



Monitoring universal health coverage in ageing populations

Evidence gaps on unmet health and social care needs in the WHO Western Pacific Region

Research report



**World Health
Organization**

Centre for Health Development

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research report
(Monitoring universal health coverage in ageing populations)

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Abbreviations

ADL	activity of daily living
ALSWH	Australian Longitudinal Study on Women's Health
CANE	Camberwell Assessment of Need for the Elderly
CLHLS	China Longitudinal Healthy Longevity Study
COVID-19	coronavirus disease
GP	general practitioner
HIES	Household Income and Expenditure Survey
IADL	instrumental activity of daily living
ILO	International Labour Organization
MARS	Malaysia Ageing and Retirement Survey
NCD	noncommunicable disease
OOP	out-of-pocket (health expenditure)
SAGE	WHO Study on global AGEing and adult health
SAR	Special Administrative Region
SDAC	Australian Survey of Disability, Ageing and Carers
UHC	universal health coverage
UN	United Nations
WHO	World Health Organization
WHS+	World Health Survey Plus
WKC	WHO Centre for Health Development, Kobe
WVS	World Values Survey

Executive summary

- Population growth and ageing, and the ongoing health transition across Western Pacific Region countries, areas and territories, will very likely contribute to increased demand for health and social care.
- A literature review found relevant studies based in just 8/37 of the Region's countries, areas and territories, with prevalence estimates ranging from 2.5% to 32.8% for unmet health care needs and from 2.8% to 64.5% for unmet social care needs.
- Most (11/15) of the identified surveys were focused on unmet health care needs; of those investigating unmet social care needs, questions on barriers to social care were not included.
- Additional variability in prevalence estimates reported in the literature and those generated from survey databases is the result of the wide range of question wording, study populations and analytical denominators used across the available surveys.
- To better inform health and social care planning, the standardization of measurement approaches is essential.

Why measure unmet health and social care needs in the Western Pacific Region?

Population growth and ageing, and the ongoing health transition across Western Pacific Region countries, areas and territories, will very likely contribute to increased demand for health and social care. However, progress towards achieving universal health coverage (UHC) has been uneven. On average, improvements in the UHC service coverage index (one metric used to assess health systems) progressed somewhat steadily between 2000 and 2019, with those gains maintained through 2021; however, the prevalence of catastrophic health expenditure due to out-of-pocket spending doubled in that timeframe, with poorer, older and rural households most affected. The true level of health care demand is likely to be higher because the current metrics exclude those who need but do not access health care. Similarly, changing family structures in the Region mean that demand for social care services is rising.

Aims of this study

To derive estimates of the prevalence of unmet health and social care needs in the older populations of the WHO Western Pacific Region, and to attempt to identify the reasons for these unmet needs.

Methods

This document describes the two methods used to meet the study aims: (i) a literature review of existing population-based estimates of unmet health and social care needs; and (ii) the access and analysis of available datasets, including population-based surveys, from a number of the countries, areas and territories in the Region.

The literature review identified 60 papers from eight countries (Australia, China, Japan, Lao People's Democratic Republic, Malaysia, New Zealand, the Republic of Korea and Viet Nam) on unmet health care needs (including dental), 12 papers from five countries (China, Malaysia, New Zealand, Republic of Korea and Viet Nam) on unmet social care needs and two papers that covered both unmet health and social care needs (China and New Zealand).

National and multi-country databases and population-based survey data were accessed and analysed, yielding prevalence estimates for unmet health care needs (Australia; Cambodia; China, including Hong Kong Special Administrative Region [SAR] and Macao SAR; Japan; Malaysia; Mongolia; New Zealand; the Philippines; Tonga; and Viet Nam) and unmet social care needs (Australia, Cambodia and Malaysia).

Published prevalence estimates available for only 8/37 of WHO Western Pacific Region countries, areas and territories

The 74 reviewed articles were on studies based in just eight of the Region's 37 countries, areas and territories. Prevalence estimates ranged from 2.5% in the Republic of Korea (≥ 65 years) to 32.8% (60–69 years) in China for unmet health care needs, and from 2.8% in Malaysia for institutionalized people (mean age, 71.6 years) to 64.5% in Viet Nam (≥ 60 years) for adults with dementia for unmet social care needs. These data are however not comparable because of the wide range of question wording, study populations and denominators used. Accessibility and acceptability barriers to care were reported at higher levels than affordability as the reasons for not receiving needed health care; no information on the reasons for unmet social care needs was reported in the literature.

Population-based public health surveys neglect social care needs

Eight of the 15 identified surveys were specifically focused on the unmet health and/or social care needs of the older populations (i.e. age ≥ 55 , 60 or 65 years); the remaining surveys sampled the general adult populations (i.e. age ≥ 18 years) of the Region from which age-stratified results were generated. Most (11) of the 15 surveys were focused on unmet health care needs, only one survey was specific to unmet social care needs, and three surveys

generated data on both unmet health and social care needs. The lowest prevalence estimates of unmet health care needs in the older population (age ≥ 60 years) were from Viet Nam (0.3%) in 2019 and Mongolia (2.2%) in 2018, and the highest from the Philippines (34.8%) in 2019. Eight of the surveys asked about the reasons for unmet health care needs, reported as acceptability (Australia, China and Tonga), availability (Australia and New Zealand), affordability (Cambodia) and accessibility (Cambodia). Unmet social care needs in the older population were only obtainable from survey databases for Australia (23.8% in 2019 from the ALSWH; and 39.8% in 2022 from the SDAC) and Cambodia (22.3% in 2023); no reasons for these unmet needs were recorded.

Challenges and opportunities

Regardless of the source of information, considerable work is needed to better understand (i) unmet social care needs across the entire Region and (ii) unmet health care needs in the Pacific island countries and territories. For Asian countries of the Region with multiple data sources to estimate unmet health care needs, efforts to compare and contrast the results within a country would improve the utility of these results for decision-making and planning. The lack of a standard approach to quantifying unmet health and social care needs was evident from the different studies, data and surveys. To better inform health and social care planning and policy, a degree of standardization of measurement approaches is needed. Sufficiently large survey sample sizes would allow for intersectional analyses that could more clearly identify population groups with higher levels of unmet needs and their determinants. Additionally, a framework to harmonize the barriers to care (or reasons for not receiving needed care) would help to highlight the main drivers of unmet need. Such knowledge could be used to inform policy and programmes that improve access to health and social care, including progress on UHC that is inclusive of the older populations of the Western Pacific Region.

1

Introduction

The WHO Western Pacific Region includes 37 countries, areas and territories varying widely in terms of demographic and economic characteristics: 21 Pacific island countries and areas (American Samoa, Cook Islands, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, Micronesia [Federated States of], Nauru, New Caledonia, Niue, Northern Mariana Islands, Palau, Papua New Guinea, Pitcairn Islands, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, and Wallis and Futuna); 14 Asian countries and territories (Brunei Darussalam; Cambodia; China, including Hong Kong SAR and Macao SAR; Japan; Lao People's Democratic Republic; Malaysia; Mongolia; the Philippines; Republic of Korea; Singapore; Viet Nam); and Australia and New Zealand. The Pacific island countries and areas include some of the world's smallest land areas and populations, and are characterized by geographic isolation, a high burden of communicable diseases and noncommunicable diseases (NCDs), and a vulnerability to the impacts of climate change (1). The Asian countries and territories include the second largest country in the world by population (China), with one country in the top five wealthiest by gross domestic product per capita in 2023 (Singapore at 85 412 United States dollars [US\$]) and another in the bottom 40 (Lao People's Democratic Republic at US\$ 1975) (2).

Population growth, population ageing and the ongoing health transition across countries, areas and territories in the Region are contributing to an increased demand for health and social or long-term care.

Populations in most of the Region's countries, areas and territories (except for American Samoa, China, Japan, Palau, Republic of Korea, and Wallis and Futuna) are projected to be larger in 2050 than 2024, with the majority also experiencing or anticipating population ageing. As of 2024, 402 million people aged 60 years and older live in the Region (from 293 million in China to just 255 in Tokelau), representing 20.5% of the total population of the Region and 34.0% of the global population aged 60 years and older (3). It is anticipated that the Region's population aged 60 years and older will increase to 675 million (35.6% of the total population of the Region) by 2050. With two exceptions (Niue and Tuvalu), most countries in the Region will also experience an increasing percentage of the population aged 60 years and older between now and 2050 (3).

Over the last two decades, average life expectancy grew faster than healthy life expectancy in many countries, areas and territories

of the Region. For many people in the Region, this means that the extra years of life lived may not be in full health, often from increasing NCD-related morbidity and subsequently resulting in higher demands on care systems. NCDs contributed to 90% of deaths and disability-adjusted life years in 2021 in the populations of the Region aged 60 years and older. Morbidity from NCDs increased during 2000–2021, with a larger increase in years lived with disability from NCDs than the increase in years of life lost (4). Longer lives for older adults but with higher morbidity across the Region has the potential to increase demand for both health and social care services.

Few health or social care systems in the Region are well positioned to supply the care needed to meet current or future demand (5–7). The health systems in the small Pacific island countries are experiencing additional workforce, geographic and climate challenges (5). Where they exist, formal social care systems have been shown to be under-resourced and poorly integrated with other parts of health care systems, even in higher income and demographically older countries, areas and territories of the Region (e.g. Australia; China, Hong Kong SAR; Japan; Republic of Korea). The social care systems of the Region may be even less prepared for future changes in demand than the health care systems, with many providing limited formal social or long-term care options, and where traditions of women providing unpaid informal care continue (8). If the health and social care systems in countries across the Region do not adapt and improve coordination, the current gap between the demand for quality care and the supply of needed services may widen. This imbalance between demand and supply has the potential to lead to increased unmet needs for health and social care, creating a spiral of poorer health and increasing demand.

One aspect of making progress towards UHC requires that everyone receives the health services they need. The WHO UHC service coverage index provides an indication of access to essential health care services, and has been reported as improving in several of the Region's countries, areas and territories over the last 20 years (9). The regional average for the UHC service coverage index increased from 49 in 2000 to 79 (on a scale of 0 to 100) in 2019 (4). However, the proportion of the population experiencing catastrophic health expenditure from out-of-pocket (OOP) costs exceeding 10% of the total household budget has increased in most countries, with the regional average doubling from 9.9% in 2000 to 19.8% in 2019 (4). In addition, health and social care workforce shortages, ageing and maldistribution are widespread in the Region (6). These data indicate inequitable progress in access to high-quality and affordable health and social care services across the Region. The populations most affected by financial hardship include poorer, older and rural households (10). The true level of health care

demand is likely to be higher, because the current metrics exclude those who need, but do not access, care.

A detailed overview of care systems and their supply in the countries, areas and territories of the Western Pacific Region is beyond the scope of this report. However, the unknown prevalence of unmet health and social care needs hinders the development of appropriate policies to achieve the global target of UHC. To address these shortcomings, this report identified and quantified unmet health and social care needs across the Region. For unmet health care need, self-reported forgone care was used. Using this approach, an analysis that included 83 countries (including 14 of the Region's countries, areas and territories) produced unmet health care needs estimates that ranged from 0.3% (Viet Nam) to 38.0% (the Philippines) (11). To identify and quantify unmet social care needs, this report used a functional ability approach (limitations in activities of daily living [ADLs] or instrumental activities of daily living [IADLs]). The mean prevalence of unmet social care needs estimated in this way in a recent systematic review was 25.1% in people aged 65 years and older in China (from four Chinese studies reporting prevalence values from 4.6% to 61.4%) (12).

This document describes the two approaches used for estimating unmet health and social care needs in the older populations of the countries, areas and territories of the WHO Western Pacific Region: (i) a review of existing population-based estimates from published literature (Chapter 2); and (ii) the generation of estimates from population-based survey data (Chapter 3). Estimates of the prevalence of unmet health and social care needs, the reasons for unmet health care needs, and a discussion of estimates from different sources and surveys in several countries, areas and territories of the Region are provided in the reporting of both approaches. Finally, the critical challenges and future opportunities for generating standardized estimates of unmet health and social care needs in the WHO Western Pacific Region are discussed (Chapter 4).

2

Literature review

2.1 Methods

A recent systematic review and meta-analysis of unmet needs for health and long-term care in older adults (age ≥ 65 years) incorporated 87 studies published from 1996 to 24 June 2020, including 10 studies based in the Western Pacific Region countries (mainly from the Republic of Korea), and reported unmet health care needs prevalence estimates up to 20.5% in New Zealand (12). This same review identified 14 studies on long-term care, including four from China dating from 2011 to 2016 (12); the mean prevalence of unmet social care needs in China because of ADL and IADL limitations was reported as 23.8% and 11.0%, respectively.

