

Elder Caregiving in Southeast Asia: A Systematic Review of Cultural Norms, Care Burdens, Carer Support and Policy Gaps

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Older Adult Caregiving in Southeast Asia: A Systematic Review of Cultural Norms, Care Burdens, Carer Support and Policy Gaps

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Abstract

Background: Southeast Asia is undergoing one of the world's fastest transitions toward population aging. Older adult caregiving arrangements vary across the region, with stronger infrastructure in wealthier Association of Southeast Asian Nations (ASEAN) countries. Nevertheless, care remains predominantly household-based, with women bearing primary responsibility. Although informal caregiving is supported by cultural norms such as filial piety, these also reinforce inequities. Limited long-term care infrastructure, weak policy integration, and insufficient caregiver support persist, particularly in poorer countries.

Methods: Following Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, a systematic search was conducted in PubMed, Scopus, Web of Science, and ScienceDirect for studies published between 2015 and 2025. Eligible studies included formal and informal caregivers of older adults in institutional, community, and household settings across Southeast Asia. Quality appraisal used the Joanna Briggs Institute and Critical Appraisal Skills tools, with certainty of evidence assessed via Grading of Recommendations, Assessment, Development and Evaluations and Confidence in the Evidence from Reviews of Qualitative Research. Findings were synthesized thematically across structural, functional, health-related, sociocultural, and policy domains.

Results: Forty-eight studies from ten Southeast Asian countries were reviewed. Findings differed markedly between richer and poorer countries, but across the region caregivers face high workloads, inadequate training, weak support systems, and poor working conditions, resulting in stress, burnout, and reduced quality of life. Dementia-related symptoms, care intensity, and family obligations were consistently linked to caregiver burden. When combined with limited institutional support, sociocultural values such as filial piety, religion, and gender norms functioned both as protective resources and as stressors. Policy gaps were

evident in the areas of financial protection, Long-Term Care (LTC) infrastructure, training, and integration between national and community systems.

Conclusions: Older adult caregiving in Southeast Asia is at a policy crossroads. Wealthier ASEAN countries are expanding formal long-term care, while poorer nations continue to depend on unpaid family caregivers, deepening inequalities. The evidence underscores the need for dedicated, protected funding allocations for caregiving and long-term care, minimum LTC standards, and stronger support and training for carers. Gender-sensitive, culturally adaptive strategies and ASEAN-level cooperation are vital to transform caregiving into a shared societal responsibility.

Trial registration: PROSPERO ID - CRD420251138727

Clinical trial number: Not applicable.

Keywords

Caregivers, Population Aging, Southeast Asia, Long-Term Care, Health Policy, Quality of Life, International Cooperation.

Background

The Association of Southeast Asian Nations (ASEAN) comprises eleven member states that share a growing regional identity, yet remain markedly diverse in their economic, political, and sociocultural characteristics. This diversity has direct implications for caregiving policy, as member states differ substantially in their welfare systems, cultural norms, and capacity to support aging populations. [1]. Regarding economic development, ASEAN has been described as a “two-tier” association, with the GDP of Singapore about 50 times higher than that of Cambodia and Myanmar [2]. ASEAN political systems range from absolute and constitutional monarchies to republics and one-party states and, despite a developing blueprint for a Political-Security Community Pillar, differences in political economies are reinforced by adherence to the long-term principle of non-interference in the domestic policies of member states [3]. Sociocultural differences across Southeast Asia encompass histories, ethnicity, religion, law, social structures and cultural norms. The ethnic mix of the region includes Asiatic groups such as Tibeto-Burman, Mon, Malay, Tai, Lao, and Shan peoples, as well as Chinese, Indian and Arabic migrants. There is considerable religious diversity with the main divisions being between followers of Islam, Buddhism, and Christianity, as well as smaller groups influenced by Taoism and Confucianism. Yet ASEAN has shown an ambition to manage differences by building a shared identity, centering on a “metaculture” based on common elements in diverse geographic cultures [4,5,6,7]. For example, in the care sphere, and as will be apparent from our review, each of the main regional religions emphasizes similar values of social responsibility, filial piety and intergenerational family solidarity that would support convergent policies and practices affecting older adult caregiving [8,9,10,11,12,13,14,15]. The global influence of an international policy discourse that is associated with significant resource flows is another powerful factor that pushes governments to modernize public policies to align more closely with expected international norms, as is

reflected in the ASEAN Community Pillar documents. Conversely, a factor that may pull in the opposite direction is that the cultures of most ASEAN countries perpetuate traditional gender roles that place the major burden of care upon women [16,17]. This may impede uptake of policies transferred from the Global North and promoted by international donor bodies.

Southeast Asia is undergoing one of the fastest demographic transitions toward population aging worldwide, with profound implications for public health, social protection, and economic development. By 2050, the proportion of older adults (aged 60 and above) in the region is predicted to double, outpacing the rate observed in many high-income countries [1]. This shift is driven by declining fertility, increased life expectancy, and rapid socioeconomic change, yet the institutional and policy responses remain limited in scope and fragmented across countries [2].

The provision of long-term care (LTC) is central to responding to this demographic transition. However, caregiving in Southeast Asia remains predominantly household-based, with families shouldering the bulk of older adult care responsibilities [3]. Unlike countries with established LTC insurance schemes, most Southeast Asian systems rely on unpaid or underpaid informal caregivers, disproportionately women, who often face competing demands from employment and domestic responsibilities. This situation exacerbates gender inequality and places caregivers at heightened risk of stress, burnout, and adverse health outcomes [4,5].

While caregiving can provide meaning and reinforce cultural values such as filial piety, it is also associated with cumulative psychosocial, financial, and physical burdens. In many countries including Thailand, Vietnam, and Indonesia, caregiving is framed as a moral and cultural obligation, rather than a shared responsibility with the state [14]. Conversely, Singapore and Malaysia increasingly depend on migrant domestic workers, reflecting changing family structures and labor market dynamics [11]. These differences highlight the region's heterogeneity, yet across all contexts, caregiving imposes cumulative psychosocial, financial, and physical burdens.

Theoretical models provide a useful lens to interpret caregiver challenges. The Job Demands-Resources (JD-R) model emphasizes how high workloads, long hours, and complex caregiving tasks, when coupled with limited organizational or policy support, lead to stress and burnout [8]. Complementarily, the Stress-Coping Model highlights the reliance of caregivers on coping strategies such as emotional regulation, religious beliefs, and kinship networks resources that, while valuable, are often insufficient in the absence of formal support [13]. Together, these frameworks illustrate how structural inadequacies converge with cultural expectations to produce health inequities among caregivers.

Despite the critical role of caregivers, the empirical evidence base in Southeast Asia remains fragmented. Research is often limited to small cross-sectional studies, with few randomized controlled trials or longitudinal analyses. Existing studies consistently report caregiver stress, depression, and lower quality of life, particularly in households caring for older adults with dementia or chronic conditions [18,19]. Yet national LTC systems remain underdeveloped,

policy mechanisms are weak, and integration between health, social, and community services is limited [20]. While extensive caregiving research exists in Europe and North America, findings from high-income contexts are not directly transferable given Southeast Asia's diverse economic conditions, cultural structures, and welfare regimes.

There are few studies that bring the findings of individual studies together to provide a synoptic picture of patterns of older adult caregiving across the region. An edited volume by Wongboonsin and Tan examines child and older adult care practices in Malaysia, Thailand, and Vietnam, three middle-income ASEAN countries [21]. Additionally we found a recent review of aging-related interventions (wider than care interventions) in Southeast Asia, which draws mainly on grey literature [22], and a scoping review of care policy integration in four Asian countries that include three from Southeast Asia [23]. To the authors' knowledge, this is the first systematic review of caregiving practices and the structural, functional, and sociocultural factors influencing caregiving outcomes specific to the eleven-member ASEAN region. The systematic review that follows aims to synthesize available evidence on caregiver burden, health outcomes, sociocultural determinants, and policy gaps in Southeast Asia. By doing so, it seeks to generate contextually relevant insights that can inform national and regional strategies for sustainable caregiving.

Methods

Search Strategy

The systematic review was conducted in accordance with the PRISMA guidelines. The review protocol was registered with PROSPERO (ID: CRD420251138727). It examines empirical studies from Southeast Asia published between 2015 and 2025. Although many factors examined have deeper historical roots predating 2015, this review aims to map the current caregiving landscape rather than trace historical origins." ¶¶¶ "Therefore, this time window was deemed most appropriate for generating actionable, policy-relevant evidence, corresponding to the region's accelerating demographic transition toward population aging [24]. Guided by the PICOS framework [25], the review addresses the question: *What factors influence caregiver burden and well-being among those providing care for older adults in Southeast Asia, and how do sociocultural contexts and policy gaps shape these experiences?* (Table 1).

The review explores how structural and functional factors, such as resources, policies, working conditions, and caregiving intensity, affect caregiver burden, well-being, and quality of care. It also examines how sociocultural norms (e.g., filial piety, family obligations, religious beliefs, and community expectations) interact with policy gaps in shaping caregiving roles and outcomes. The systematic search was conducted in four primary databases (PubMed, Scopus, Web of Science, ScienceDirect). Supplementary sources (ACI, ThaiJO, Google Scholar) were used only to verify bibliographic details, or retrieve full texts, but not included as primary databases.

Inclusion Criteria

Studies were eligible for inclusion if they met the following criteria:

1. Focused on informal/family caregivers and formal caregivers of older adults, including those in institutional, community-based, or household settings.
2. Addressed factors influencing caregiver burden, well-being, sociocultural contexts, or policy gaps (e.g., working conditions, organizational or structural support, cultural expectations, health and welfare policies, role demands, or financial strain).
3. Reported outcomes on caregiver health, well-being, or quality of care from non-randomized studies or RCTs examining determinants of caregiver burden, health, or well-being.
4. Were conducted in Southeast Asian countries.
5. Were published in peer-reviewed journals between January 2015 and August 2025.
6. Are written in English.

Exclusion Criteria

Studies were excluded if they:

1. Used inappropriate study designs (e.g., narrative reviews, commentaries, editorials, conference abstracts, or non-peer-reviewed publications).
2. Focused on care recipients below the age of 60 years, as this review defines 'older adults' in accordance with the United Nations threshold of 60 years and above.
3. Did not include caregivers of older adults as the study population.
4. Did not focus upon older adults as caregivers.
5. Were completed outside Southeast Asia.
6. Did not report relevant outcomes concerning caregiver burden, health and well-being, sociocultural contexts, policy-related factors, or quality of care.

Search Terms

The search strategy combined Medical Subject Headings (MeSH) and free-text keywords. Boolean operators [26,27] (“AND” and “OR”) were applied to maximize search sensitivity and specificity. The key terms included: “older adults,” “elderly,” “aging population,” and “geriatric” in the context of “Southeast Asia” and specific country names (e.g., Singapore, Thailand, Malaysia, Indonesia, Vietnam, Philippines, Cambodia, Lao PDR, Myanmar, Brunei, and Timor-Leste). For the caregiving dimension, keywords comprised “caregiver,” “family caregiver,” “informal caregiver,” “formal caregiver,” and “paid caregiver.”. Structural determinants were captured using terms including “work conditions,” “employment status,” “financial strain,” “remuneration,” “organizational support,” “social or health policy,” and “long-term care.” Functional determinants including “caregiving,” “care hours,” “role overload,” and “activities of daily living (ADL).”. Outcomes were represented by terms including “caregiver health,” “well-being,” “stress,” “burnout,” “depression,” “quality of life,” “coping,” “job satisfaction,” “caregiver burden,” and “quality of care.”

Data Sources and Search Engines

A systematic search was conducted in four primary databases: PubMed, Scopus, Web of Science, and ScienceDirect. These were selected as the main sources to ensure comprehensive

coverage of peer-reviewed international literature on caregiving in Southeast Asia. In addition, ASEAN Citation Index (ACI) and Thai Journals Online (ThaiJO) were consulted to verify reference lists and bibliographic details, while Google Scholar was used as a supplementary tool to retrieve full-text articles when necessary. These supplementary sources were not considered primary search databases but were employed only to support completeness of the dataset. Reference lists of eligible studies and relevant reviews were also screened manually to identify additional studies that met the inclusion criteria.

Screening and Selection Process

All retrieved records were imported into reference management software and duplicates were removed. Screening was conducted in two stages: titles/abstracts and full-text review, performed independently by two reviewers (N.T. and N.C.) using predefined criteria. Discrepancies were resolved through discussion or, if necessary, consultation with a third reviewer (R.K.). The selection process was documented in a PRISMA flow diagram.

Data Extraction

A standardized data extraction form was developed. Key variables included: study characteristics (author, year, country, study design, sample size); caregiver characteristics; structural and functional factors assessed; outcome measures (health, well-being, and quality of care); and main findings. Data extraction was conducted independently by two reviewers (N.T. and N.C.), with discrepancies resolved through discussion and consensus (R.K.), consistent with recommended practice for systematic reviews [26,27]. Quantitative results were summarized descriptively by reporting effect sizes, prevalence, and associations where available.

Study Quality and Certainty of Evidence

Study quality was rigorously assessed using the Joanna Briggs Institute (JBI) Critical Appraisal Checklists [28] and the Critical Appraisal Skills Programme (CASP) tools [29]. These provide structured frameworks to evaluate study design, methodological rigor, data collection, analysis, reporting transparency, and potential sources of bias or confounding. Such tools enable systematic appraisal across both quantitative and qualitative studies, ensuring consistency and reliability in judgments. Two reviewers (N.T. and N.C.) made independent assessments, documenting decisions at each stage, with discrepancies resolved through discussion or adjudication by a third reviewer (R.K.). To complement this appraisal, the certainty of the overall body of evidence was evaluated using the GRADE (Grading of Recommendations, Assessment, Development, and Evaluation) approach [30]. This framework considers study limitations, inconsistency, indirectness, imprecision, and potential publication bias, rating each outcome as high, moderate, low, or very low certainty. Incorporating GRADE enhances transparency, reproducibility, and confidence in the synthesized findings.

Qualitative Evidence Synthesis

Findings were synthesized thematically using a deductive approach guided by the study's conceptual framework, which organizes evidence across five predefined domains: structural factors, functional factors, health and well-being, sociocultural values, and policy gaps. Within each domain, themes and subthemes were identified inductively from the data to capture patterns not anticipated a priori. Initial coding was conducted independently by two reviewers (N.T. and N.C.), with a codebook developed iteratively through team discussion. Theme generation followed an established thematic synthesis approach [26], comprising familiarization with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final synthesis. Interrater reliability was assessed by calculating the percentage agreement between reviewers on theme assignment; discrepancies were resolved through discussion and, where necessary, adjudication by a third reviewer (R.K.).

Results

The initial database search yielded a total of 607 records (PubMed = 129; Scopus = 372; Web of Science = 31; ScienceDirect = 75). Supplementary sources (ACI, ThaiJO, Google Scholar) were used only to verify bibliographic details and retrieve full texts and were not included in this count. After removing 82 duplicates, 525 records remained for screening. Following title and abstract screening, 328 records were excluded as irrelevant, and 397 reports were sought for retrieval.

Of these, 200 reports could not be retrieved due to inaccessible full texts, unavailable institutional access, or incomplete records. Consequently, 197 full-text articles were retrieved and assessed for eligibility.

Of the 197 full-text articles assessed, 149 were excluded for the following reasons: inappropriate study design (e.g., narrative reviews, commentaries, conference abstracts; $n = 21$), not focused on caregivers of older adults ($n = 40$), conducted outside Southeast Asia ($n = 37$), outcomes not relevant to caregiver well-being or quality of care ($n = 45$), and full-text not available in English ($n = 6$). Ultimately, 48 studies met the inclusion criteria and were included in the systematic review (Figure 1).

A total of 48 studies were included in the systematic review (Supplementary table 1). The included studies were published between January 2015 and August 2025, and were conducted across 10 Southeast Asian countries, including Thailand, Malaysia, Singapore, Indonesia, Philippines, Brunei, Myanmar, Cambodia, Timor-Leste and Vietnam (no eligible studies were identified from Lao PDR). These utilized various approaches, including cross-sectional and mixed-methods studies of caregivers of older adults in households, communities, and institutions.

The reviewed studies demonstrated substantial variation in sample sizes. Core variables of interest included job demands, job resources, and key outcomes related to both caregiver well-being and the quality of care provided. The outcomes assessed across studies included psychological health, occupational stress, job satisfaction, turnover intention, and perceived quality of care for older adults.

Table 2 presents a synthesis of research evidence on caregiving outcomes across Southeast Asian countries, organized into five thematic domains: Structural Factors, Functional Factors, Health and Well-being, Sociocultural Values, and Policy Gaps. The numbers in each cell indicate the number of studies reporting on the respective issues within each country.

Quality Appraisal of Included Studies

Based upon the JBI and CASP checklists, most studies were judged to be of moderate quality. Common limitations included small or unrepresentative samples, limited measurement validity, and inadequate control of confounders. Qualitative studies provided valuable contextual insights but were generally rated to provide low certainty due to small samples and limited transferability. Based on GRADE, the overall evidence ranged from Low to Moderate certainty, with higher confidence in intervention studies such as caregiver training and support (Supplementary Table 1).

A planned meta-analysis was not feasible because of substantial heterogeneity in study designs, theoretical frameworks, outcome measures, and assessment tools. Comparison of the quality of quantitative and qualitative evidence is particularly difficult as “certainty” and “confidence” assessments are based on different criteria. This diversity precluded statistical pooling and limited comparability. Therefore, findings have been synthesized narratively and thematically to capture the multifaceted nature of caregiving in Southeast Asia.

Key Findings

Table 2 reveals clear country differences in the distribution and focus of the reviewed studies. Most strikingly, the majority of studies have been undertaken in richer ASEAN member states. If we compare the four large high or upper middle-income countries (Singapore, Malaysia, Thailand and Indonesia) with the four poorest lower middle-income member states (Cambodia, Myanmar, Timor-Leste and the missing Lao PDR) there are differences in the domains covered by the studies. Studies mentioning training and support of carers, or training to manage complex care needs, are virtually absent in the lower-income countries, suggesting that such initiatives have not been sufficiently documented or evaluated in the published literature. Studies in poorer countries also report little about gender-based caring norms, insecure employment, poor working conditions, and the importance of religion, whether this reflects a genuine absence of these issues or a gap in research coverage remains unclear from the available evidence. The research in the higher-income countries is more comprehensive and ranges across all domains, although this may in part simply reflect the greater number and variety of studies completed.

Drilling down to examine detailed findings, the review highlights critical structural, functional, health-related, and sociocultural determinants shaping the experiences of caregivers of older adults. Evidence drawn predominantly from higher-income ASEAN countries — particularly Thailand, Malaysia, Singapore, and Indonesia, which together account for 38 of the 48 reviewed studies — indicates that limited resources, underdeveloped LTC systems, inadequate training, and entrenched cultural expectations were consistently associated with heightened caregiver stress and burden. Evidence from lower-income member

states (Cambodia, Myanmar, and Timor-Leste) remains sparse, and findings should not be generalized across the region without this caveat. These findings underscore systemic gaps and inform the need for targeted policies to strengthen support for caregivers in the region (Figure 2).