To consider the most recent evidence on measuring unmet health and social care needs in the WHO Western Pacific Region, PubMed databases were searched for literature published from 25 June 2020 to 31 December 2024, revising the key search terms used previously to include terms such as “social care” and “activities of daily living” and names of relevant geographic areas.

The inclusion criteria were original articles based on health or economic surveys conducted in countries, areas and territories of the Western Pacific Region that: applied quantitative analysis and reported outcomes on forgone care or unmet needs related to health or social or long-term care; focused on adult populations; reported ADLs or IADLs; and were published in English. Subnational-level studies were included where the analyses drew from a national-level study or in countries with limited publications (e.g. Malaysia and Viet Nam). Publications were not limited by age of study participants, but this report focused on the older population group (≥ 60 years) within study populations.

Papers with studies on specific disease-related unmet needs or forgone care (e.g. cancer, lupus); family planning and/or contraception; or unmet needs for information, social support, services or training were excluded. With the exception noted above, studies that were not nationally representative, that focused on the unmet needs of caregivers or were based in locations outside of the Region were excluded.

From initial search results of 4038 papers, 3430 papers not meeting inclusion criteria were excluded to identify 608 articles for abstract review. Further screening to exclude a further 472 publications meant that full-text reviews were undertaken of 136 papers. Full-text reviews resulted in a total of 74 reviewed articles (Table 2.1 and

Table 2.2) (13–86): 60 papers on unmet health (including dental) care needs; 12 papers on unmet social care needs; and two papers that reported results for both unmet health and social care needs (Annex 1, Fig. A1.1). Most of the published papers included studies implemented before 2020.

Table 2.1. Summary of results from the literature review: unmet health care needs

Reference; country of study	Study	Age of respondents (years)	Type of care	Sample size for subgroup (n)	Questions asked to identify unmet needs	Prevalence (%), if reported ^a	Reasons for unmet needs (prevalence in %)
Broad et al. 2020 (13); New Zealand	2016–2018 International Resident Assessment Instrument	82% > 75 (IQR 76–87)	Health (including dental and allied health) and social	578 residents of retirement villages	Needed health services over past 12 months but did not access	2.1 (optician), 2.8 (GP), 3.8 (audiologist), 4.2 (dentist) 5.4 (ADL clinical assessment protocols triggered)	NR
Jang et al. 2020 (14); Republic of Korea	2017 National Survey of Older Koreans	≥ 65	Health	2 281	In the past year, have you not received a medical treatment you thought you needed?	15.8	NR
Jo et al. 2020 (15); Republic of Korea	2010–2013 KNHANES (5th and 6th)	≥ 50	Health	10 129 (2782 with osteoarthritis, mean age 68.5 years; 7347 without osteoarthritis, mean age 63.7 years)	Have you been unable to go to hospital/clinic (excluding dental clinic) when you wanted to within the past year? If so, what was the reason you could not go to hospital/clinic when you wanted to among the following? (Reasons categorized as availability, acceptability and accessibility)	Prevalence NR; overall incidence: 17.5 ^b (31.6 ^b and 12.1 ^b in those with and without osteoarthritis, respectively)	Overall: availability (4.2), accessibility (6.5), financial (5.5), transportation accessibility (10.2), acceptability (5.0)
Kim et al. 2020 (16); Viet Nam	NR	≥ 19	Health	233	Participants were asked if they had any kind of health problems during the past 12 months and whether they had access to the required health care providers to solve their problems	Prevalence NR; incidence: 18.5 ^b , 3.9 (50–64 years), 3.0 (≥ 65 years)	Accessibility (30), availability (47), acceptability (16)

Reference; country of study	Study	Age of respondents (years)	Type of care	Sample size for subgroup (n)	Questions asked to identify unmet needs	Prevalence (%), if reported ^a	Reasons for unmet needs (prevalence in %)
Li et al. 2020 (17); China	2015 CHARLS	≥ 65	Health	5 166	Have you been ill in the last month? In the last month, have you visited a public hospital, private hospital, public health centre, clinic, health workers or doctors practice, or been visited by a health worker or doctor for outpatient care? In the past year, did a doctor suggest that you needed inpatient care, but you were not hospitalized?	Unmet inpatient needs: 1.2 ^c (no NCD); 3.1 ^c (one NCD); 7.3 ^c (multimorbidity); 12.6 ^c (multimorbidity and one or more ADL limitation)	NR
Mao et al. 2020 (18); China	2008–2013 NHSS	≥ 60	Health	9 646	Have you been ill in the last two weeks? What was the main reason for not seeking outpatient treatment? In the past year, did a doctor suggest that you needed inpatient care but you were not hospitalized?	36.2 ^c and 29.4 ^c (2008, uninsured and insured) 26.7 ^c and 17.7 ^c (2013, uninsured and insured)	Affordability 2008: 86.4 (uninsured) and 85.4 (insured); 2013: 52.2 (uninsured) and 43.8 (insured)
Pledger et al. 2020 (19); New Zealand	2013–2016 New Zealand Health Survey	≥ 55	Health (including dental and medication)	15 626 (pooled over three study waves)	In the past 12 months, was there a time when you had a medical problem but did not visit a GP because of cost? In the past 12 months, was there a time when you had a medical problem but did not visit a GP because you had no transport to get there? In the past 12 months, was there a time when you got a prescription for yourself but did not collect one or more prescription items from the pharmacy or chemist because of cost?	NR	GP: cost (24.8, 13.8, 6.3), ^b transport (13.4, 6.3, 1.4) ^b Medication: cost (19.6, 8.3, 2.9) ^b Dental: cost (42.1, 38.3, 24.2) ^b (Data for public renters, private renters and owner-occupiers, respectively)

Reference; country of study	Study	Age of respondents (years)	Type of care	Sample size for subgroup (n)	Questions asked to identify unmet needs	Prevalence (%), if reported ^a	Reasons for unmet needs (prevalence in %)
Temple et al. 2020 (20); Australia	2015 Survey of Disability, Ageing and Carers	≥ 55	Health (including dental)	Total: 25 555; subset: 6 533	Since last year, has there been any time you needed to go to GP/hospital/medical specialist/ dentist but didn't?	12.2 (GP), 9.4 (specialist), 25.8 (dental), 7.0 (hospital)	Discrimination: specialists in health care setting (2.6 prevalence ratio); avoidance: GPs in non-health care setting (1.9 prevalence ratio)
Wang et al. 2020 (21); China	2014 National Internal Migrant Population Dynamic Monitoring Survey	15–59	Health	7 592	Unmet need for inpatient service referred to the proportion of migrants who were asked to be hospitalized by a doctor but did not utilize it	18.8 ^b	Felt it was unnecessary (41.0), economic difficulty (29.5)
Choi and Kim 2021 (22); Republic of Korea	2018 KCHS	≥ 65	Health	42 698 (women)	During the past year, have you ever been unable to go to a hospital or clinic (not including dentistry) when you wanted to go to there?	9.7	Transport (38.4), financial (28.4), symptoms not severe (16.8), inconvenient time (10.9), long wait for appointment (3.0), difficulty making appointment (2.5)
Jang et al. 2021 (23); Republic of Korea	2014–2017 KHPS	≥ 19	Health	4 069 (with one or more NCD)	Have you ever experienced not receiving the necessary medical treatment or examination (excluding dental care) in the past year (12 months)? Which of the following is the main reason?	Overall: 15.6 ^b 14.6 (60–69 years), 17.2 (≥ 70 years)	NR

Reference; country of study	Study	Age of respondents (years)	Type of care	Sample size for subgroup (n)	Questions asked to identify unmet needs	Prevalence (%), if reported ^a	Reasons for unmet needs (prevalence in %)
Jang et al. 2021 (24); Republic of Korea	2016–2018 KNHANES	≥ 19	Health (dental)	14 000	Have you ever needed dental care in the past year but did not receive it? What is the main reason you needed dental care but did not receive it? Have you felt you needed dental care but could not get it because you could not afford it in the previous year? (Reasons: cost, transportation, personal responsibilities, fear of treatment, lack of time, waiting time, other)	Overall: 31.7 ^b 33.1 (60–69 years), 34.4 (≥ 70 years)	NR
Jung and Ha 2021 (25); Republic of Korea	2013–2017 KNHANES	≥ 19	Health	26 598	Over the past year, have you ever felt that you could not or did not access a medical service at the time when you needed it? What was the reason for which you did not receive the medical service you needed?	Age ≥ 60 years 12.0 (both sexes), 16.1 (women), 6.8 (men)	Economic (24.8), time (37.3)
Kim et al. 2021 (26); Republic of Korea	2020	46 (mean)	Health (during COVID-19 pandemic)	813	Question asked was whether respondents felt they needed health care services but did not receive them during the COVID-19 pandemic	13.4 ^b	NR
Kim et al. 2021 (27); Republic of Korea	2014–2018 KNHANES	≥ 19	Health (including dental)	15 588	During the past 12 months/ year, have you felt you needed health care but did not receive it? What was the main reason for [this]?	28.0 ^b (men), 34.4 (women) ^b Age ≥ 60 years: 25.6 (men), 36.1 (women)	NR

Reference; country of study	Study	Age of respondents (years)	Type of care	Sample size for subgroup (n)	Questions asked to identify unmet needs	Prevalence (%), if reported ^a	Reasons for unmet needs (prevalence in %)
Lee et al. 2021 (28); Republic of Korea	2009, 2011– 2014 KHPS	Mean age: 43.1 (2009), 46.2 (2014)	Health (dental)	20 451 observations of 5 567 individuals	Did you ever fail to receive dental care services over the past year, even when there was a need for treatment or check- up?	24.7 ^b (2009), 15.9 ^b (2014)	NR
Nguyen et al. 2021 (29); Viet Nam	2019 Perceived Barriers to Psychological Treatment scale	≥ 60	Health (mental)	376	Rate the degree to which different kinds of problems might get in the way of seeing a counsellor or a therapist	NR	Physical/health restrictions (3.3 ± 1.1), availability (2.7 ± 1.2), geographic and financial accessibility (2.7 ± 1.0)
Shah et al. 2021 (30); Malaysia	2018–2020 Japan Gerontological Evaluation Study – Bhasa Malaysia version	≥ 60	Health	1 204	Did you ever hesitate to visit health facilities even when you were ill/sick in the past 12 months?	6.6	Lack of knowledge about health care and financial barriers
Sheng et al. 2021 (31); China	2005–2018 National Household Income and Living Expenditure Survey	NR	Health	NR (regional level unmet medical demand)	Econometric model to determine optimal health care demand compared with actual demand	12.6 ^b	Regions with higher medical costs had more unmet needs

Reference; country of study	Study	Age of respondents (years)	Type of care	Sample size for subgroup (n)	Questions asked to identify unmet needs	Prevalence (%), if reported ^a	Reasons for unmet needs (prevalence in %)
Temple et al. 2021 (32); Australia	2018 Survey of Disability, Ageing and Carers	≥ 15	Health (including dental)	1955 primary carers	See Temple et al. (20)	Age ≥ 65 years 9.4 (GP), 10.0 (specialist), 21.3 (dental)	Total study population ^b GP: too busy (38.6), decided not to seek care (20.3), long wait time or not available (14.4), cost (5.4) Specialist: too busy (25.8), cost (18.7), decided not to seek care (13.7), appointment upcoming (11.5) Dental: cost (45.5), too busy (20.8), dislikes (16.0)
Zhang et al. 2021 (33); China	2003–2013 NHSS	Mean age: 34.7 (2003), 36.7 (2008), 39.4 (2013)	Health (utilization rates, forgone hospitalization)	16 950 (2003), 121 870 (2008), 141 513 (2013)	See Mao et al. 2020 (18) In the past year, did a doctor suggest that you needed inpatient care but you were not hospitalized?	27.0 ^b (2003), 23.0 ^b (2008), 21.4 ^b (2013)	Financial difficulties (77.5, 71.7, 45.4); early hospital discharge because of financial difficulties (68.3, 54.6, 37.0)
Zhou et al. 2021 (34); China	2008–2018 NHSS	≥ 13	Health	25 048	See Mao et al. 2020 (18)	9.0 ^b (outpatient), 1.4 ^b (inpatient), 53.4 ^b (physical examination), 13.2 ^b (early discharge from hospital)	Outpatient: illness is not serious (11.7); inpatient: treatment unnecessary (27.4)

Reference; country of study	Study	Age of respondents (years)	Type of care	Sample size for subgroup (n)	Questions asked to identify unmet needs	Prevalence (%), if reported ^a	Reasons for unmet needs (prevalence in %)
Che et al. 2022 (35); Republic of Korea	2011–2017 KHPS	≥ 18	Health (dental)	2 399	See Lee et al. 2021 (28)	15.8 ^b	Financial burden (7.9)
Chen et al. 2022 (36); China	2012–2018 China Family Panel Survey	18–80 (20.3% ≥ 60 years)	Health	1 387	Have you felt uncomfortable in the last two weeks? Have you visited doctors?	27.9 ^b (2012), 16.3 ^b (2016), 14.1 ^b (2018)	NR
Chung 2022 (37); Republic of Korea	2014–2018 KHPS	≥ 19	Health	14 691 (2014), 14 001 (2015), 13 741 (2016), 13 408 (2017), 13 359 (2018)	See Jang et al. 2021 (23)	12.8 ^c (2014), 13.7 ^c (2015), 11.1 ^c (2016), 10.6 ^c (2017), 12.1 ^c (2018)	2014–2018: lack of care and support (5.3), time constraint (3.7), financial difficulty (3.1)
Chung 2022 (38); Republic of Korea	2014–2018 KHPS	≥ 19	Health	68 930 observations of 16 535 individuals	See Jang et al. 2021 (23)	12.1 ^c (2018), 14.1 ^c (2014–2018)	2018: non- financial (9.6), financial (2.5); 2014–2018: non- financial (10.1), financial (4.0)
Gao et al. 2022 (39); China	2011 CHARLS	≥ 45	Health	14 774	See Li et al. 2020 (17)	Overall: 13.0 ^b 14.3 (60–74 years), 15.2 (≥ 75 years)	Inpatient: affordability (62.0); outpatient: acceptability and adequacy (63.9)

Reference; country of study	Study	Age of respondents (years)	Type of care	Sample size for subgroup (n)	Questions asked to identify unmet needs	Prevalence (%), if reported ^a	Reasons for unmet needs (prevalence in %)
Huang et al. 2022 (40); China	NA	≥ 60	Health and social	2 063 nursing home residents	Utilized CANE tool	4.8 (social), 7.6 (health)	Daily activity (11.2), memory (6.0), physical health (7.6), information on physical condition and treatment (13.9), company (11.9), intimate relationships (9.2)
Jung et al. 2022 (41); Republic of Korea	2014–2018 KHPS	≥ 19	Health	10 644	See Jang et al. 2021 (23)	2014: 13.4 ^b , 18.0 (≥ 65 years)	Accessibility, affordability
Lee et al. 2022 (42); Republic of Korea	2011–2014 KHPS	20–59	Health	7 047	See Jang et al. 2021 (23)	16.5 ^b (2011), 14.7 ^b (2012), 16.4 ^b (2013), 12.1 ^b (12.1)	Time constraint (~50), financial difficulty (~20)
Yan et al. 2022 (43); China	2008–2018 NHSS	≥ 15	Health	172 578 (2008), 246 673 (2013), 254 485 (2018)	See Mao et al. 2020 (18)	UEBMI: ^b 23.3, 15.8, 17.6; URBMI: ^b 29.6, 18.4, 20.8; NRCMS: ^b 24.8, 18.1, 22.3; uninsured: ^b 32.7, 19.4, 27.2	NR
Cho and Kwon 2023 (44); Republic of Korea	2020 National Survey of Older Koreans	≥ 65	Health	9 930	In the past year, have you thought that you needed treatment, but you did not receive treatment at a hospital?	2.5	NR
Choe and Pak 2023 (45); Republic of Korea	2013– 2015 and 2019–2021 KNHANES	19–64	Health	19 394	See Kim et al. 2021 (27)	9.3 ^b	Availability (0.5), acceptability (6.9), accessibility (1.9)

Reference; country of study	Study	Age of respondents (years)	Type of care	Sample size for subgroup (n)	Questions asked to identify unmet needs	Prevalence (%), if reported ^a	Reasons for unmet needs (prevalence in %)
Choi et al. 2023 (46); Republic of Korea	2012–2018 KNHANES	≥ 20	Health (dental)	12 104	See Jang et al. 2021 (24)	32.5 ^b	Insufficient time (37.4), cost (28.2)
Hwang et al. 2023 (47); Republic of Korea	2020 Koreans’ Happiness Survey	≥ 19	Health (during COVID-19 pandemic)	13 491	Did you receive the needed care in a timely manner? (Response “no” implied received care late or not at all)	Delayed and forgone care: 4.0, ^b 4.3 (≥ 65 years)	NR
Kim and Hwang 2023 (48); Republic of Korea	2020 Experience Survey on Healthcare Use of Older Adults	≥ 65	Health (during COVID-19 pandemic)	1 917	After the COVID-19 outbreak (February 2020), was there ever a time when you felt that you needed health care, but you didn’t receive it?	8.9	NR
Kim and Jeon 2023 (49); Republic of Korea	2016–2018 KHPS	≥ 18	Health	43 415	See Jang et al. 2021 (23)	15.4 ^b and 9.8 ^b (those with and without disability)	NR
Kim and Kawachi 2023 (50); Republic of Korea	2010–2018 KNHANES	50–80	Health (dental)	≥ 65 years: 1478 (2010), 8136 (after 2010)	See Jang et al. 2021 (24)	8.8 (higher unmet needs after 2012 policy)	NR
Kim et al. 2023 (51); Republic of Korea	2007–2015 KNHANES	≥ 20	Health (dental)	≥ 65 years: 1346 (2007– 2009), 1253 (2010–2012), 1110 (2013– 2015)	See Jang et al. 2021 (24)	Age ≥ 65 years For low- and high- income men, low- and high-income women: 75, 35, 70, 62 (2007–2009); 48, 10, 57, 9 (2010–2012); 42, 12, 54, 8 (2013– 2015)	Cost

Reference; country of study	Study	Age of respondents (years)	Type of care	Sample size for subgroup (n)	Questions asked to identify unmet needs	Prevalence (%), if reported ^a	Reasons for unmet needs (prevalence in %)
Li et al. 2023 (52); China	2011–2018 CHARLS	≥ 45	Health	7 719	See Li et al. 2020 (17)	Outpatient: 9.9 ^b (2011), 14.0 ^b (2013), 13.4 ^b (2015) Inpatient: 2.2 ^b (2011), 3.3 ^b (2013), 4.9 ^b (2015)	Outpatient: already under treatment (13.0, 11.1, 10.5), illness not serious (48.9, 58.0, 51.2), cost (17.6, 14.4, 18.1), no time (1.7, 2.4, 2.0), traffic (3.1, 2.6, 2.7) Inpatient: cost (61.1, 61.3, 57.5); not willing to go (17.4, 19.8, 19.7)
Park and Chung 2023 (53); Republic of Korea	2017 KHPS	50–64	Health	1 151	See Jang et al. 2021 (23)	11.1	Time constraint (39.8), minor symptoms (32.0), financial difficulty (20.3)
Park et al. 2023 (54); Republic of Korea	2019 KCHS	≥ 60	Health	946 immigrants	See Choi and Kim 2021 (22)	8.2	NR
Roh and Kim 2023 (55); Republic of Korea	2019–2020 KNHANES	≥ 65	Health (during COVID-19 pandemic)	1690 (2019), 1681 (2020)	Have you ever needed a medical (excluding dentistry) examination or treatment in the past year but not received it? What was the main reason for not receiving medical examination or treatment when you needed it?	8.2 (2019), 7.6 (2020)	2019: cost burden (46.2), mild symptoms (30.8), insufficient time (23.1) 2020: cost burden (40.8), mild symptoms (40.8), insufficient time (16.4)

Reference; country of study	Study	Age of respondents (years)	Type of care	Sample size for subgroup (n)	Questions asked to identify unmet needs	Prevalence (%), if reported ^a	Reasons for unmet needs (prevalence in %)
Wu et al. 2023 (56); China	2013 CHARLS	≥ 60	Health	7 659	In the past month, was there ever a time when you were ill but did not visit any medical facilities or medical providers for outpatient care? In the past year, was there ever a time when you were not hospitalized after receiving a doctor's recommendation for hospital admission?	13.9 (outpatient), 8.4 (inpatient)	Economic (14.6), availability (6.4), mild symptoms (59.2), other (19.6)
Wu et al. 2023 (57); China	1993–2018 NHSS	All	Health (inpatient)	177 501 (2003, 11.6% aged ≥ 65 years), 273 688 (2008, 14.7% aged ≥ 65 years), 256 304 (2013, 18.5% aged ≥ 65 years)	See Zhou et al. 2021 (34)	23.2 ^b (2003), 17.2 ^b (2013), 21.5 ^b (2018)	NR
Zhang et al. 2023 (58); China	2011–2015 CHARLS	≥ 45	Health	5 548 with at least one NCD	See Li et al. 2020 (17)	Outpatient, inpatient: 4.5, ^b 1.2 ^b (no multimorbidity); 7.2, ^b 2.7 ^b (new onset multimorbidity)	NR

Reference; country of study	Study	Age of respondents (years)	Type of care	Sample size for subgroup (n)	Questions asked to identify unmet needs	Prevalence (%), if reported ^a	Reasons for unmet needs (prevalence in %)
Zhuoga et al. 2023 (59); China (Tibet)	2013–2018 NHSS	≥ 16	Health	2013: 11 092 (2944 aged 45–59 years, 1773 aged ≥ 60 years) 2018: 10 397 (3248 aged 45–59 years, 1760 aged ≥ 60 years)	During the past year, did the doctor refer you to hospitalization services but you did not seek them? (options: not necessary, no effective treatment care, financial hardship, hospitalization services were bad, no time, no spare bed in the hospital, restriction of health insurance reimbursement policies, other)	Inpatient: 0.8 ^b (2013), 1.5 ^b (2018)	2013: financial hardship (47.6), no time (17.9), unnecessary (6.0) 2018: financial hardship (28.6), no time (13.6), unnecessary (14.6)
Aryal et al. 2024 (60); Lao People's Democratic Republic	2022 People's Voice Survey	≥ 18	Health	2 004 (430 aged 50–59 years, 192 aged ≥ 60 years)	In the past 12 months, was there a time when you had a health problem and needed medical attention, but you did not get health care from a provider?	10 ^c (50–59 years), 11 ^c (≥ 60 years)	NR
Aryal et al. 2024 (61); Lao People's Democratic Republic	2022 People's Voice Survey	≥ 18	Health	2 007	See Aryal et al. 2024 (60)	16 ^b (overall), 20 ^b (poor), 16 ^b (non- poor)	NR
Chung 2024 (62); Republic of Korea	2018 KHPS	≥ 45	Health	13 359 (4972 aged 45– 64 years, of whom 98.2% needed care; 4147 aged ≥ 65 years, of whom 99.8% needed care)	Have you ever experienced not receiving the necessary medical treatment or examination (excluding dental care) in the past year? (options: yes, no, no medical treatment or examination of any kind was needed)	12.5 ^c (45–64 years), NR 14.2 ^c (≥ 65 years)	

Reference; country of study	Study	Age of respondents (years)	Type of care	Sample size for subgroup (n)	Questions asked to identify unmet needs	Prevalence (%), if reported ^a	Reasons for unmet needs (prevalence in %)
Gao et al. 2024 (63); China	2011–2015 CHARLS	≥ 45	Health	14 156 (2011, mean age 59.5 years), 18 153 (2013, mean age 60.6 years), 19 532 (2015, mean age 61.2 years)	See Li et al. 2020 (17)	13.2 ^b (2011), 13.3 ^b (2013), 13.8 ^b (2015)	NR
Harris et al. 2024 (64); New Zealand	NR	≥ 15 (39.5% aged ≥ 55 years)	Health	2010	In the last 12 months: was there ever a time that you needed health care but could not get it; did you ever feel that you needed professional help for your emotions, stress, mental health, or substance use, but you didn't receive that help; and has there been any time when you needed to see a GP about your own health, but didn't get to see any doctor at all?	16.8 ^b (general health), 16.2 ^b (mental health), 17.9 ^b (primary health)	
Ho et al. 2024 (65); Malaysia	2023 Kami Survey	18–61	Health	696 members of LGBT+ community	If ever, when did you last receive mental professional help (e.g. from counsellors and psychologists) for your emotional stress, substance use or mental health-related issues? (Response "never, but it would have been helpful" counted as unmet needs)	29 ^b	Stigma/safety (61), cost (57), poor understanding from mental health professional (52), belief of professional that identity is the mental health issue (45), trust (42), conversion therapy offered (32)