Theme 1: Structural Factors

Subtheme 1.1 Resources and Organizational Support: Several studies indicated that formal caregivers in institutional and organized LTC settings often lacked adequate training and access to essential resources. For instance, insufficient preparation in dementia care and the absence of continuous training opportunities were associated with increased stress and reduced confidence in caregiving roles [5,18,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46]. Conversely, studies reporting institutional support, including ongoing training and supervisory guidance, showed that formal caregivers expressed higher job satisfaction and a stronger intention to remain in the profession [36,37,48,49,50]. Informal family caregivers, by contrast, reported limited access to training and practical guidance, particularly in lower-income settings where community-based support services are scarce [20,42,43,51,52].

Subtheme 1.2 Policies and Social Welfare Systems: The review highlighted marked differences between countries. In higher-income settings such as Singapore and Malaysia, more older adult care is institutionalized, with heavy reliance on migrant or foreign domestic workers [53,54]. Elsewhere in the region, almost all care for older people is provided by families, largely due to limited state support and underdeveloped welfare systems [20,42,43,45,46,51,52]. These limitations were associated with considerable economic and psychological burdens on both formal and informal caregivers.

Subtheme 1.3 Working Conditions: Challenging working conditions were consistently reported across studies of both formal and informal caregivers, though the nature of these conditions differed by context. Among formal caregivers in institutional settings, long working hours, high workloads, and low pay were commonly documented [5,19,31,37,38,42,54,55]. In institutional settings, caregivers were frequently responsible for caring for an excessive number of older adults, which was strongly associated with fatigue and burnout [32,35]. Job insecurity was also identified as a concern associated with reduced motivation and professional commitment among formal caregivers. For informal caregivers, challenging conditions manifested differently — through broader societal employment pressures that reduced their capacity to balance paid work with unpaid family caregiving responsibilities, compounding financial and psychological strain [39,51,52,56].

Subtheme 1.4 High workload combined with inadequate resources: Several studies reported that caregivers providing prolonged hours of care and attending to highly dependent older adults experienced significantly higher stress levels, particularly in contexts where resources were limited. The absence of adequate organizational or governmental support—such as insufficient equipment or understaffed facilities—appeared to intensify the adverse impact of caregiving demands and was associated with increased risk of burnout [5,19,20,31,35,39,40,51,53,54,57,58,59,60].

Subtheme 1.5 Role of training in managing complex care needs: Studies also emphasized that caregivers responsible for older adults with complex health conditions, including fully dependent older adults or those with multiple comorbidities, were better able to cope when they had access to structured training and skill development. In contrast, the absence of such training was associated with greater burden from complex caregiving tasks, heightened stress, and diminished capacity to provide quality care [5,18,32,37,40,44,49,61,62].

In summary, structural determinants such as limited resources, insufficient training, weak welfare policies, and poor working conditions were found in this review to be associated with caregiver stress and burnout, predominantly in studies from Singapore, Malaysia, Thailand, and Indonesia. High workloads without adequate organizational support appeared to exacerbate negative outcomes. Structured training and supportive policies were noted to be protective factors across multiple studies, enhancing confidence, job satisfaction, and caregiver retention. Evidence on structural factors from lower-income member states — particularly Cambodia, Myanmar, and Timor-Leste — remains limited, and these patterns cannot be assumed to apply uniformly across the region.

Theme 2: Functional Factors

Subtheme 2.1 Caregiving Intensity: Multiple studies reported that prolonged caregiving hours and an excessive number of care recipients were significantly associated with higher stress levels, burnout, and fatigue [5,31,39,40,43,44,45,50,53,55,56]. Caregivers providing more than 8–10 hours of daily care frequently experienced greater psychological distress compared with those with shorter caregiving shifts. Extended and overnight responsibilities were also linked to negative physical outcomes, including chronic fatigue and sleep disturbances, further compounding the psychological burden [32,38,41,42,46,49,63].

Subtheme 2.2 Dementia-related and Clinical Symptoms: Several studies highlighted that caring for older adults with dementia or chronic illnesses such as stroke and diabetes was associated with elevated caregiver stress and workload [33,35,46,52,58,64,65]. Behavioral and psychological symptoms of dementia (BPSD) including aggression, memory loss, and mood changes were especially challenging, often serving as key drivers of caregiver exhaustion and mental health difficulties [5,18,44,49,50,60,62,64,66,67]. Furthermore, highly dependent older adults, such as those requiring full assistance with daily activities, required specialized caregiving skills. However, the lack of adequate training and support intensified caregiver stress and reduced confidence in providing appropriate care [32,52,65].

Subtheme 2.3 Caregiver Older Adult Relationship: The personal relationship between caregivers and older adults also played a critical role. Evidence showed that caregivers who were spouses or adult children were frequently motivated by cultural values of filial duty and family attachment [5,14,18,31,32,33,35,41,42,44,46,62,64,68,69,70]. While these relationships could provide meaning and motivation, they also heightened vulnerability to cumulative stress and burnout, particularly when external support systems were lacking [31]. Many carers need to hold paid jobs that occupy some of their time. Some studies revealed that caregivers often perceived care as an obligation, rather than a voluntary choice, which

negatively both affected their satisfaction with paid employment and diminished the quality of the support they could provide [32,49].

Subtheme 2.4 Care dependency and policy constraints: Evidence from studies in Thailand and Indonesia in particular found that behavioral and psychological symptoms of dementia (BPSD) — including aggression, agitation, memory loss, and mood disturbances — were significantly associated with heightened caregiver stress, psychological distress, and reduced quality of life. In countries where LTC policies and services remain underdeveloped, the intensity of caregiving demands further exacerbated negative outcomes, including stress, depression, and reduced care quality [5,20,31,32,33,35,38,39,40,42,43,45,52,54,57,58,64,65].

In summary, functional factors including caregiving intensity, dementia-related and clinical symptoms, and the caregiver–older adult relationship were found in this review to be associated with caregiver stress, burnout, and reduced care quality, with the strongest evidence drawn from Thailand, Malaysia, Singapore, and Indonesia. These associations appeared particularly pronounced in contexts where training and policy support were lacking. Data on functional factors from Cambodia, Myanmar, Brunei, and Timor-Leste are sparse, limiting the extent to which these findings can be generalized to lower-income settings.

Theme 3: Health and Well-being

Subtheme 3.1 Mental Health and Emotional Burden: Multiple studies reported that caregivers face heightened risks of stress, burnout, and depression, particularly when engaged in prolonged caregiving hours or when providing care for older adults with dementia and behavioral or psychological symptoms [5,18,31,32,34,38,39,40,41,42,44,45,46,48,49,50,56,60,62,71,72]. These adverse outcomes appeared to be further exacerbated by insufficient organizational support and policy constraints, which were associated with amplified burden of care.

Subtheme 3.2 Physical Health: Caregivers frequently reported chronic fatigue, sleep disturbances, and physical strain associated with repetitive tasks and extended caregiving responsibilities [18,19,32,38,39,40,47]. Providing care for highly dependent older adults also increased risks of injury and long-term health decline.

Subtheme 3.3 Quality of Life: Several studies demonstrated that caregivers experience lower QoL compared with the general population, especially in psychological, social, and economic domains [18,35,38,40,42,43,44,45,46,50,58,61,62,68,73,74]. Nevertheless, evidence also indicated that access to training, family and community support, and healthcare services could mitigate these negative effects and enhance satisfaction with the caregiving role [32,40].

In summary, caregiving in Southeast Asia was associated with adverse outcomes across caregivers' physical health, mental well-being, and QoL, with evidence concentrated in Thailand, Malaysia, Singapore, and Indonesia. The presence of formal and informal support systems, together with sociocultural values, were noted across multiple studies to function as protective mechanisms that partially mitigated these burdens. The limited number of studies from lower-income ASEAN countries means that health and well-being outcomes for

caregivers in those settings remain insufficiently documented, and these findings cannot be assumed to apply uniformly across the region.

Theme 4: Sociocultural Values

Subtheme 4.1 Filial piety and family obligations: Evidence across the region consistently highlighted that filial piety and family obligations remain central drivers of older adult care within households, particularly in Thailand, Vietnam, Indonesia, and the Philippines. In these contexts, families and by extension caregivers continue to shoulder the primary responsibility for older adult care, especially in areas where LTC systems remain underdeveloped. This trend was similarly reflected in other Southeast Asian countries [33,35,39,42,43,44,45,46,49,59,75]. When state resources for older adult care are limited, family obligations appeared to be associated with heightened caregiving burdens, intensifying stress and fatigue, particularly among low-income households or those caring for highly dependent older adults [40,51,52,62].

Subtheme 4.2 Family relationships and insecure employment: Family members, such as adult children or spouses, were often motivated by values of filial piety. However, when performed in contexts characterized by low wages and inadequate labor rights, family bonds were associated with heightened stress and burnout [19,32,49].

Subtheme 4.3 Religion and spirituality: Several studies emphasized that religious and spiritual beliefs, as well as reliance on kinship and community networks, function as cultural coping resources that help sustain caregivers' psychological well-being. However, in the absence of adequate respite services or formal state support, reliance on informal resources alone was insufficient, often reducing caregivers' quality of life and increasing risks of depression and burnout [33,35,36,42,44,51,71,76].

Subtheme 4.4 Ethnicity and cultural norms: Evidence suggested that the cultural norms of some ethnic groups served as a protective factor against caregiver burden. This finding reflects the role of family-centered norms, strong communal ties, and extended family networks in buffering the adverse effects of intensive caregiving demands [5,18,19,51,63,75,77]. Yet, caregiver burden was still significantly associated with reduced quality of life and heightened risks of depression, particularly when older adults presented with functional, cognitive, or behavioral impairments. These findings suggest that the relationship between cultural norms and caregiver burden was context-dependent across the reviewed studies, varying with the intensity of care demands and the availability of formal and informal support.

Subtheme 4.5 Family structure changes and reliance on migrant caregivers: In Singapore and Malaysia, increasing reliance on migrant workers and formal services reflects broader transformations in family structure and labor markets. This shift signifies a transition from family-based obligations toward professionalized care services, compelling states to design LTC policies that align with cultural contexts. More generally, however, formal caregivers continue to face high workloads and emotional demands shaped by family and cultural

expectations of care recipients. This underscores the need for sensitivity to cultural differences and adequacy of existing structural support in policy design [19,35,54,62,63].

Subtheme 4.6 Gender norms and caregiving roles: Most studies reported that caregiving responsibilities are disproportionately borne by women [5,18,20,32,39,51,52,53,58,59,73,75,76], reflecting entrenched gender norms in the region. Female caregivers often experienced higher levels of stress and burden, particularly when family or state support were insufficient [5,37,39,59].

In summary, sociocultural values were found in this review to be associated both with protective effects — through filial piety, religion, and community networks — and with normative pressures, particularly through entrenched gender roles and family obligations, with evidence drawn predominantly from Thailand, Vietnam, Indonesia, the Philippines, and Malaysia. While traditional values appeared to provide meaning and emotional support, they were also associated with intensified caregiver burden when combined with limited institutional and policy support. Evidence on religion and gender norms is largely absent from studies in Cambodia, Myanmar, and Timor-Leste, and caution should be exercised in extending these findings to those contexts.

Theme 5: Policy Gaps in supporting older adult caregivers

Subtheme 5.1 Insufficient financial and welfare support systems for caregivers: In both richer and poorer ASEAN countries caregivers particularly family members, face economic vulnerability due to substantial caregiving costs and lost work opportunities without adequate compensation. Low-income caregivers are especially at risk of financial strain and diminished quality of life [39,42,43,73]. One study in Indonesia found that caregivers often experience a “double burden” of income loss and additional caregiving expenses, with women disproportionately affected due to cultural expectations to prioritize family care [58]. One study in Malaysia found that informal caregivers providing more than 20 hours of care per week experienced significantly poorer health, reduced work productivity, and limited social participation, with financial hardship compounding these effects despite the existence of UHC [53]. A study in Thailand, similarly reported that low household income and poor caregiver health were strongly associated with higher burden scores among family caregivers, even in the context of national health insurance coverage [51]. These findings, alongside multiple additional studies from Malaysia and Thailand [31,34,45,46,48,51,60], indicate that the existence of UHC does not in itself protect caregivers from financial vulnerability, highlighting the need for dedicated caregiver-specific financial support mechanisms.

Subtheme 5.2 Limited formal LTC infrastructure: Formal LTC systems are underdeveloped or absent in much of the region, placing the primary burden on families, particularly women. Rising LTC demand, driven by demographic change and shrinking household sizes, contrasts with the limited availability of supportive services such as day-care centers or professional home care, often confined to urban areas. Families thus rely on limited resources of time, labor, and finances, intensifying social inequalities and undermining both caregiver and care recipient well-being. The lack of sustainable LTC systems represents a critical policy gap requiring urgent attention [20,40,42,43,46,52,53,78]. The contrast between countries is

particularly stark. In Singapore, where formal LTC infrastructure is most developed, approximately 49% of households with dependent older adults were found to employ foreign domestic workers, reflecting a structured hybrid care model that partially offsets family burden [63]. In contrast, caregivers in Myanmar — where no formal LTC system exists — reported moderate to severe burden, relying entirely on family resources with no access to institutional support [52]. Family caregivers of stroke patients in Myanmar similarly reported significantly lower quality of life, with financial strain and the absence of health insurance identified as primary contributors [42]. Seven of the eight studies reporting LTC deficits were undertaken in richer countries, a finding that may reflect greater research capacity and more developed policy discourse in those settings rather than a higher actual prevalence of LTC gaps.

Subtheme 5.3 Restricted access to caregiver training, skills, and psychosocial support:

Caregivers frequently lack opportunities for essential training, especially for conditions such as dementia or chronic illness. Limited knowledge compromises care quality and increases risks of stress, fatigue, and burnout. Evidence shows reliance on ad hoc strategies rather than evidence-based practices. Even in richer countries, training and psychosocial support services remain scarce, particularly in rural areas. These disparities increase burdens for low-income caregivers and threaten the sustainability of older adult care systems [18,33,34,37,40,44,45,46,49,50,58,62,75]. Country-level findings illustrate the breadth of this gap. In the Philippines, family caregivers expressed moderate to high learning needs in caregiving knowledge and skills, with identified competency gaps directly associated with poorer quality of care [34]. Similarly, informal caregivers of stroke patients in Malaysia with low knowledge of positioning and feeding techniques reported significantly higher burden scores, underscoring the direct relationship between training access and caregiver outcomes [37]. Even in higher-income settings, gaps persist: in Singapore, caregivers of older adults with dementia and higher dependency needs reported greater burden and poorer well-being, with access to structured support identified as a key moderating factor [54]. These disparities increase burdens for low-income caregivers and threaten the sustainability of older adult care systems across the region.

Subtheme 5.4 Weak linkages between policy, society, and community support systems:

Although many countries acknowledge aging-related challenges, gaps remain in connecting national policies with community-based support. Existing measures emphasize medical care and entitlements, but neglect daily caregiver needs, forcing reliance on informal networks with limited capacity. [20,31,39,42,43,49,51,53]. The disconnect between policy intention and community-level implementation is evident across multiple country contexts. In Thailand, family caregivers of dependent older adults in Bangkok reported high burden and unmet support needs despite the universal coverage scheme, with caregivers expressing a strong desire for community-based respite care, financial aid, and training that remained unavailable in practice [20]. In Indonesia, health service factors including the accessibility and quality of community health services were found to be significant determinants of caregiver empowerment, suggesting that weak health system linkages were associated with reduced caregivers' capacity to provide quality care [49]. In Myanmar, perceived social support was

the strongest predictor of caregiver quality of life, yet formal community support mechanisms were largely absent, leaving caregivers dependent on informal family networks [42]. These findings collectively underscore that policy frameworks without corresponding community delivery mechanisms are insufficient to address the structural determinants of caregiver burden.

The reviewed evidence drawn primarily from higher-income ASEAN countries underscores the need for robust financial mechanisms, formal LTC systems, expanded training and psychosocial support, and integrated policy–community linkages. Policy gaps in lower-income member states such as Cambodia, Myanmar, Lao PDR, and Timor-Leste are likely to be at least as acute, but remain substantially under-researched. It should be noted that the findings synthesized above are derived exclusively from English-language publications, which may disproportionately reflect research conducted in higher-income ASEAN countries with greater research capacity and publication infrastructure. Studies from lower-income member states are likely underrepresented not only due to limited research capacity, but also because relevant work published in local languages — such as Burmese, Khmer, Lao, and Tetum — was outside the scope of this review. This linguistic limitation may partially explain the apparent gaps in evidence on formal training access and policy uptake in those settings, and should be considered when interpreting the heterogeneity of findings across the region.

Discussion

This review aims to identify and synthesize factors affecting caregivers' health, burden, and quality of life in Southeast Asia. As ASEAN countries rapidly transition into an aging society, demand for long-term care will rise while infrastructure and policy support remain limited. Families and communities, often the primary caregivers for dependent or chronically ill older adults, face increasing physical and psychological strain. The discussion interprets these findings within theoretical and empirical contexts, highlighting structural, functional, sociocultural, and policy challenges, and emphasizes the urgent need for systemic support to reduce burdens and enhance sustainable caregiving capacity.

Structural Factors

This review highlights that caregivers of older adults in Southeast Asia continue to face significant constraints in terms of resources and support, though the nature and severity of these constraints differ markedly by country. In Singapore and Malaysia, where organizational infrastructure is more developed, studies found that formal caregivers reported higher job satisfaction and intention to remain in the profession when structured training and supervisory support were available [36,37,48,50]. In contrast, studies from Thailand, Indonesia, and Myanmar found that caregivers — both formal and informal — consistently reported limited access to training, inadequate organizational support, and high workloads without compensation, all of which were associated with elevated stress and burnout [40,42,51,52]. These intra-ASEAN differences underscore that resource adequacy is closely tied to national income level and LTC system development. Consistent with the JD-R model [8], high demands without adequate resources were associated with stress and burnout

regardless of setting a pattern also documented in other developing country contexts, including single studies in India [79], West Africa [80], and rural South Africa [81] underscoring the urgent need for structural support systems and sufficient welfare provisions to enhance caregivers' quality of life and ensure the sustainability of the long-term care workforce.

Functional Factors

Providing intensive care for more than 8–10 hours per day is strongly associated with heightened caregiver burden and fatigue, a pattern evident across multiple ASEAN settings. In Singapore, caregivers of older adults with severe dementia followed distinct burden trajectories over time, with worse outcomes linked to higher BPSD severity and lower social support [46]. In Thailand and Indonesia, caregiving duties exceeding 8–10 hours per day were strongly associated with fatigue and psychological distress [5,51,57]. In lower-income settings such as Myanmar and Cambodia, functional burden was compounded by the complete absence of formal respite or LTC services, leaving caregivers with no institutional support [42,43]. These findings are consistent with the Stress-Coping Model [13], which conceptualizes caregiving stress as arising from primary stressors such as caregiving intensity and BPSD, and secondary stressors including financial strain, role conflict, and social isolation — a pattern similarly documented in one study from Iran [82], West Africa [83], and South America [84]. While caregiving relationships rooted in family values and filial piety may provide meaning and motivation, one study from South Africa found that, in the absence of adequate support, the unpredictable behaviors of older adults with complex conditions were associated with poorer caregiver mental health [85]. Overall, prolonged care intensity and complex health needs function as primary stressors that, when compounded by insufficient resources, compromise caregiver well-being and threaten the sustainability of the long-term care workforce.