Reference; country of study	Study	Age of respondents (years)	Type of care	Sample size for subgroup (n)	Questions asked to identify unmet needs	Prevalence (%), if reported ^a	Reasons for unmet needs (prevalence in %)
Huh et al. 2024 (66); Republic of Korea	2015–2020 KNHANES	≥ 19	Health	26 219 (mean age 45.3 years, of which 2339 reported an unmet need)	During the past year, have you ever needed to use medical care (examination or treatment) at a hospital or clinic (excluding dentistry) but were not able to receive it?	8.8 ^b	NR
Jeffreys et al. 2024 (67); New Zealand	2013–2019 New Zealand Health Survey	≥ 55	Health (medication)	5889 with unmet needs	In the past 12 months, was there a time when you got a prescription for yourself, but did not collect one or more prescription items from the pharmacy or chemist because of cost?	15.6 ^c (55–64 years), 7.5 ^c (65–74 years), 3.4 ^c (≥ 75 years)	Affordability
Okamoto et al. 2024 (68); Japan	2004–2020 Japan Household Panel Survey	≥ 65	Health	34 782 (total over 15 different annual surveys)	During the past year, did you receive treatment, such as an outpatient or inpatient service? (Response “did nothing despite having symptoms” counted as unmet need)	6.5 (2005), 7.0 (2010), 5.5 (2015), 1.8 (2020)	NR
Pledger and Cumming 2024 (69); New Zealand	2013–2019 New Zealand Health Survey	≥ 15	Health	71 502 (11 472 aged ≥ 15 years who needed but did not get care, of which 2730 aged ≥ 55 years)	See Pledger et al. 2020 (19)	13.1 ^c (55–64 years), 7.2 ^c (65–74 years), 3.5 ^c (≥ 75 years)	Affordability
Tak and Ryu 2024 (70); Republic of Korea	2019–2021 KNHANES	≥ 65	Health (dental)	3 907	Have you ever needed dental care in the past year but did not receive it? If “yes”, what is the main reason you needed dental care but did not receive it?	12.0 (weighted)	Affordability
Wang et al. 2024 (71); China	2008–2018 NHSS	≥ 45	Health	16 438 (Jiangsu Province)	See Mao et al. 2020 (18)	12.9 (outpatient), 2.2 (inpatient)	NR

Reference; country of study	Study	Age of respondents (years)	Type of care	Sample size for subgroup (n)	Questions asked to identify unmet needs	Prevalence (%), if reported ^a	Reasons for unmet needs (prevalence in %)
Wu et al. 2024 (72); China	2011–2015 CHARLS	≥ 45 (mean age of outpatients and inpatients: 61.5 and 63.1 years, respectively)	Health	11 592 outpatients and 6 320 inpatients who needed health care	See Li et al. 2020 (17)	Prevalence NR; incidence: 29.4 ^c (outpatient), 34.4 ^c (inpatient)	Outpatient: financial (4.7), non- financial ^d (24.8); inpatient: financial (18.7), non- financial (15.7)
Xu et al. 2024 (73); China	2010 WHO Study on global AGEing and Adult Health	≥ 50	Health	3 340	The last time you needed health care, did you get health care?	6.5 (≥ 50 years), 29.3 (50–59 years), 32.8 (60–69 years), 30.2 (70–79 years), 7.8 (≥ 80 years)	NR
Yang et al. 2024 (74); Republic of Korea	2018 KCHS	≥ 50	Health	63 447 (aged 50–64 years), 70 985 (aged ≥ 65 years)	See Choi and Kim 2021 (22)	6.0	NR

ADL: activity of daily living; CANE: Camberwell Assessment of Need for the Elderly; CHARLS: China Health and Retirement Longitudinal Survey; COVID-19: coronavirus disease; GP: general practitioner; IQR: interquartile range; KCHS: Korea Community Health Survey; KHPS: Korea Health Panel Survey; KNHANES: Korea National Health and Nutrition Examination Survey; LGBT+: lesbian, gay, bisexual, transgender and other; NA: not applicable; NCD: noncommunicable disease; NHSS: (China) National Health Service Survey; NR: not reported; NRCMS: New Rural Cooperative Medical Scheme (China); UEBMI: Urban Employee Basic Medical Insurance (China); URBMI: Urban Resident Basic Medical Insurance (China).

^a Prevalence reported for older population (≥ 60 or 65 years), either the focus of the study or as a subgroup, and as a proportion of the total study/subgroup sample size, unless otherwise specified.

^b Prevalence reported for entire (i.e. all age groups) study population.

^c Prevalence reported as a proportion of those who self-reported a need for health or social care, or for an entire study population already identified as having a health or social care need.

^d Non-financial reasons for not seeking outpatient care: already under treatment, illness is not serious and does not merit treatment, no time, inconvenient traffic, poor service in the hospital, treatment is not useful and other.

Table 2.2. Summary of results from the literature review: unmet social care needs

Reference; country of study	Study	Age of respondents (years)	Type of care	Sample size for subgroup (n)	Questions asked to identify unmet needs	Prevalence (%), if reported ^a	Reasons for unmet needs (prevalence in %)
Broad et al. 2020 (13); New Zealand	2016–2018 International Resident Assessment Instrument	82% > 75 (IQR 76–87)	Health (including dental and allied health) and social	578 residents of retirement villages	Needed health services over past 12 months but did not access	2.1 (optician), 2.8 (GP), 3.8 (audiologist), 4.2 (dentist) 5.4 (ADL clinical assessment protocols triggered)	NR
Carvacho et al. 2021 (75); Malaysia	2015 Malaysian CANE study	Mean 71.6 (SD 7.8)	Social	110 institutionalized older people	CANE	Mean 2.8 (SD 2.0)	Intimate relationships (66.4), company (40.0), daytime activities (24.5)
Chen et al. 2021 (76); China	2014 CLHLS	≥ 60	Social	1 700	Do you require assistance when performing each activity (e.g. eating)? Does the assistance provided by caregivers meet your needs?	60.6 ^c	NR
Meng et al. 2021 (77); China	2018 CLHLS	≥ 65	Social	8 096	Do you expect your community to provide personal care/ grocery shopping/home visit/ psychological consulting services? Are [these] services available in your community?	51.3–55.3 ^c	NR

Reference; country of study	Study	Age of respondents (years)	Type of care	Sample size for subgroup (n)	Questions asked to identify unmet needs	Prevalence (%), if reported ^a	Reasons for unmet needs (prevalence in %)
Zhao and Wang 2021 (78); China	2019 National Survey on Basic Public Service Delivery of Persons with Disabilities	≥ 16 (mean 57)	Social (medical, rehabilitation, accessibility)	9 642 112 adults with disabilities	Unmet care need defined as those with intellectual, mental or severe physical disabilities but no care; unmet medical need defined as ill within the past 2 weeks but did not seek medical treatment; unmet rehabilitation need (including surgery, medication, functional training, assistive devices and nursing care); unmet accessibility need (including adapted or specially designed tools, devices or other forms of environmental modification to a room)	10.2 ^b (care), 15.4 ^b (medical), 45.6 ^b (rehabilitation), 13.7 ^b (accessibility)	NR
Cao et al. 2022 (79); China	2018 CLHLS	≥ 65	Social	2 879	See Chen et al. 2021 (76)	50.4 ^c	NR
Hu and Chou 2022 (80); China	2015 CHARLS, 2015 TLISA	≥ 65	Social	CHARLS: 6 341, TLISA: 4 588	CHARLS: asked about their ability to perform five ADLs and five IADLs. Those who reported a care need but did not receive help were treated as having unmet need. TLISA: asked whether they had any difficulties in performing six ADL tasks and nine IADL tasks. Who could help to carry out these tasks? Do you think the assistance you receive is sufficient or need to have much more?	CHARLS: 4.5 (ADL), 7.0 (IADL) TLISA: 2.8 (ADL), 4.5 (IADL)	NR

Reference; country of study	Study	Age of respondents (years)	Type of care	Sample size for subgroup (n)	Questions asked to identify unmet needs	Prevalence (%), if reported ^a	Reasons for unmet needs (prevalence in %)
Huang et al. 2022 (40); China	NA	≥ 60	Social (and health)	2 063 nursing home residents	Utilized CANE tool	4.8 (social), 7.6 (health)	Daily activity (11.2), memory (6.0), physical health (7.6), information on physical condition and treatment (13.9), company (11.9), intimate relationships (9.2)
Huang et al. 2023 (81); China	2005–2014 CLHLS	≥ 65	Social	1 914 needing partial or full assistance with at least one ADL	ADLs (Barthel Index) Does the assistance provided by caregivers meet your needs? (options “fully met”, “basically met” or “not met”)	18.6 ^c	NR
Leigh et al. 2023 (82); Republic of Korea	2020 Korean Longitudinal Study of Ageing	≥ 65	Social	2 769 observations from 1 581 adults	People with care needs were asked whether they had caretakers; people who reported an absence of help were defined as those with unmet ADL and IADL care needs	29.7 ^c	NR
Phi et al. 2023 (83); Viet Nam	2021 Vietnamese Population Change and Family Planning Survey	≥ 60	Social	18 409	Having difficulty with performing [activity]? Received help with [activity]? Need [help/more help] with [activity]?	4.8 ^c	NR

Reference; country of study	Study	Age of respondents (years)	Type of care	Sample size for subgroup (n)	Questions asked to identify unmet needs	Prevalence (%), if reported ^a	Reasons for unmet needs (prevalence in %)
Song and Sun 2023 (84); China	2018 CLHLS	≥ 65	Social	1 896	"I have difficulty and need help" or "I cannot do it" selected for at least one ADL of those with long-term care needs due to functional limitations See Chen et al. 2021 (76)	44.2 ^c	NR
Woo et al. 2023 (85); China	2018 CLHLS	≥ 65	Social	1 187 who required partial or full assistance with bathing, dressing, indoor transfer, toilet, eating and/or continence	Does the assistance provided by caregivers meet your needs? (options: "not met", "partially met" and "fully met") See Chen et al. 2021 (76)	45.7 ^c	NR
Nguyen et al. 2024 (86); Viet Nam	2020–2021 CANE instrument	≥ 60	Social	90 with dementia	Utilized CANE tool	25.6 ^c (physical health), 64.5 ^c (daytime activities)	NR

ADL: activity of daily living; CANE: Camberwell Assessment of Need for the Elderly; CHARLS: China Health and Retirement Longitudinal Survey; CLHLS: Chinese Longitudinal Healthy Longevity Survey; GP: general practitioner; IADL: instrumental activity of daily living; IQR: interquartile range; NA: not applicable; NR: not reported; SD: standard deviation.

^a Prevalence reported for older population (≥ 60 or 65 years), either the focus of the study or as a subgroup, and as a proportion of the total study/subgroup sample size, unless otherwise specified.

^b Prevalence reported for entire (i.e. all age groups) study population.

^c Prevalence reported as a proportion of those who self-reported a need for health or social care (or for an entire study population already identified as having a health or social care need).

Otherwise relevant studies by Higuchi et al. (87) on unmet health care needs published before 2020, and by Thomas et al. (88) on unmet social care needs but with a small number of participants, are not listed in Table 2.1 or counted in the 74 reviewed papers. Using data from the 2010–2011 Japan Gerontological Evaluation Study (study population 23 079), Higuchi et al. (87) reported a prevalence of unmet health care needs in those aged 65 years and older of 6.9%. No reasons for these unmet needs were reported. Thomas et al. (88) reported a prevalence of unmet social care needs of 59%, but from a sample of just 44 Aboriginal Australians aged 50 years and older self-reporting a need for home care. Higuchi et al. (87) provide an additional (and similar) estimate for Japan to that reported in a reviewed paper (68), and Thomas et al. (88) provides important information for a minority population that is traditionally under-researched.

A number of qualitative studies were also identified (from Australia, New Zealand, the Philippines and Viet Nam) that could be examined further to better understand the meaning and impact of unmet needs in the region, but were not included in this report (89–92).