Health and Well-being

The health and quality of life of caregivers has been a concern for policy makers across the region, though the evidence base is heavily concentrated in higher-income countries. In Singapore, large cross-sectional surveys found high prevalence of psychological distress, reduced QoL, and work productivity impairment among both formal and informal caregivers [38,48,54]. In Malaysia and Thailand, studies reported elevated depression, anxiety, and burnout, particularly among female caregivers and those with low social support [51,53,60,72]. In Vietnam, spousal caregiving was associated with a 7.3% increase in poor psychological well-being and a 9.7% increase in life dissatisfaction [32]. Evidence from Myanmar and Indonesia, while more limited, similarly documented significant burden and reduced QoL, with social support identified as the strongest protective factor [42,56,58]. Notably, evidence on caregiver health outcomes from Cambodia, Lao PDR, and Timor-Leste remains largely absent from the reviewed literature, representing a critical gap. The presence of formal and informal support systems was consistently identified as a protective factor across the region consistent with findings from studies in India [86] and Iran [87] showing that while the heavy demands of caregiving negatively affect both physical and mental health,

supportive systems and strengthened coping capacities can serve as protective factors, helping to sustain caregiver well-being over the long term.

Sociocultural Values

Sociocultural values strongly shape caregiving for older adults across Southeast Asia, but their expression and impact differed markedly by country context. In Thailand, Vietnam, and Indonesia, filial piety was the dominant normative driver of family caregiving, providing meaning and motivation but also intensifying burden when combined with limited institutional support [32,39,51,76]. In Malaysia, cultural and religious values — particularly among Malay Muslim caregivers — provided spiritual coping resources that partially buffered psychological distress, though they did not reduce objective burden levels [33,36,72]. In Singapore, the intersection of filial piety with heavy reliance on migrant domestic workers created a distinctive hybrid model in which cultural obligations were partially delegated to paid caregivers, raising questions about the sustainability and equity of this arrangement [19,63]. Gender norms consistently reinforced the disproportionate burden on women across all countries with available data, though evidence from Cambodia, Myanmar, and Timor-Leste on gender-specific outcomes remains sparse. These intra-ASEAN nuances extend the broader literature on sociocultural values in caregiving, where studies from China [88], Japan [89], and South Africa [90] similarly found that while filial piety and family obligations sustain caregiving, inadequate structural support and persistent gender inequality intensify burdens and undermine caregivers' health and quality of life.

While the Introduction identified gender roles as a key structural factor shaping caregiving in Southeast Asia, the reviewed literature did not examine this dimension in comparable depth. Gender norms and caregiving roles were documented in studies predominantly from Thailand, Indonesia, Malaysia, Singapore, and the Philippines, with no gender-specific data available from Cambodia, Lao PDR, Myanmar, or Timor-Leste. Across studies with available data, caregiving responsibilities were consistently found to be disproportionately borne by women, with female caregivers reporting higher stress, burnout, and reduced quality of life [39,51,53,56]. In Indonesia, female caregivers faced a 'double burden' of unpaid caregiving and paid employment, compounded by cultural expectations of filial duty [58]. In Thailand, sociocultural discourses framing spousal caregiving as an expression of lifelong devotion and marital obligation reinforced women's continued provision of care even amid their own declining health [76]. However, the reviewed literature largely documented these disparities descriptively rather than examining underlying mechanisms or evaluating gender-sensitive interventions. From a JD-R perspective, gender norms function as an invisible structural demand culturally enforced rather than organizationally imposed yet remain absent from most policy frameworks in the region.

Policy Gaps in supporting older adult caregivers

Policy gaps in LTC remain a critical barrier across the region, though their nature and severity differ substantially between higher- and lower-income ASEAN countries. In Singapore and Malaysia, where UHC frameworks are most developed, residual policy gaps center on the

adequacy of caregiver-specific financial protection and the regulation of migrant caregiver employment [53,63]. In Thailand and Indonesia, the disconnect between national UHC policy and community-level implementation was consistently identified as a primary source of unmet caregiver need [20,49,51]. In Vietnam and the Philippines, where LTC systems remain nascent, policy gaps manifest primarily as the near-total absence of formal training, psychosocial support, and institutional respite services [18,34,62,66]. In Myanmar, Cambodia, and Timor-Leste, the reviewed evidence suggests that formal LTC policy frameworks are largely absent, leaving caregivers entirely dependent on family and community networks [42,43,52]. Interpreted through the lenses of welfare regime theory and the care diamond framework, these patterns reflect a predominantly familialistic model of welfare provision across the region, in which caregiving responsibility remains concentrated within households. The degree of familialism, however, varies significantly by country income level and LTC system maturity — a nuance that uniform regional policy prescriptions risk obscuring.

Taken together, the findings of this review are broadly consistent with both the JD-R model and the Stress-Coping framework introduced in the Background. Across the region, caregivers face high demands — intensive care tasks, BPSD, long hours, and normative family obligations — while resources remain inadequate, including limited training, weak policy support, and insufficient formal LTC infrastructure. Sociocultural values such as filial piety and religious beliefs function as personal coping resources in the Stress-Coping sense, partially mediating the relationship between demands and adverse outcomes; however, they are insufficient to compensate for structural deficits, particularly in lower-income settings. These theoretical lenses also highlight the gendered nature of caregiving demands: women disproportionately bear both the demands and the normative expectations, while receiving fewer formal resources and protections. Addressing this requires policy responses that treat gender equity not as a peripheral concern but as a structural priority embedded in LTC system design across the region.

Future Policy Directions

The heterogeneity of older adult caregiving in different ASEAN countries suggests that no single policy template could be rolled out across the region. Rather, future national policies need to be aligned with stage of development and specific policy deficits. Policy makers must take account of the two-tier gap between richer and poorer ASEAN states, with policies in the former centering more on improvements to existing infrastructure and support mechanisms and in the latter more on establishing basic infrastructure and social protection floors, plus maximizing what existing informal support mechanisms can achieve. This general picture is complicated by different trajectories of economic development, as well as changes in the split between formal and informal sectors and patterns of internal rural to urban migration; factors which affect the transition from traditional social support networks to publicly provided services. Many of the structural and systemic challenges identified in this review including caregiver burnout, inadequate training, insufficient LTC funding, and the disproportionate caregiving burden placed on women — remain incompletely addressed even in higher-income countries within and beyond the ASEAN region.

The “ASEAN way” generally combines negotiating consensus on broad policy objectives with permissiveness regarding specific policy pathways and speed of implementation, so that domestic policies are often prioritized over a uniform community approach [91,92]. Policy harmonization has gone further in areas such as trade, transport and labor migration than human rights and welfare. An area that provides useful lessons for older adult caregiving policy is UHC, where policy across the region is evolving to address rising treatment costs in aging societies. The ASEAN Plus Three UHC network offers South-South knowledge sharing and mechanisms for engagement between governments and policy experts, while permitting divergent pathways to achieve or maintain universal coverage [93,94]. Among the more mature UHC countries, Singapore has progressively expanded MediSave withdrawal limits and long-term care service subsidies to support older adults with severe disabilities [95], Malaysia is considering a shift from predominantly tax-based funding towards a contributory national health insurance model, with feasibility studies and stakeholder consultations ongoing as of 2025 [96], and Thailand is reviewing the budget allocation system for its Universal Coverage Scheme (gold card), with independent audits commissioned in 2025 to assess reimbursement rates and financial sustainability [97]. On the path to UHC, Indonesia, the Philippines, and Vietnam have favoured a contributory approach combining employer/employee contributions with user charges and subsidies for lower-income service users [98,99], while Lao PDR has adopted an approach closer to direct state funding, though constrained by limited fiscal capacity and ongoing economic pressures [100].

Just as with UHC, older adult care policy could benefit from an agreed ASEAN framework for staged development, mutual knowledge transfer, and mechanisms that allow synergy between countries at similar points in their transition towards comprehensive LTC provision. Within such a framework, countries with greater fiscal and institutional capacity could play a demonstrator and mentoring role, while lower-income systems prioritize foundational policies and countries facing unique pressures pilot targeted innovations. The evidence from this review already points to several concrete policy options that have worked well and could be explicitly embedded in such an ASEAN roadmap.

For richer ASEAN countries (such as Singapore, Brunei, and Malaysia), the literature highlights the value of building hybrid LTC systems that combine family care, paid migrant caregivers, and formal services, underpinned by regulation and structured support. In Singapore, high reliance on foreign domestic workers to support dependent older adults has been made more sustainable through regulated employment, integration with health services, and targeted training; large surveys show both the scale and structural importance of paid caregivers in reducing family load [63]. Similarly, mobile-health interventions for dementia caregivers in Singapore have been associated with reduced burden and psychological distress in randomized trials [50], suggesting that digital platforms may serve as a core policy instrument in richer, highly connected settings. In Malaysia, cultural-based caregiver support groups and telephone-based interventions have been associated with reduced burden and improved quality of life [36,45], indicating that multicomponent psychosocial support, delivered through well-resourced health systems, may be a feasible policy option.

For poorer or more resource-constrained countries (for example, Cambodia, Myanmar, Laos, Timor-Leste, and poorer regions of Indonesia and the Philippines), the most consistently supported policies are those that upgrade the capabilities of family caregivers and leverage existing community structures. Cross-sectional and qualitative studies from Myanmar, Indonesia, Vietnam and the Philippines found limited access to formal dementia care training and caregiving skills development, alongside strong cultural expectations of filial duty and high psychological and financial strain, but also a strong willingness to care [18,34,39,42,49,52,56,58,62,67,73]. These contexts benefit most from low-cost national policies that standardize basic caregiver training (for ADLs, dementia, stroke and chronic disease care), embed this training in primary care and village health-volunteer systems, and use community or faith-based organizations as platforms for peer support. Evidence from Thailand's caregiver capacity-building programme and early policy modeling work in Bangkok suggests that even modest interventions combining training, simple financial relief, and community-based respite can substantially improve caregiver ability and perceived quality of care, and are therefore realistic first-generation policies for lower-income ASEAN members.

Finally, several countries confront unique pressing problems for which more tailored policies are warranted. Thailand's rapid demographic aging, heavy dependence on older female caregivers, and high prevalence of older adults with complex care and dependency needs argue for scaling policies that have already shown promise: structured caregiver capacity-building programmes [61], integration of caregiver-burden screening into routine primary care, and policy models that emphasize financial aid, respite care, caregiver training, and community-based support for dependent older adults [20]. Vietnam faces a particularly steep rise in dementia prevalence and documented gaps in formal caregiver training; the culturally adapted REACH-VN intervention, which was associated with reduced caregiver burden and distress in a cluster RCT [18], suggests that culturally tailored, community-based dementia programs may form an important component of national dementia strategies. In Malaysia and the Philippines, where studies document high psychosocial burden and mental-health problems among caregivers of stroke, dementia, and palliative-care patients [37,60,62,72,73], scalable policies include embedding caregiver assessment and support into hospital discharge planning and NCDs programs, and expanding telephone- and app-based psychosocial support nationwide [36,45]. Together, these differentiated but evidence-based policy directions illustrate how an ASEAN older adult care framework could move beyond abstract principles to a concrete menu of proven interventions, sequenced according to each country's fiscal capacity, institutional maturity, and specific demographic or disease-related pressures [16].

Funding will be a particular challenge in the poorer countries. ASEAN lacks the developed community economic framework and supranational institutions of the European Union, and given the political divisions within the Association, direct financial subsidies from richer to poorer member states are unlikely to be feasible. However, there is scope for prioritization in the allocation of international donor assistance, and assistance in terms of community-funded mechanisms for networking and knowledge transfer.

Limitations of the Study

The reviewed studies are not distributed equally across ASEAN member states. Higher-income countries dominate, with 38 of 48 studies conducted in high or upper-middle income settings, while Lao PDR, Cambodia, Timor-Leste, and Myanmar are substantially underrepresented. This imbalance is compounded by the inaccessibility of approximately half of potentially eligible reports and the restriction to English-language publications, both of which likely disproportionately exclude evidence from lower-income member states where relevant research may be published in local languages such as Burmese, Khmer, Lao, and Tetum. The review is further subject to publication bias favoring experienced research teams and positive outcomes from wealthier settings. Also, the reviewed literature did not systematically report quantitative data on LTC investment or service coverage by country, precluding formal triangulation of caregiver outcomes with structural policy indicators.

Additionally, it must be noted that there may be some heterogeneity of definitions of key terms such as “caregiver burden” in the reviewed studies, particularly since both quantitative and qualitative studies are included.

Finally, it must be conceded that certain difficulties arise in quality assessment in a review that covers both quantitative and qualitative studies. Differences in both epistemology and evaluative criteria mean that GRADEpro certainty ratings and CERQual confidence assessments are not directly comparable. A “moderate” rating for a quantitative finding does not sit on the same conceptual scale as a “moderate confidence” rating for a qualitative theme. Moreover, qualitative syntheses often highlight contextual nuance, meaning-making, and mechanisms of burden, whereas quantitative studies focus on measurable associations and prevalence estimates. Thus, although integrating the two approaches increases the comprehensiveness of the review, the juxtaposition of certainty/confidence ratings across evidence types must be interpreted with caution.

Future research priorities

More research is needed to fill knowledge gaps, and also to set country findings in the wider context of the development of ASEAN policy on older adult caregiving. There is an obvious deficit centering on the paucity of data on caregiving in the poorest ASEAN countries, Lao PDR, Cambodia, Timor-Lesse and Myanmar, which is partly linked to limited research capacity in those countries. Additionally, the heterogeneity of ASEAN member states means there is great value in comparative studies that examine the experiences of countries at similar stages of development so that knowledge transfer can occur. For example, in those countries with the greatest development challenges, research might examine the cost-effectiveness of different LTC models, or the impact of specific cultural interventions. More generally, researchers must recognise that the ASEAN region continues to evolve rapidly, so that policy makers require up-to-date data on the impact of changes in mature systems as well as progress in countries that are concerned more with basic social protection floors.

Alongside pragmatic social policy research, there is a valuable role for political science studies that look at the evolution of policy within an economic bloc that represents a rival

model to the European Union. ASEAN is negotiating a difficult path that combines elements of a shared community approach to social welfare with acceptance of variation in domestic policies, a continuing tension that raises intriguing issues concerning national sovereignty, regional blocs and the globalisation of welfare policies.

Conclusions

The systematic review highlights the persistent structural and policy limitations of older adult care systems in Southeast Asia, which undermine the well-being of both informal and formal caregivers. High-intensity care, extended working hours, insufficient state support, and inadequate access to support and training exacerbate caregivers' vulnerability to stress, burnout, and health risks. Cultural values such as filial piety and familial obligation, while serving as sources of motivation, simultaneously impose psychosocial burdens and reinforce gender inequality, particularly affecting women. These findings emphasize that older adult care is not merely a health concern but is deeply embedded in socio-economic and cultural structures that determine its sustainability and equity. A region as heterogeneous as Southeast Asia poses great challenges for policy makers. Developing a comprehensive ASEAN policy framework on aging caregiving will be important, but this will need to accommodate varying domestic initiatives tailored to national situations. In mature systems these are likely to centre on securing adequate budgets, optimizing formal services, securing adequate carer recruitment, and improving regulation of, and training for professional care services. In poorer countries, the major policy challenges range from securing baseline funding to constructing basic infrastructure and managing the transition from traditional informal care to accessible formal care. To align with international norms, policy makers across the region need to show greater sensitivity to gender equality and shift the major burden of care away from poorly-supported female carers.

Addressing these challenges requires comprehensive policy responses, including greater financial and welfare support, standardized long-term care infrastructure, accessible psychosocial services, continuous caregiver training, and gender-sensitive approaches, underpinned by integration across national, community, and household levels to ensure a sustainable and just older adult care system.

List of abbreviations

ASEAN	Association of Southeast Asian Nations
BPSD	Behavioral and Psychological Symptoms of Dementia
CASP	Critical Appraisal Skills Programme
CERQual	Confidence in the Evidence from Reviews of Qualitative Research
GRADE	Grading of Recommendations Assessment, Development and Evaluation
JB	Joanna Briggs Institute
LTC	Long-Term Care
NCDs	Non-Communicable Diseases
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses

RCT	Randomized Controlled Trial
QoL	Quality of Life
UHC	Universal Health Coverage

Declarations

Ethics approval and consent to participate: Not applicable. This study is a systematic review of published literature and did not involve human participants, human data, or human tissue.

Consent for publication: Not applicable. The manuscript does not contain any individual person's data in any form.

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Authors' contributions:

NT; Conceptualization (study design, defining scope), Methodology (including search strategy design), Investigation (study selection, data extraction), Writing original draft (preparation of the initial manuscript). **RK;** Methodology (protocol development, inclusion/exclusion criteria), Project administration (coordination of tasks, submission handling), Validation (cross-checking data and risk of bias assessment, and adjudication of screening and data extraction discrepancies), Writing review & editing (critical revision and refinement of the manuscript). **DH;** Supervision (oversight of the systematic review process), Conceptualization (expert input on study design), Formal analysis (interpretation of findings), Writing review & editing (substantial revision and final approval). **NC;** Data curation (management of references, compiling evidence tables), Investigation (study screening and data extraction), Formal analysis (synthesis of findings), Writing review & editing (language editing and manuscript revision) and **MC;** Visualization (preparation of PRISMA flow diagram and tables), Formal analysis (interpretation and synthesis of results), Validation (risk of bias checking), Writing review & editing (final revisions and approval).