2.2 Results

Of the 60 reviewed articles on unmet health care needs (Table 2.1), 53 focused on general health care needs and seven were specific to dental care (24,28,35,46,50,51,70). Twenty-nine publications (22 health and seven dental) were based on studies conducted in the Republic of Korea (14,15,22–28,35,37,38,41,42,44–51,53–55,62,66,70,74); 18 in China (17,18,21,31,33,34,36,39,43,52,56–59,63,71–73); four in New Zealand (19,64,67,69); two in each of Australia (20,32), Lao People’s Democratic Republic (60,61), Malaysia (30,65) and Viet Nam (16,29); and one in Japan (68).

Two of the publications based in China included subnational-level analyses of data from nationally representative studies (59,71), as did the two studies based in Viet Nam (16,29) and one of the Malaysian studies (65). Four of the publications, all based on studies conducted in the Republic of Korea, focused on unmet health care needs as a direct result of public health measures enacted to control the spread of the coronavirus disease (COVID-19) pandemic (26,47,48,55).

Of the 12 reviewed articles on unmet social care needs (Table 2.2), eight were based on studies conducted in China (76–81,84,85), two studies were conducted in Viet Nam (83,86), and one study was conducted in each of Malaysia (75) and the Republic of Korea (82).

A further two papers reported results for both unmet health and social care needs, and were based in China (40) and New Zealand (13) (Table 2.1 and 2.2).

2.3 Unmet health care needs

2.3.1 Identification

Table 2.1 illustrates the wide range of questions used to identify unmet needs. If participants were asked about forgone care, the question took the general form of “The last time you needed health care, did you receive that care?” (e.g. WHO SAGE, China) (73). There was a degree of similarity in question wording between some surveys within countries (e.g. China, Republic of Korea and Viet Nam), but usually greater variability between surveys. A number of studies in China, for example Li et al. (17), often included separate questions about outpatient and/or inpatient care.

Some of the questions put to participants may have been highly contextual or used wording that did not translate correctly to English. For example, the Malaysia Healthy Ageing Study (30) used the question, “Did you ever hesitate to visit health facilities even when you were ill/sick in the past 12 months?” In translation, “hesitate” may or may not mean a definitive action leading to unmet need (i.e. delayed or forgone care). One study in China (36) asked: “Have you felt uncomfortable (or physical discomfort) in the last two weeks?” followed by “Have you visited doctors?” The term “uncomfortable” or “physical discomfort” might be the correct literal translation from Mandarin, but may be understood by Mandarin speakers in a different way than its meaning in English.

A range of recall periods was also used across the published surveys, typically from 2 weeks to 12 months. Even for studies with identical recall periods, the question wording was different (e.g. “Since last year”, “During the past 12 months”, “Over the past year”, etc.).

2.3.2 Prevalence

The results in Table 2.1 provide prevalence estimates for countries based on data from different surveys, and from a wide range of study populations from 13 years and older to 65 years and older. Just over one half (33/62) of the reviewed publications provided prevalence estimates for the older population (age ≥ 60 or 65 years), either as the specific focus of the paper or as a subgroup of the study population.

In estimating prevalence, most studies used the entire study population or subgroup (i.e. those with and those without care needs) as denominator, but other studies, for example Mao et al. (18), used the number of those self-reporting care needs.

For those studies reporting the prevalence of unmet health care needs as a proportion of study population or subgroup (i.e. those with and those without needs), a range of values from 7.6% (nursing home residents aged ≥ 60 years) (40) to 32.8% (60–69 years) was

observed for China; from 3.4% (≥ 75 years, 2013–2019) (67) to 7.5% (65–74 years, 2013–2019) (67) for New Zealand; and from 2.5% (≥ 65 years, 2020) (44) to 17.2% (≥ 70 years, 2014–2017) (23) for the Republic of Korea. The prevalence of unmet health care needs was reported as 9.4% (≥ 65 years, 2021) in Australia (32), 7.0% (≥ 65 years, 2010) in Japan (68), 6.6% (≥ 60 years, 2018–2020) in Malaysia (30) and 3.0% (≥ 65 years, 2020) in Viet Nam.

A study based in China (China Health and Retirement Longitudinal Study) (≥ 60 years) reported unmet health care needs in 2013 for outpatients and inpatients as 13.9% and 8.4%, respectively (56). The same survey in 2015 (≥ 65 years) reported unmet needs for inpatient care from 1.2% in those with no chronic condition to 7.3% in those with multiple co-morbid conditions (17). For populations in China aged 60 years and older self-reporting health care needs in 2008 and 2013, the estimates were 36.2% and 26.7% (for those uninsured) and 29.4% and 17.7% (for those with insurance), respectively (18).

Of survey respondents in the Lao People's Democratic Republic who had self-reported a need for health care, 11% (≥ 60 years, 2022) reported that these needs were unmet (61).

Three different surveys conducted in the Republic of Korea to measure unmet health care needs during the COVID-19 pandemic estimated prevalence among those aged 65 years and older as 4.3% (2020 Koreans' Happiness Survey) (47), 7.6% (2019–2020 Korea National Health and Nutrition Survey) (55) and 8.9% (2020 Experience Survey on Healthcare Use of Older Adults) (48).

2.3.3 Reasons

Accessibility and acceptability barriers to care were reported at higher levels than affordability as the reasons for not receiving needed care (Table 2.3). In China, accessibility was reported more frequently than affordability. In the Republic of Korea, accessibility was typically reported as the leading barrier, followed by affordability and acceptability issues. Acceptability and availability were leading reasons in Australia, and affordability in New Zealand (possibly because of question wording). Acceptability was listed as a key reason in both Malaysian studies.

Table 2.3. Summary of reasons for unmet health care needs

Study	Reasons for unmet health care needs (%) ^a			
	Availability	Affordability	Acceptability	Accessibility
Australia				
Temple et al. 2021 (32)	14.4	5.4		58.9
China				
Wang et al. 2020 (21)		29.5		41.0
Gao et al. 2022 (39)		62.0 (inpatient)	63.9	
Li et al. 2023 (52)		17.6		53.7
Wu et al. 2023 (56)	6.4	14.6	59.2	
Zhuoga et al. 2023 (Tibet) (59)		47.6 (2013), 28.6 (2018)		23.9 (2013), 28.2 (2018)
Wu et al. 2024 (72)		4.7 (outpatient), 18.7 (inpatient)		
Malaysia				
Shah et al. 2021 ^a (30)		2 ^a	1 ^a	
Ho et al. 2024 (65)		57	61	
New Zealand				
Pledger et al. 2020 (19)		44.9		21.1
Republic of Korea				
Jo et al. 2020 (15)	4.2	5.5	5.0	16.7
Choi and Kim 2021 (22)		28.4		71.6
Jung and Ha 2021 (25)		24.8		37.3
Lee et al. 2022 (42)		20	50	
Park and Chung 2023 (53)		20.3		71.8
Roh and Kim 2023 (55)		46.2		53.9

^a Percentages reported for all studies with the exception of Shah et al. (30), who provided enough information to rank the reasons for forgoing or delaying health care; these included lack of knowledge about health care (acceptability) and financial barriers (affordability).

2.4 Unmet social care needs

2.4.1 Identification

People with social care needs usually receive support in a number of ways, including from family and friends, professional care and support at home, adaptations and telecare at home, assistive devices (e.g. walking stick or frame) or residential care (populations that are not often captured in study samples). To identify social care needs, several of the reviewed studies incorporated self-reported limitations in ADLs or IADLs in the past 30 days (80–82). If study participants reported such limitations, they were then asked if they received any or sufficient care. Other approaches, including the International Resident Assessment Instrument Clinical Assessment Protocols (13) and Camberwell Assessment of Need for the Elderly (CANE) (40,75,86), were also used.

2.4.2 Prevalence

Reviewed studies based in five countries (China, Malaysia, New Zealand, Republic of Korea and Viet Nam) provided prevalence estimates for unmet social care needs in the older population (Table 2.2).

For studies based in China, estimates calculated for total study population or relevant subgroup (i.e. for those with and those without needs) ranged from 4.5% for ADL limitations to 7.0% for IADL limitations (≥ 65 years) (80). Estimates of the prevalence of unmet social care needs calculated for those with social care needs ranged from 18.6% for ADL limitations (≥ 65 years, 2005–2014 China Longitudinal Healthy Longevity Study [CLHLS]) (81) to 60.6% for required caregiver assistance (≥ 60 years, 2014 CLHLS) (76). A study on ageing in Taiwan, China, asked participants (≥ 65 years) whether required assistance with any ADLs and IADLS was provided; 2.8% and 4.5% of the total study population reported unmet needs, respectively (80).

The 2015 Malaysian CANE Study of a small number of institutionalized people (mean age, 71.6 years) found a mean of 2.8% for prevalence of unmet needs (75). In a survey of residents of New Zealand retirement villages (82% ≥ 75 years), 5.4% reported not being able to access assistance with ADL limitations (13). The 2020 Korean Longitudinal Study of Ageing identified unmet needs for assistance with ADL and IADL limitations in 29.7% of a population of those with care needs (≥ 65 years) (82). Finally, in a survey of older adults (≥ 60 years) with dementia in Viet Nam, 64.5% reported unmet needs for assistance with daytime activities (86).

2.4.3 Reasons

None of the reviewed studies included questions about reasons for unmet social care needs. However, one paper (an analysis of CLHLS data) highlighted factors associated with unmet community-based long-term care service needs: depression status, ADL limitations, poor self-rated health, number of children, level of education and marital status (77).

2.5 Discussion

The literature review identified relevant results from some Western Pacific Region countries and areas. Overall, prevalence estimates for both unmet health and social care needs are required in most countries of the Region. The data needs are greatest in the Pacific island countries, territories and areas, none of which had published results in the literature for unmet health or social care needs. The WHO WHS+ would be a viable option to fill these data gaps; it has recently been implemented in three Asian countries in 2023–2024, including in the Western Pacific Region (Cambodia), and includes questions on both unmet health and social care needs. Another option is to add an agreed set of questions to upcoming data collection efforts (e.g. ALSWH; Nauru HIES; and New Zealand Health, Work and Retirement Survey).

For those countries with multiple sources of data identified in the literature, additional work is needed to determine the overall prevalence of unmet needs in any given year and over time. The different study aims and focus of analyses from the same studies in China, New Zealand and the Republic of Korea (e.g. in people with or without chronic diseases and/or insurance, or stratified by equity indicators), without also publishing an overall estimate of those with needs, makes interpretation of results difficult. Those countries with data from multiple surveys covering the same year and similar populations, but with different question wording, face the challenge of determining the overall levels of unmet needs.

Efforts to generate data in countries with no publications could be enhanced by using agreed definitions or standardized sets of questions for surveys.

3

Survey data analysis

3.1 Methods

Other sources of data on unmet health and social care needs in the older population of the Western Pacific Region were identified via professional networks, the review described in Chapter 2 or additional online database searches. The other databases included country-specific agencies (e.g. ministry of health or national statistics offices), non-government agencies (e.g. Pacific Community, WHO, other United Nations [UN] agencies, ILO or World Bank) or academic sites (e.g. the Inter-university Consortium for Political and Social Research of the University of Michigan, and the Australian Data Archive of the Australian National University).

Survey materials were accessed, and questionnaires and data dictionaries reviewed. As well as identifying data sources separate to those mentioned in Chapter 2, additional data from surveys with published results in the reviewed literature were also examined. For example, only WHO SAGE China wave 1 data were available via the reviewed publications (73), but additional results from waves 2 and 3 were accessed and reported in this chapter.

This search resulted in accessible databases from 12 national surveys conducted in Australia (6), Malaysia (1), New Zealand (1), the Philippines (1), Tonga (1) and Viet Nam (2). A further three multi-country surveys including data from the Western Pacific Region were also identified, namely WHO SAGE (China and Mongolia), WHS+ (Cambodia) and WVS (Australia; China, including separate surveys for Hong Kong SAR, Macao SAR and Taiwan, China; Japan; Malaysia; the Philippines; Viet Nam). Table 3.1 lists these national and multi-country survey databases, including interview questions and prevalence estimates calculated from survey data.

The analytical sample from Mongolia SAGE provided an overall estimate of unmet health care needs (2.2%), but the resulting analytical sample was too small for further meaningful subgroup analyses. Three studies – 2024 Nauru HIES; ALSWH; and New Zealand Health, Work and Retirement Survey – added questions on unmet health care needs from WHO WHS+, but did not have results published or data available at the time of analysis.

Table 3.1. Prevalence of unmet health and/or social care needs derived from population health and economic surveys identified in the WHO Western Pacific Region

Study (year)	Age of study participants (years)	Type of unmet needs	Survey question(s)	Prevalence of unmet needs calculated from survey data (%)
Australia				
Australian Longitudinal Study on Women's Health (2013, 2016, 2019)	62–67 (2013), 64–70 (2016), 68–73 (2019)	Social	How often is each of the following types of support available to you if you need it ("some of the time" or "none or a little of the time"): someone to help you if you are confined to bed; someone to prepare your meals if you are unable to do it yourself; someone to help with daily chores if you are sick; and multiple other questions about social and other support.	Proportion reporting unmet needs for tangible support "all of the time": 27.2 (2013), 23.4 (2016), 23.8 (2019) (see Annex 2, Table A2.1 for details about other types of care)
Commonwealth Fund International Health Policy Survey (2017, 2021)	≥ 65	Health	During the past 12 months, was there a time when you: (i) did not fill/collect a prescription for medicine, or you skipped doses of your medicine because of the cost; (ii) had a medical problem but did not consult with/visit a doctor because of the cost; (iii) skipped a medical test, treatment, or follow-up that was recommended by a doctor because of the cost; or (iv) did not visit a dentist when you needed to because of the cost?	5.1, 5.1, 7.1, 21.3 (2017) 1.9, 4.3, 5.7, 14.9 (2021)
National Aboriginal and Torres Strait Islander Health Survey (2018–2019)	≥ 15	Health	During the last 12 months was there ever a time you/name/child's name needed to go to a GP/doctor at the clinic but didn't?	12.5 (1680/10 579 aged ≥ 55 years)
National Aboriginal and Torres Strait Islander Health Survey (2022–2023)	≥ 15	Health	During the last 12 months was there ever a time you/name/child's name needed to go to a GP/doctor at the clinic but didn't?	16.0 (1124/7768 aged ≥ 60 years)
Patient Experience Survey (2018–2019, 2022–2023)	≥ 55	Health	Were there any times in the last 12 months you tried to get an appointment with this GP and couldn't? Since last year, has there been any time you needed to go to a GP but didn't? If "yes", was this because of cost?	0.4, 16.6, 1.7 (2018–2019) 0.6, 23.5, 4.7 (2022–2023)

Study (year)	Age of study participants (years)	Type of unmet needs	Survey question(s)	Prevalence of unmet needs calculated from survey data (%)
Patient Experience Survey (2023–2024)	≥ 55	Health	Since [month]/last year, has there been any time you needed to go to a GP but didn't? ... what/what was the main reason you did not go? (1, Cost; 2, dislike or fear of service; 3, waiting time too long; 4, service not available when required; 5, had an upcoming appointment; 6, too busy; 7, transport/distance; 8, other) Excluding the time you needed to see a GP but didn't, since [month]/last year, has there been any time you needed to see a GP but delayed going? Was [this delay] because of cost? Since [month]/last year, has there been any time you/[name] delayed getting or did not get prescribed medication because of the cost?	21.1, 18.5 (cost), 32.2 (non-cost) Delayed seeing GP at least once or did not see a GP when needed: 27.6 (55–64 years), 19.7 (65–74 years), 15.3 (75–84 years), 11.6 (≥ 85 years) Because of cost: 6.2, 3.9, 1.8, 1.6; not cost-related: 21.4, 15.7, 13.3, 10.0 Of those who needed a prescribed medication: 6.5, 3.3, 2.7, 2.4
Survey of Disability, Ageing and Carers (2018, 2022)	≥ 65	Health	Those reporting need for health care assistance	2018: 13.0 (unmet) 2022: 5.3 (unmet), 14.7 (partially met)
Survey of Disability, Ageing and Carers (2018, 2022)	≥ 65	Social	Self-care questions about whether help needed with showering or bathing, dressing, eating, toileting, bladder or bowel control Mobility questions about whether help needed getting into or out of a bed or chair, moving about usual place of residence, moving about a place away from usual residence, walking 200 m, walking up and down stairs without a handrail, bending and picking up an object from the floor	For sex- and age-stratified data, see Annex 2, Table A2.2 2018: 3.2 (unmet), 31.1 (partially met) 2022 (39.8% of those aged ≥ 65 years needed some assistance with everyday activities): 4.2 (unmet), 43.5 (partially met)
Ten to Men (2015–2022)	< 30 to 60–69	Health	Waves 1 and 2: In the past 12 months, was there any time that you needed health care but could not get it?	Age 60–69 years: 20.5 (wave 3), 27.1 (wave 4)

Study (year)	Age of study participants (years)	Type of unmet needs	Survey question(s)	Prevalence of unmet needs calculated from survey data (%)
			Waves 3 and 4: Below is a list of reasons why some people may be unable to access health care when they need it. During the past 12 months, have you been unable to access health care for any of the following reasons?	Age ≥ 50 years: 7.6 (acceptability), 7.4 (affordability), 6.1 (availability) (wave 3); 11.4 (availability), 7.0 (COVID-19), 6.8 (acceptability) (wave 4)
Malaysia				
Malaysia Ageing and Retirement Survey (wave 1, 2018; wave 2, 2020)	≥ 40	Health	In the last 12 months, did you go for any of the following medical check-ups such as general health screen, cholesterol, mammogram, pap smear, colonoscopy, prostate or bone density? If “no”, what is the main reason for not going for the medical check-up? 1, Wanted to but difficult to travel to a medical check-up facility (either because of the distance or traveling cost); 2, did not expect any problem as the previous check-up went fine; 3, too busy; 4, could not afford to; 5, afraid of results; 6, did not see a need; 7, other (specify)	Wave 1: 2.8 (60–69 years), 2.5 (70–79 years), 2.7 (≥ 80 years) Wave 2: 0.6 (60–69 years), 1.1 (70–79 years), NR (≥ 80 years)
Malaysia Ageing and Retirement Survey (wave 1, 2018; wave 2, 2020)	≥ 40	Social (ADLs)	Do you need assistance in performing the following activities for the past one week (ADLs and IADLs)? If “yes”, who usually will help with ADLs for those requiring assistance?	NR (prevalence of social care need reported as 15.3 in 2018 and 17.6 in 2020) Spouse or daughter (both years)
New Zealand				
New Zealand Health Survey (2022–2023)	≥ 15	Health	In the past 12 months, was there a time when you had a medical problem but did not visit a GP (for any of the following reasons)? In the last 12 months, did you ever feel that you needed professional help for your emotions, stress, mental health or substance use, but you didn't receive that help?	Cost: 7.2 (65–74 years), 4.4 (≥ 75 years); waiting time: 19.7 (65–74 years), 13.7 (≥ 75 years); transport: 2.3 (65–74 years), 1.1 (≥ 75 years) 7.8

Study (year)	Age of study participants (years)	Type of unmet needs	Survey question(s)	Prevalence of unmet needs calculated from survey data (%)
			In the past five years, has a doctor referred you to a specialist but you did not go for any of the following reasons?	Cost: 4.4
Philippines				
Longitudinal Study of Ageing and Health in the Philippines (2018)	≥ 60	Health	Within the past 12 months, have you felt ill, and thought about going to see a doctor, but didn't?	23.4 (25.0 for 60–69 years; 22.6 for ≥ 70 years) Reasons: 82.5 (cost), 4.6 (self-medication), 3.0 (no time), 2.9 (illness not serious)
Tonga				
Household Income and Expenditure Survey (2021)	≥ 18	Health	Did [name] get help or care for [a previously reported condition]? If “no”, what is the main reason(s) [name] did not seek medical assistance?	19.3 (age ≥ 60 years) Reasons: 5.7 (availability), 0.7 (accessibility), 84.9 (acceptability), 1.2 (affordability)
Viet Nam				
Viet Nam National Aging Survey (2011)	≥ 60	Health	During the last 12 months, were there any times that you were sick or injured that prevented you from performing your usual activities? Did you receive any professional treatment for these illnesses or injuries? Do you think that you needed treatment?	5.4
Viet Nam Older Persons and Social Health Insurance (2019)	≥ 60	Health	During the last 12 months, were there any times that you were sick or injured that prevented you from performing your usual activities? Did you receive any professional treatment for these illnesses or injuries? Do you think that you needed treatment?	0.3

Study (year)	Age of study participants (years)	Type of unmet needs	Survey question(s)	Prevalence of unmet needs calculated from survey data (%)
Multi-country				
WHO Study on global AGEing and adult health China (wave 1, 2008–2010; wave 2, 2015; wave 3, 2018–2019), Mongolia (2016)	≥ 18	Health	The last time you needed health care, did you get health care? Response “no” considered as unmet needs.	Age ≥ 60 years China: 6.2 (2008–2010), 10.6 (2015), 5.9 (2018–2019) Mongolia: 2.2
World Health Survey Plus Cambodia (2023)	≥ 18	Health	The last time you needed health care, did you get health care? Response “no” considered as unmet needs.	3.7 (≥ 60 years) 1.0 (availability), 43 (affordability), 21 (acceptability), 18 (accessibility)
World Health Survey Plus Cambodia (2023)	≥ 18	Social (ADLs or IADLs)	Those with at least one ADL limitation (12.9% of those aged 60–69 years and 15.1% of those aged ≥ 70 years) were asked: was there a time you did not receive the help you needed in the past 12 months?	22.3 (≥ 60 years)
World Values Survey (wave 6, wave 7); Australia; China, including separate surveys for Hong Kong SAR, Macao SAR and Taiwan, China; Japan; Malaysia; Philippines; Viet Nam	≥ 18	Health	In the last 12 months, how often have you or your family gone without medicine or medical treatment that you needed? Options: often, sometimes, rarely, never (“often” and “sometimes” classed as unmet needs)	Age ≥ 60 years Australia: 6.0 (2012), 5.0 (2018) China: 14.6 (2013), 11.1 (2018) China, Hong Kong SAR: 8.6 (2018, 60–69 years), 10.4 (2018, ≥ 70 years) China, Macao SAR: 8.7 (2019, 60–69 years), 2.3 (2019, ≥ 70 years) Taiwan, China: 3.1 (2019, 60–69 years), 9.9 (2019, ≥ 70 years) Japan: 3.9 (2010), 4.6 (2019) Malaysia: 8.9 (2012), 10.7 (2018) Philippines: 25.5 (2012), 34.8 (2019) Viet Nam: 13.7 (2020)

ADL: activity of daily living; COVID-19: coronavirus disease; IADL: instrumental activity of daily living; NR: not reported; SAR: Special Administrative Region.

^a Small sample size for those aged 60 years and older and for reasons. Data therefore presented for sample of those aged 50 years and older, with a mean endorsement across all reasons (e.g. availability was the average of those selecting no service in area, wait time too long/no appointments and not taking new patients).

3.2 Results

Most of the data identified in the published literature in Chapter 2 were based on studies conducted during or before 2020. A number of the surveys accessed for this report were implemented after 2020, for example: Ten to Men, National Aboriginal and Torres Strait Islander Health Survey, Patient Experience Survey and SDAC (Australia); WHS+ (Cambodia); New Zealand Health Survey; and Tonga HIES (Table 3.1).

Eight of the 15 identified surveys were specifically focused on the unmet health and social care needs of the older population (i.e. age $\geq$ 55, 60 or 65 years). The remaining seven surveys collected data on the general adult population (i.e. age $\geq$ 18 years) of the Region, with age-stratified analysis undertaken to generate prevalence estimates for older populations.

Most (11) of the 15 surveys were focused on unmet health care needs. Only one survey (ALSWH) was specific to unmet social care needs. Three of the surveys (Australian SDAC; MARS; and WHS+) collected population-based data on both unmet health and social care needs, although only SDAC and WHS+ asked about unmet needs.

3.3 Unmet health care needs

3.3.1 Identification

As reported in Table 3.1, there is a lack of consistency in questions used to identify unmet health care needs between surveys and between and within countries.

The Commonwealth Fund International Health Policy Survey (Australia) used four questions about unmet health care needs related to prescription medications, medical visits, skipped tests or dentist visits, but only in relation to affordability. In contrast, the Patient Experience Survey (Australia) asked three questions related to the usual first point of care, that is, whether participants attended an appointment with a general practitioner (GP) when needed, identifying unmet needs because of availability as well as affordability.

WHO SAGE China and Mongolia (health care) and WHO WHS+ Cambodia (both health and social care) first established whether participants had ever needed care. If within the last 3 years, this was followed by a question to assess unmet needs: "The last time you needed health care, did you get health care?"

Although survey question wording typically varied between surveys, the two surveys based in Viet Nam (2011 National Aging Study and 2019 Older Persons and Social Health Insurance) were designed by the same survey team and therefore used identical questions, allowing comparisons over time.