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References

1. Sakamoto R. Aging in Southeast Asia and Japan: Challenges and opportunities. *Geriatrics & Gerontology International*. 2025.
2. Taylor P, Earl C. Ageing and inequalities in the ASEAN countries. *Research Handbook on Inequalities in Later Life*: Edward Elgar Publishing; 2024. p. 209-35.
3. Hayashi R. Demand and supply for long-term Care for Older Persons in Asia. 2019.
4. Glinskaya E, Walker T, Wanniarachchi T. Caring for Thailand's aging population. 2021.
5. Putri YSE, Putra IGNE, Falahaini A, Wardani IY. Factors associated with caregiver burden in caregivers of older patients with dementia in Indonesia. *International Journal of Environmental Research and Public Health*. 2022;19(19):12437.
6. Concepcion GP. A Single Identity while Facing Diversity? Exploring ASEAN Integration through Culture. *SUVANNABHUMI*. 2022;14(2):269-303.
7. Agbisit J. A Regional Identity in the Making. *The Asean Magazine*. 2023.
8. Bakker AB, Demerouti E. The job demands-resources model: State of the art. *Journal of managerial psychology*. 2007;22(3):309-28.
9. Aulino F. Rituals of care for the elderly in northern Thailand: merit, morality, and the everyday of long-term care. *American Ethnologist*. 2016;43(1):91-102.
10. Abdullah S. Kinship care and older persons: An Islamic perspective. *International Social Work*. 2016;59(3):381-92.
11. Mehta KK, Leng TL. Experiences of formal and informal caregivers of older persons in Singapore. *Journal of cross-cultural gerontology*. 2017;32(3):373-85.
12. Leelavanichkul S, Chamrathirong A, Jampaklay A, Gray R. Religiosity, the practices of religions, and the perception of older people among Muslims and Buddhists in Thailand. *The International Journal of Aging and Human Development*. 2018;86(2):131-51.
13. Lazarus RS, Folkman S. Stress, appraisal, and coping: Springer publishing company; 1984.
14. Jiang N, Wu B, Li Y. Caregiving in Asia: priority areas for research, policy, and practice to support family caregivers. *Health Care Science*. 2024;3(6):374-82.
15. Felipe-Dimog EB, Garcia AP, Liang F-W, Silao CLT, Hsu M-T, Saragih ID. Caring behavior of Filipinos toward their elderly family members. *Acta Medica Philippina*. 2024;58(15):6.
16. Yeung W-JJ, Thang LL. Long-Term care for older adults in ASEAN plus three: the roles of family, community, and the state in addressing unmet eldercare needs. *Journal of Aging and health*. 2018;30(10):1499-515.
17. Harding SC, Wasnik P, Bezbaruah S. Ageing, Caregiving and Gender Equality: Reimagining the Narrative. *ASEAN*; 2025.
18. Nguyen H, Nguyen HT, Nguyen NB, Tran D, Harvey DJ, Nguyen BT, et al. Testing the efficacy of a culturally adapted family dementia caregiver intervention (REACH VN): Results from a cluster randomized controlled trial in Northern Vietnam. *The American Journal of Geriatric Psychiatry*. 2025;33(5):535-45.
19. Ha NHL, Chong MS, Choo RWM, Tam WJ, Yap PLK. Caregiving burden in foreign domestic workers caring for frail older adults in Singapore. *International Psychogeriatrics*. 2018;30(8):1139-47.
20. Suna N, Miankerd W, Cheausuwantavee T. Developing a Policy Model to Support Family Caregivers of Dependent Older Adults in Bangkok. *Journal of Population and Social Studies [JPSS]*. 2025;33:524-43.
21. Wongboonsin P, Tan J-P. *Care relations in Southeast Asia: the family and beyond*: Brill; 2018.
22. Mohan A, Jothikaran TAJ, Gudi N, AK A, Ashok L. Growing old before growing rich: a scoping review on ageing-related policy interventions from the WHO Southeast Asian Region. *BMJ open*. 2025;15(1):e079621.
23. He AJ, Tang VF. Integration of health services for the elderly in Asia: A scoping review of Hong Kong, Singapore, Malaysia, Indonesia. *Health Policy*. 2021;125(3):351-62.
24. He W, Goodkind D, Kowal PR. *An aging world*: 2015. United States Census Bureau Washington, DC; 2016.

25. Saaig M, Ashraf B. Modifying “Pico” question into “Picos” model for more robust and reproducible presentation of the methodology employed in a scientific study. *World journal of plastic surgery*. 2017;6(3):390.
26. Booth A, Martyn-St James M, Clowes M, Sutton A. Systematic approaches to a successful literature review. 2021.
27. Gusenbauer M, Haddaway NR. Which academic search systems are suitable for systematic reviews or meta-analyses? Evaluating retrieval qualities of Google Scholar, PubMed, and 26 other resources. *Research synthesis methods*. 2020;11(2):181-217.
28. Aromataris E, Munn Z. JBI manual for evidence synthesis: Jbi; 2020.
29. Long HA, French DP, Brooks JM. Optimising the value of the critical appraisal skills programme (CASP) tool for quality appraisal in qualitative evidence synthesis. *Research Methods in Medicine & Health Sciences*. 2020;1(1):31-42.
30. Group GW. Grading quality of evidence and strength of recommendations. *Bmj*. 2004;328(7454):1490.
31. Phetsitong R, Vapattanawong P, Sunpuwan M, Völker M. State of household need for caregivers and determinants of psychological burden among caregivers of older people in Thailand: An analysis from national surveys on older persons. *PLoS One*. 2019;14(12):e0226330.
32. Le DD, Dang TNH, Giang LT. The effects of spousal caregiving on middle-age and older caregivers' Health and well-being: Evidence from Vietnam. *Research on Aging*. 2025;47(1):47-65.
33. AM ZI, Noorlaili M, Rosdinom R, Azlin B, Iryani T. Caring for moderate to severe dementia patients-Malaysian family caregivers experience. *IUM Medical Journal Malaysia*. 2018;17(1).
34. Alvarez ICC, Ong MB, Abocejo F. Learning needs and quality care among family caregivers and elderly patients of Guadalupe, Cebu City, Central Philippines. *European Scientific Journal*. 2017;13(24):356-76.
35. Loh KJ, Ng ALO, Chia YC, Lee WL, Mohan D, Renganathan E. Caring for people living with dementia and their informal caregivers: Current perspectives in Malaysia. *Malaysian Family Physician: the Official Journal of the Academy of Family Physicians of Malaysia*. 2024;19:69.
36. Zakaria R, Razak AA. THE EFFECTIVENESS OF A CULTURAL-BASED SUPPORT GROUP FOR MALAY DEMENTIA CAREGIVERS IN KELANTAN, MALAYSIA: A PRE-POST INTERVENTION STUDY. *ASEAN Journal of Psychiatry*. 2017;18(1).
37. Mustapa A, Sharif A, Hanafi M, Mustaffa N. Assessing informal caregiver burden as well as knowledge on positioning and feeding of stroke patients in a tertiary hospital in Kelantan, Malaysia. *The Medical journal of Malaysia*. 2024;79(4):487-9.
38. Sambasivam R, Liu J, Vaingankar JA, Ong HL, Tan ME, Fauziana R, et al. The hidden patient: chronic physical morbidity, psychological distress, and quality of life in caregivers of older adults. *Psychogeriatrics*. 2019;19(1):65-72.
39. Tumanggor RD, Elfira E, Aizar E. Female Caregiver Devotion as a Stress Factor in Caring for Hospitalized Elderly in Indonesia. *International Journal of Nursing Education*. 2020;12(2).
40. Thanapop S, Saengsuwan B, Rasdi I, Thanapop C. Determinants of Quality of Life in Thai Caregivers of Dependent Older Adults: The Role of Health Promotion and Occupational Risks. *International Journal of Environmental Research and Public Health*. 2025;22(4):578.
41. Juntasopeepun P, Bliss DZ, Pandang A, Thana K. Determinants of Caregiver Burden Among Primary Family Caregivers of Bedridden Older Adults Living at Home. *Western Journal of Nursing Research*. 2025;47(7):586-94.
42. May Sein B, Monkong S, Leelacharas S, Satitvipawee P. Factors Explaining Quality of Life among Family Caregivers of People with Stroke in Myanmar: A Cross-sectional Study. *Pacific Rim International Journal of Nursing Research*. 2022;26(2):355-69.
43. Horn R, Heng C, Chea C, Sieng C, Louv C, Turton B, et al. Perceptions of oral health among older Cambodians and their caregivers: A qualitative study. *Gerodontology*. 2018;35(1):45-50.
44. Pankong O, Pothiban L, Sucamvang K, Khampolsiri T. A randomized controlled trial of enhancing positive aspects of caregiving in Thai dementia caregivers for dementia. *Pacific Rim International Journal of Nursing Research*. 2018;22(2):131-43.

45. Ahmad SABS, Kabir ZN, Tyrrell M, Craftman Å, Nasreen HE. Efficacy of a Telephone-Intervention on Caregiving Burden and Mental Health among Family Caregivers of Persons with Dementia in Malaysia: A Randomized Controlled Trial. *International Journal of Environmental Research and Public Health*. 2024;21(10):1354.
46. Malhotra C, Chaudhry I, Shah SU, Østbye T, Malhotra R. Trajectories of negative and positive experiences of caregiving for older adults with severe dementia: application of group-based multi-trajectory modelling. *BMC geriatrics*. 2024;24(1):172.
47. Wu F, Chen W, Wan R, Lu J, Yu Q, Tu Q. Perceived HRM and turnover intentions of elderly care workers: perspective from person-job fit and institutional ownership. *BMC nursing*. 2024;23(1):242.
48. Chua CKT, Wu JT, Wong YY, Qu L, Tan YY, Neo PSH, et al. Caregiving and its resulting effects—the care study to evaluate the effects of caregiving on caregivers of patients with advanced cancer in Singapore. *Cancers*. 2016;8(11):105.
49. Sya'Diyah H, Nursalam N, Mahmudah M, Efendy F. Structural model of family caregiver for elderly with dementia. *Iranian Journal of Nursing and Midwifery Research*. 2023;28(6):730-4.
50. Lee YT, Yuan Q, Zhang Y, Samari E, Goveas R, Ng LL, et al. Evaluating a mobile-based intervention to promote the mental health of informal dementia caregivers in Singapore: Study protocol for a pilot two-armed randomised controlled trial. *PloS one*. 2024;19(6):e0305729.
51. Tamdee D, Tamdee P, Greiner C, Boonchiang W, Okamoto N, Isowa T. Conditions of caring for the elderly and family caregiver stress in Chiang Mai, Thailand. *Journal of Health Research*. 2019;33(2):138-50.
52. Zun Naing M, Yaw May S, Htike Aung M. Caregiver burden from caring for dependent elderly in Yangon, The Republic of the Union of Myanmar. 2020.
53. Kong Y-L, Anis-Syakira J, Jawahir S, R'ong Tan Y, Rahman NHA, Tan EH. Factors associated with informal caregiving and its effects on health, work, and social activities of adult informal caregivers in Malaysia: findings from the National Health and Morbidity Survey 2019. *BMC Public Health*. 2021;21(1):1033.
54. Aman Z, Liew SM, Ramdhan SN, Philp I, Khoo EM. The impact of caregiving on caregivers of older persons and its associated factors: a cross-sectional study. *Singapore medical journal*. 2020;61(5):238.
55. Ghazali S, Abdullah KL, Abd Aziz A, Mohd Amin R, Jusoh AS, Mansor M, et al. Burden of caregivers of the elderly with chronic illnesses and their associated factors in an urban setting in Malaysia. *Malaysian Journal of Public Health Medicine*. 2015;15(1):1-9.
56. Yiengprugsawan VS, Rahmawati R, Cumming RG, Piggott J. Factors relating to depressive symptoms of caregivers for older care recipients in Indonesia. *Aging & mental health*. 2022;26(12):2454-61.
57. Chuakhamfoo NN, Phanthunane P, Chansirikarn S, Pannarunothai S. Health and long-term care of the elderly with dementia in rural Thailand: A cross-sectional survey through their caregivers. *BMJ open*. 2020;10(3):e032637.
58. Nasrun MWS, Kusumaningrum P, Redayani P, Lahino HL, Mardhiyah FS, Basfiansa AD, et al. Relationship between quality of life of people with dementia and their caregivers in Indonesia. *Journal of Alzheimer's Disease*. 2021;81(3):1311-20.
59. Thana K, Kamp K, Chintanawat R. Psychometric properties of the Thai version of caregiver reaction assessment tool among caregivers who providing care for dependent elderly persons. *CMUJ. Nat Sci*. 2022;21(4):e2022058.
60. Baobaid MF, Saraf MA, Al-Mahdi AY, Al-Goshae HAA, Abdulghani MA, Jayaram J, et al. MENTAL HEALTH AND CARE BURDEN OF INFORMAL CAREGIVERS FOR PALLIATIVE PATIENTS IN SELANGOR. *Malaysian Journal of Public Health Medicine*. 2024;24(3):262-71.
61. Wangpitpanit S, Panuthai S, Sucamvang K, Lasuka D, Jitapunkul S. Family caregiver capacity building program for older people with dependency in Thailand: a randomized controlled trial. *Pacific Rim International Journal of Nursing Research*. 2016;20(1):18-32.
62. Tan RU, Orteza GO. Knowledge and Attitude of Filipino Caregivers of Patients with Dementia Admitted for other Health Issues in a Tertiary Hospital in Metro Manila: A Descriptive Cross-sectional Study. *Acta Medica Philippina*. 2025;59(8):65.