The questions about health care in MARS (both health and social care) asked about preventive care and appointments for routine medical check-ups such as cholesterol, bone density or cancer screening.

The recall period of 12 months was the most commonly used (including in WHS+) as this timeframe provides a balance between minimizing recall bias and ensuring a sufficient period of time to capture infrequent events (e.g. hospitalization). However, Tonga HIES adopted a much shorter recall period of 30 days, for example, “In the last 30 days, did you have any of these health problems?” then “Did you get help or care for this problem?” If the response was “no”, respondents were then asked about the main reason for not receiving or seeking care.

3.3.2 Prevalence

The lowest values of estimated prevalence of unmet health care needs in the older population (age ≥ 60 years) were from Viet Nam (0.3%) in 2019 and Mongolia (2.2%) in 2018 (Table 3.1). The prevalence of unmet health care needs in those aged 60 years and older in Tonga was 19.3% in 2021. The prevalence of unmet health care needs was estimated as 3.7% in Cambodia in those aged 60 years and older in 2023 (WHS+). Using the same questions in SAGE China in 2019 resulted in a prevalence of 5.9% of unmet health care needs in those aged 60 years and older.

The highest prevalence values were extracted from survey data from the Philippines, in which the prevalence of unmet health care needs in the population aged 60 years and older was estimated as 25.5, 23.4 and 34.8% from 2012 WVS wave 6, 2018 Longitudinal Study of Ageing and Health in the Philippines and 2019 WVS wave 7, respectively.

Estimates for unmet health care needs because of cost in Australia (Patient Experience Survey) ranged from 1.7% in those aged 55 years and older (2018–2019) to 6.2% in those 55–64 years and 1.6% in those aged 85 years and older (2023–2024). Estimates of unmet health care needs because of cost from a different study in Australia (Commonwealth Fund International Health Policy Survey) implemented in 2017 and 2021 were 5.1% and 4.3%, respectively, in those aged 65 years and older (noting a smaller sample size in 2021). The prevalence of not seeing a GP when needed in New Zealand (New Zealand Health Survey, 2022–2023) because of cost was 7.2% and 4.4% in those aged 65–74 years and 75 years and older, respectively, which was lower than because of waiting time (19.7% and 13.7%, respectively).

3.3.3 Reasons

Only eight of the surveys asked participants to report reasons for unmet health care needs, which were categorized in this report as availability, affordability, acceptability and accessibility (Table 3.2). Acceptability (e.g. preference for alternative or traditional medicine; issues with language, trust or service quality; concerns about discrimination) was the leading reported reason for unmet health care needs in Australia (National Aboriginal and Torres Strait Islander Health Survey), China (WHO SAGE) and Tonga (HIES) in those aged 60 years and older (Table 3.2). Availability (e.g. in terms of appointment, personnel, medical facility, equipment or medications) was a commonly reported reason in Australia (Ten to Men) and New Zealand. Affordability was listed as a common reason in several countries, and was the leading reason for unmet health care needs in Cambodia (WHS+). Compared with the other surveys in Table 3.2, experiencing unmet health care needs because of issues with accessibility (e.g. lack of transport, distance to facility, waiting time for appointment) was more frequently reported in WHS+ Cambodia. Further country-specific analyses on the reasons for unmet needs, and their classification by sociodemographic and household factors, are needed for the design and implementation of relevant policies and other interventions.

Table 3.2. Reasons reported by survey respondents for unmet health care needs

Study	Age group (years)	Reasons reported for unmet health care needs, as a percentage of those self-reporting unmet needs (%)			
		Availability	Affordability	Acceptability	Accessibility
Australia					
National Aboriginal and Torres Strait Islander Health Survey (2018–2019, 2022–2023) ^a	≥ 15 (15.9%, 14.5% ≥ 60)	28	7, 18.9	79, 8.4	14, 32.2 ^b
Patient Experience Survey (2018–2019, 2022–2023, 2023–2024)	≥ 55	–	1.7, 4.7, 18.5	–	–
Ten to Men (2020 wave 2, 2022 wave 4) ^c	≥ 50	6.1, 11.4	7.4	7.6, 6.8	–
Cambodia					
World Health Survey Plus (2023)	≥ 60	1	43	21	18
China					
WHO Study on global AGEing and Adult Health (wave 1, 2008–2010)	≥ 60	11	23	61	2

Study	Age group (years)	Reasons reported for unmet health care needs, as a percentage of those self-reporting unmet needs (%)			
		Availability	Affordability	Acceptability	Accessibility
New Zealand					
New Zealand Health Survey (2022–2023)	≥ 65	1	7	1	21
Philippines					
Longitudinal Study of Ageing and Health in the Philippines (2018)	≥ 60	–	82.5	–	5.9
Tonga					
Household Income and Expenditure Survey (2021)	≥ 60	5.7	0.7	84.9 ^d	1.2

^a No unit record data were available, possibly leading to the potential for double-counting within categories.

^b Mean of three reasons (waiting time or not available, too busy and decided not to seek care).

^c Mean endorsement across all reasons (e.g. availability was the average of those endorsing no service in area, waiting time too long and/or no appointments, and not taking new patients).

^d 80% of survey respondents reported that their “health problem [was] not serious”; another 5% attended a traditional healer before seeking health care.

3.4 Unmet social care needs

3.4.1 Identification

Further to the surveys conducted in China, the Republic of Korea and Viet Nam already identified in the literature review (Chapter 2, Table 2.2), ALSWH was the only additional survey identified in the Western Pacific Region focusing solely on unmet social care needs. SDAC (Australia) and WHS+ (Cambodia) provided data on both unmet health and social care needs. MARS provided information on social care need and providers of needed care. SDAC, MARS and WHS+ first asked participants whether they experienced difficulties with ADLs/IADLs to ascertain social care needs. The former and the latter included follow-on questions about whether these social care needs were met, similar to many of the studies identified in the literature. Using ADLs/IADLs for older populations is a reliable and efficient approach to assess need for social care and support. This approach has been used in many studies across different countries to assess functional limitations in older people; however, it may not adequately identify needs for social care in younger populations or people who have needs for other types of support, such as social contact, safety and occupation, or living arrangements (93). For example, a recent review found similar levels of unmet physical and social needs as for psychological and environmental needs (94).

ALSWH used the Medical Outcomes Study approach to assess unmet social care needs (95). The social support questions included an overall score and four subcategory scores: informational support, tangible support, affectionate support and positive social interaction support. The subcategory of tangible support items is more closely aligned with questions about ADLs and/or IADLs limitations.

WHS+ Cambodia used ADL, IADL and WHO Disability Assessment Schedule (96) questions to ascertain care needs, with follow-on questions about whether care needs were met. This survey also included questions reflecting the Washington Group disability questions (97).

MARS included a list of those providing assistance with ADL limitations (domestic maid, spouse, daughter, son, granddaughter or “other”), but did not include a question about whether the participant experienced any unmet or partially unmet needs for social care. Although this information about care providers is important for discussions about the care economy, it is hoped that future waves will include a question about unmet needs for social care.

3.4.2 Prevalence

Based on results from the 2023 WHS+ Cambodia, unmet social care needs increased with age from 17.2% for those aged 18–29 years to 22.3% for those aged 60 years and older. Unmet social care needs decreased with age in a cohort of Australian women: those reporting unmet social care needs “all of the time” decreased from 27.2% (in 2013, when the group was aged 62–67 years) to 23.8% (in 2019, when the group was aged 68–73 years) (Annex 2, Table A2.1).

SDAC (Australia) yielded estimates of unmet social care needs of 34.3% for those aged 65 years and older; see Annex 2, Table A2.2 for further sex- and age-stratified results.

MARS (Malaysia) questions identified unmet social care needs and care providers, but did not include any specific question about unmet needs.

3.4.3 Reasons

None of the surveys included questions about the reasons for unmet social care needs.

3.5 Discussion

The results from additional survey data analysis added to the number of countries covered, provided estimates from more recent years compared with many of the results published in the literature, and provided an additional approach to assessing unmet social care needs (e.g. ALSWH).

The timeframe (12 months) included in the questions for unmet health care needs was largely consistent across the different studies. Where multiple years of cross-sectional data were available, the prevalence of unmet health care needs was generally lower in more recent years.

With the exception of a number of studies based in Australia and Viet Nam, access was provided to the microdata for analysis. Data tables were obtained from the Australian Bureau of Statistics for the Patient Experience Survey, National Aboriginal and Torres Strait Islander Health Survey, and SDAC. Results were generated for this report by the study director for both studies based in Viet Nam, but the raw data were not accessible.

As with the findings from the literature review reported in Chapter 2, the reasons for unmet health care needs – acceptability and affordability were frequently endorsed along with availability – provide valuable inputs for policy and planning purposes.

4

Discussion and conclusion

4.1 Overview of data availability

Only two fifths (14/37) of the countries, areas and territories of the WHO Western Pacific Region have (i) published results reporting the prevalence of unmet health and/or social care needs; and/or (ii) accessible survey databases from which the prevalence of unmet health and/or social needs can be estimated (see Table 4.1). However, it should be noted that only publications and survey databases available in English were investigated; it is not known how this language restriction affected the apparent lack of data from the remaining 22 countries, areas and territories of the Region.

Table 4.1. Sources of information for 14 of the 37 countries, areas and territories of the WHO Western Pacific Region

	Published literature ^a			Additional survey databases accessed ^b		
	Health care	Social care	Both health and social care	Health care	Social care	Both health and social care
Australia	x	x		x	x	x
Cambodia						x
China	x	x	x	x		
Hong Kong SAR				x		
Macao SAR				x		
Japan	x			x		
Lao People's Democratic Republic	x					
Malaysia	x	x		x		x
Mongolia				x		
New Zealand	x		x	x		
Philippines				x		
Republic of Korea	x	x				
Tonga				x		
Viet Nam	x	x	x	x		
Total	8	5	3	11	1	3

SAR: Special Administrative Region.

^a These columns note the countries for which published studies were reviewed, regardless of whether the individual studies used data from a survey.

^b These columns count accessed surveys.

Asian countries (particularly China and the Republic of Korea), as well as Australia and New Zealand, had more publications and/or survey databases than the Pacific island countries and areas. However, these countries with the most data would still benefit from further studies on unmet health and social care needs, particularly on unmet social care needs, as well as further analysis of existing data to better guide policy.

Studies to improve data availability in the lower-income and Pacific island countries and areas are needed, especially with the increasing impact of climate change on both population health and health systems. For countries with no or limited data, mainly the Pacific island countries and areas, a priority could be to work with the Pacific Community to identify ways of including questions about health and social care needs in planned surveys by national authorities and international agencies (e.g. the Pacific Community, WHO, ILO, World Bank). Recent examples of such collaboration were the inclusion of questions from the WHO WHS+ instrument in the 2024 Nauru HIES (ILO); the next waves of the ALSWH; and the New Zealand Health, Work and Retirement Survey.

No or limited data also affects system and service planning and policy in the Region. Using the current demand estimates without adjustments for unmet needs would underestimate demand. This underestimate, combined with the known deficits in the current supply and/or workforce, would result in flawed input data for supply-side modelling and projections for future service and workforce planning (98).

4.2 Data harmonization

For the small number of countries with available relevant unmet health and social care needs data, the results may not be comparable within or between these countries because of the differences in survey question wording, survey methods and methods of analysis.

For countries with limited data and few survey options, other methods of assessing unmet health and social care need (via health care utilization data or burden of disease data) should be explored. Any collective effort that results in an agreement on a set of standardized questions to be used in future data collection platforms would benefit both national and cross-national understanding of unmet needs.

Countries with available data sources would benefit from applying agreed definitions of unmet health care needs, and using standardized or harmonized approaches to generate prevalence estimates and identify barriers to seeking or receiving needed care. Standardizing identification methods may be easier than changing

survey questions in new waves of established studies; however, a uniform or standardized set of questions within data collection efforts in the wealthier and Asian continent countries (e.g. Australia, China, Japan, New Zealand and the Republic of Korea) would improve the accuracy of overall prevalence estimates and allow cross-study and cross-country comparisons.

The approach to identifying and quantifying unmet social care needs is somewhat more uniform because it is frequently based on an established method of assessing care needs in older people (limitations with ADLs and/or IADLs). Using functional limitations to define social care needs in older people is a reasonable approach. However, unmet social care needs data within the Region are much more scarce than unmet health care needs data. Most countries of the Western Pacific Region need more data on the prevalence and reasons for unmet social care needs.

4.3 Policy relevance

Policies that improve access to affordable health and social care services reduce unmet need; reducing unmet needs for health and social care will have a positive impact on health outcomes and care costs, and lead to higher productivity for individuals and society. Improving the supply of quality social care services would help to maintain independence in older age and address inequities in the care economy.

Policies that promote healthy ageing, address NCD risks (e.g. reducing the sale of ultra-processed foods; increasing levies on companies that produce sugary drinks and tobacco) and delay onset of functional limitations in older age would all translate into people reaching older ages in better health and with lower requirements for health care.

Addressing social determinants of health and improving levels and quality of social care (that in turn reduces more costly use of health care services) may also be attractive policy options to consider. Acknowledging the social factors and risks that impact health over the life course (social determinants of health), health care utilization and access to social care has the potential to contribute to maintaining health or mitigating health deterioration with ageing and in older age. Health and social care services can result in health gains in older people and positive economic effects, through maintaining productivity and delaying or reducing medical and long-term care costs. Quantifying the health costs or outcomes for high-burden NCDs resulting from non-use of health care, delayed use of health care and sub-optimal use of health care may generate more interest in addressing unmet needs.

The currently available metrics to monitor primary health care systems and UHC are related to access and financing of care. Services provided by these systems need to better reflect the population health burden and better integrate health and social care (12). For affordability, this means better risk-pooling mechanisms to reduce the increases in OOP health expenditures in many countries. Spending that is directed to best buys for NCDs (99) has the potential to improve health and slow the increase in government health expenditures. Efforts to lower non-financial barriers to health and social care, such as availability of services and lack of caring and support, are also needed.

In addition to access and financing, most countries of the Western Pacific Region are facing health and care workforce challenges, including shortages, maldistribution, ageing and inefficient use of the existing workforce (98,100). Policies related to the health workforce should also address the current mismatch between health workforce occupations and the roles needed to meet the evolving health needs and demands of ageing populations.

Social care systems, either home- or community-based or residential care, need strengthening or restructuring in most countries of the Western Pacific Region to make them sustainable and responsive to the changing demands of the population. Policies that address the care economy and social care systems may benefit from lessons and evidence accumulating through the Global Observatory of Long-Term Care (101) and others (102).

If the projected number of older people in need of social care services grows rapidly in low- and middle-income countries in Asia and the Pacific region (103), efforts to quantify the levels of social care needed to keep individuals ageing well and independently, as well as determine who provides this care, are needed. In this report, only MARS asked questions about who provided needed care. The social care workforce is as strained (if not more) than the health workforce, and jobs in this sector are typically associated with lower pay and status. The importance of the care economy has risen across the region, with UN Women (104), the Association of Southeast Asian Nations (ASEAN) (105) and the Asian Development Bank (106) implementing actions to address the issue. This has implications for families, but also for societies and economies.

In many countries, the social care workforce is an unpaid (often female) family member. However, an over-reliance on unpaid care may not be sustainable as care needs become more complex and longer in duration. Policies that address the unequal burden of unpaid care would contribute towards economic empowerment of women, while reducing the impact of informal care provision on the formal workforce participation and productivity (107).

Finally, the COVID-19 pandemic exposed health system vulnerabilities and the impact of underinvestment in the health workforce and systems. The subsequent restructuring of health and social care systems in the Western Pacific Region to address unmet needs (and population ageing) would therefore benefit from adopting community-based integrated care with a person-centred focus (6).

4.4 Future research

Prevalence estimates from published literature and survey databases are already available from a range of countries, areas and territories of the Western Pacific Region; these data could be used to: investigate the policy levers that impact levels of unmet health and social care need; examine population characteristics related to the different drivers of unmet needs (e.g. accessibility or affordability) and in different population groups (e.g. migrants, minority groups, differently abled or older population), with a focus on health equity; and undertake cross-study comparisons within countries to improve the quality of estimates used to inform policy and planning.

International organizations could collaborate to agree on definitions of unmet health and social care needs, the metrics to be monitored and approaches to capture this information through surveys. A standard approach or set of questions to estimate unmet health care needs would address country-specific needs and improve cross-country comparability. These could then be used to guide service adaptations and improvements, workforce estimation and planning, and mechanisms to strengthen health and social care systems.

Unmet social care needs questions using limitations in ADLs and/or IADLs have potential issues with underestimating prevalence because of the question timeframe (usually the previous 30 days) and the scope of care needs (does not include other care needs outside the physical and cognitive); questions about reasons for unmet social care needs could be developed.

Mixed-methods studies could be considered to better understand the meaning and contextual factors that may influence the prevalence of unmet needs in different countries and cultures. Alternative approaches to measuring unmet needs – for example, related to high-burden conditions or climate change – could be developed for specific countries and areas of the Region.

4.5 Concluding remarks

Unmet needs for health and social care are indicators of health inequity and a lack of responsiveness of health systems; both issues require government leadership through policy development and implementation. High-quality evidence that contributes to an understanding of the prevalence and drivers of unmet needs in older populations in the Western Pacific Region is needed to: inform interventions that address demand for health and social care; plan future health systems services; ensure an adequate health workforce supply; and enable progress towards UHC for all ages.

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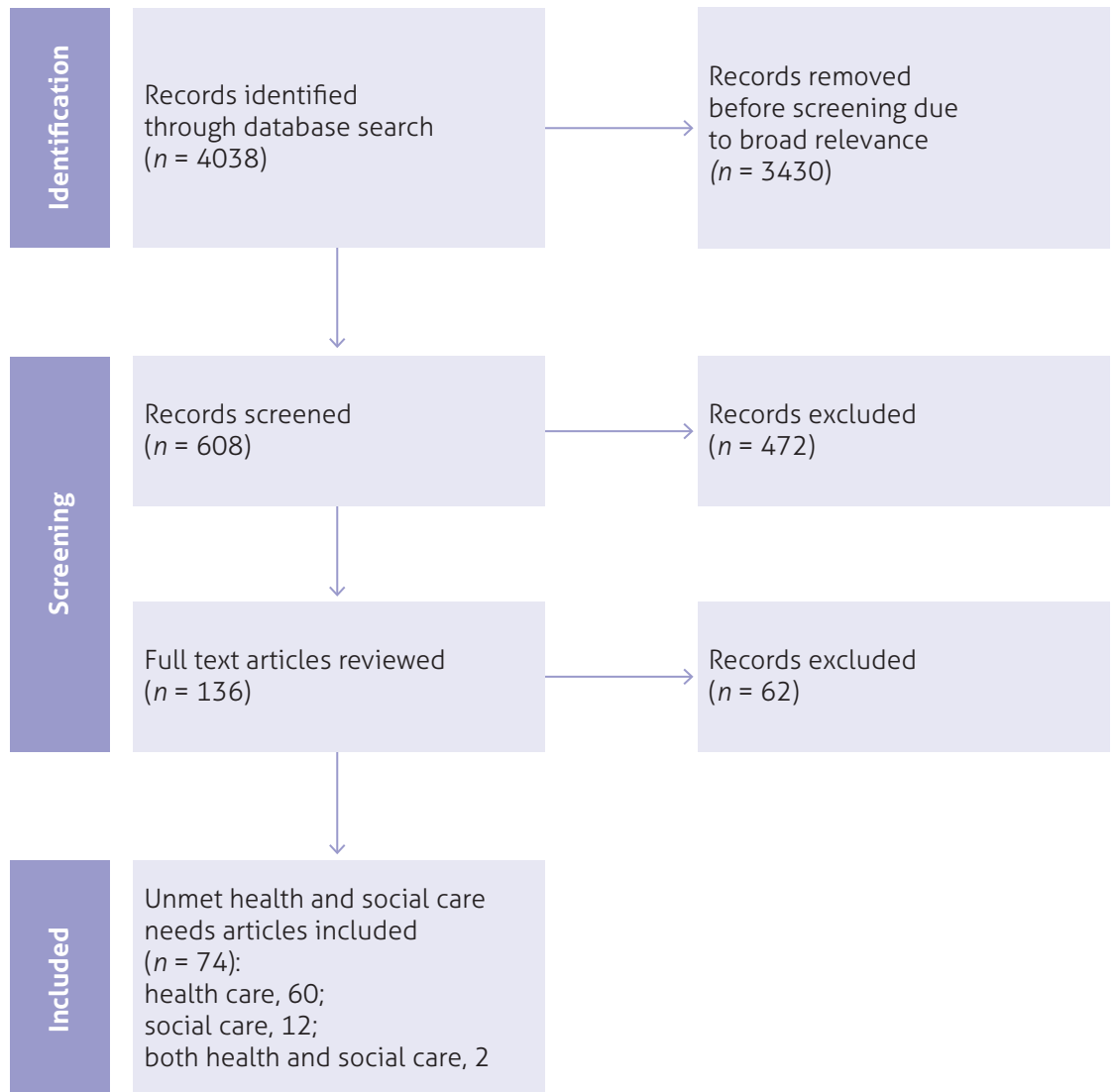
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Annex 1. Literature search and screening results

Fig. A1.1. Preferred reporting items for systematic reviews and meta-analysis (PRISMA) flow diagram



Annex 2. Survey analysis additional data

Table A2.1. Australian Longitudinal study on Women's Health, 2013–2021

Functional support type ^a	Response	2013 62–67 years (n = 9 046)	2016 64–70 years (n = 8 492)	2019 68–73 years (n = 7 823)
Emotional/informational support	All of the time	45.2	47.1	50.0
	Most of the time	30.8	31.3	29.6
	Some of the time	14.9	14.3	13.6
	None or a little of the time	9.1	7.2	6.8
Social support	All of the time	49.6	52.0	53.2
	Most of the time	26.9	27.4	26.8
	Some of the time	14.8	13.5	13.4
	None or a little of the time	8.7	7.0	6.6
Affectionate support/positive social interaction	All of the time	53.9	54.6	57.2
	Most of the time	26.3	27.0	25.5
	Some of the time	13.5	12.8	12.1
	None or a little of the time	6.3	5.6	5.2
Tangible support	All of the time	48.3	51.4	51.4
	Most of the time	24.5	25.1	24.9
	Some of the time	13.5	12.0	12.7
	None or a little of the time	13.7	11.4	11.1

^a Functional support is the degree to which interpersonal relationships serve particular functions. The Medical Outcomes Study (MOS) social support index measures functional support and is derived from a 19-item, multi-dimensional, self-administered survey (1).

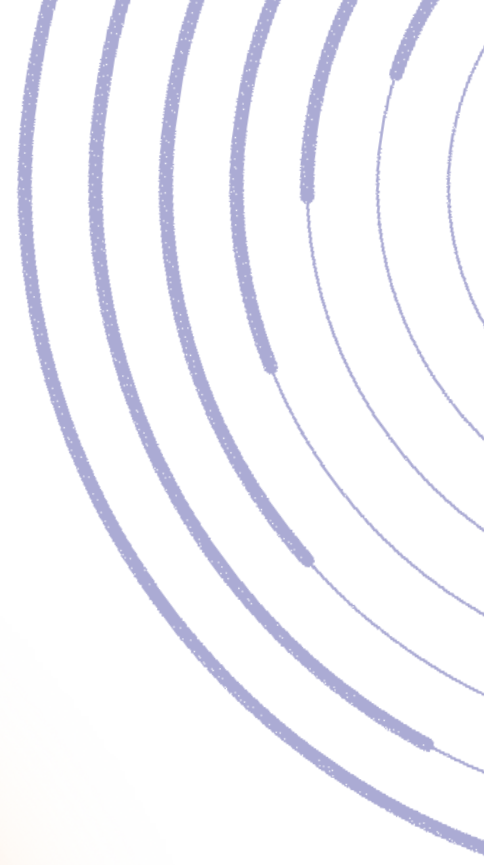
Table A2.2. Survey of Disability, Ageing and Carers, Australia, 2018

Extent to which need for assistance is met for at least one activity (<i>n</i> = 3 270)	Total (95% CI)	Women	Men	Age group (years)					Moderate to profound limitation	No to mild limitation /chronic disease without disability
				65–69	70–74	75–79	80–84	≥ 85		
Need fully met	65.7 (64.1–67.3)	64.5	67.7	66	64.6	60.5	68.1	69.4	58.4	74.7
Need not met at all	3.2 (2.6–3.8)	2.9	3.8	4.1	4.4	3.5	2.7	1.6	1.5	5.4
Need partly met	31.1 (29.5–32.7)	32.6	28.5	30	31	36	29.2	29.1	40.1	19.9

CI: confidence interval.

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