63. Picco L, Abdin E, Vaingankar JA, Pang S, Shafie S, Sambasivam R, et al. Prevalence and risk factors of caregiver dependence among older adults in a Southeast Asian population. *Ann Acad Med Singapore*. 2016;45(11):486-94.
64. Vaingankar JA, Chong SA, Abdin E, Picco L, Jeyagurunathan A, Zhang Y, et al. Care participation and burden among informal caregivers of older adults with care needs and associations with dementia. *International psychogeriatrics*. 2016;28(2):221-31.
65. Win KK, Chong MS, Ali N, Chan M, Lim WS. Burden among family caregivers of dementia in the oldest-old: An exploratory study. *Frontiers in medicine*. 2017;4:205.
66. Nguyen TTT, Than THN, Nguyen TC, Duong Vu LT, Truong KT, Thai TT, et al. Challenges, knowledge, and skills required for family caregivers of older adults with dementia: a qualitative study in Vietnam. *Global Health Action*. 2025;18(1):2526929.
67. Nguyen T, Than T, McFarland P, Chiem M, Huynh T, Tran T, et al. Dementia prevalence among older hospitalized patients in Vietnam and dementia understanding of their caregivers. *Aging Med Healthcare*. 2019;10:128-32.
68. Fauziana R, Sambasivam R, Vaingankar JA, Abdin E, Ong HL, Tan M-E, et al. Positive caregiving characteristics as a mediator of caregiving burden and satisfaction with life in caregivers of older adults. *Journal of Geriatric Psychiatry and Neurology*. 2018;31(6):329-35.
69. Wahab PA, Talib NAA, Hatta NNKNM, Saidi S, Mulud ZA, Wahab MNA, et al. The caregiving burden of older people with functional deficits and associated factors on Malaysian family caregivers. *The Malaysian Journal of Medical Sciences: MJMS*. 2024;31(1):161.
70. Yanto YU, Owa MG, Ningtyas R, Ximenes MDRS, Moreira FM, Hendriques SEFR. The Relationship Between Role of Family with Choice of Therapy at Degenerative Elderly Peoples Iha Suco Horai Quik Posto Administrativo Maubesse Municipiu Ainaro Tinan 2024. *Jurnal Kesehatan Komunitas Indonesia*. 2024;4(3):346-62.
71. Mahalle S, Yahya N, Zailani FF. Psychological Issues on Family Caregivers of Stroke Patients in Brunei Darussalam: In the Era of Pandemic COVID-19. *Education Quarterly Reviews*. 2022;5(2):299-305.
72. Nasreen HE, Tyrrell M, Vikström S, Craftman Å, Syed Ahmad SAB, Zin NM, et al. Caregiver burden, mental health, quality of life and self-efficacy of family caregivers of persons with dementia in Malaysia: baseline results of a psychoeducational intervention study. *BMC geriatrics*. 2024;24(1):656.
73. Fenequito AC, Robles CF, Santos AF, Valencia KBC. Effects of Caregiver Burden to The Psychosocial Adjustment and Quality of Life of Caregivers of Older People with Debilitating Diseases. *Globus An International Journal of Medical Science, Engineering and Technology*. 2023;12(1):41-53.
74. Siregar R, Kritpracha C, Chinnawong T, editors. The Quality Of Life Of Informal Caregivers Of Older People With Type 2 Diabetes Mellitus In Indonesia: A Cross-Sectional Study. *Proceeding of The International Conference of Inovation, Science, Technology, Education, Children, and Health*; 2024.
75. Gray RS, Pattaravanich U. Internal and external resources, tiredness and the subjective well-being of family caregivers of older adults: a case study from western Thailand, Southeast Asia. *European Journal of Ageing*. 2020;17(3):349-59.
76. Thanapet U, Pradubmook-Sherer P. Subjectivities of Older Spousal Caregivers in Rural Northern Thailand: A Qualitative Study on Sociocultural Influences. *Journal of Population and Social Studies [JPSS]*. 2025;33:143-58.
77. Loo YX, Yan S, Low LL. Caregiver burden and its prevalence, measurement scales, predictive factors and impact: a review with an Asian perspective. *Singapore Medical Journal*. 2022;63(10):593-603.
78. Idris DR, Tengah A, Noor SM, editors. Caring is Not a One Man Show”: Family Caregiver’s Experiences in Caring the Dependent Elderly in Brunei Darussalam. 5th international conference on health Sciences (ICHS 2018); 2019: Atlantis Press.
79. Kochuvilayil A, Varma RP. Understanding caregiver burden and quality of life in Kerala’s primary palliative care program: a mixed methods study from caregivers and providers’ perspectives. *International Journal for Equity in Health*. 2024;23(1):92.

80. Agyemang-Duah W, Rosenberg MW. Geographical location as a determinant of caregiver burden: a rural-urban analysis of the informal caregiving, health, and healthcare survey in Ghana. *BMC Primary Care*. 2024;25(1):317.
81. Matina SS, Manderson L, Gómez-Olivé FX, Berkman L, Harling G. Intensity of care and the health status of caregivers to elderly rural South Africans. *medRxiv*. 2024.
82. Ameri F, Rahmani H, Mirhosseini S, Basirinezhad MH, Saeedi M, Ebrahimi H. Exploring Caregiver Burden in Alzheimer's Disease: The Predictive Role Of Psychological Distress. *The Open Public Health Journal*. 2024;17(1).
83. Owokuhaisa J, Kamoga R, Musinguzi P, Muwanguzi M, Natukunda S, Mubangizi V, et al. Burden of care and coping strategies among informal caregivers of people with behavioral and psychological symptoms of dementia in rural south-western Uganda. *BMC geriatrics*. 2023;23(1):475.
84. Fialho PPA, Koenig AM, Santos ELd, Guimarães HC, Beato RG, Carvalho VA, et al. Dementia caregiver burden in a Brazilian sample: Association to neuropsychiatric symptoms. *Dementia & neuropsychologia*. 2009;3(2):132-5.
85. Mahomed A, Pretorius C. Understanding the lived experiences of family caregivers of individuals with dementia in Soweto, a South African Township. *Dementia*. 2022;21(7):2264-87.
86. Chakraborty R, Jana A, Vibhute VM. Caregiving: a risk factor of poor health and depression among informal caregivers in India-A comparative analysis. *BMC public health*. 2023;23(1):42.
87. Ramesh J, Guruprasad P. Factors Affecting the Psychological Well-Being of Caregivers of Dementia Patients: A ematic Review. *Journal of Neurology Research Reviews & Reports SRC/JNRRR-260*. 2024;6(12):2-6.
88. Zhan HJ, Feng Z, Chen Z, Feng X. The role of the family in institutional long-term care: cultural management of filial piety in China. *International Journal of Social Welfare*. 2011;20:S121-S34.
89. Takagi E, Silverstein M. Purchasing piety? Coresidence of married children with their older parents in Japan. *Demography*. 2011;48(4):1559-79.
90. Schatz E, Seeley J. Gender, ageing and carework in East and Southern Africa: A review. *Global public health*. 2015;10(10):1185-200.
91. Yean TS, Das SB. The ASEAN economic community and conflicting domestic interests: An overview. *Journal of Southeast Asian Economies*. 2015:189-201.
92. Pham H. Australian Outlook Blog Posts [Internet]. Australia: Australian Institute of International Affairs. 2025. [cited 2025]. Available from: <https://www.internationalaffairs.org.au/australianoutlook/beyond-the-asean-way-rethinking-the-regions-policy-making-process/>.
93. Van Minh H, Pocock NS, Chaiyakunapruk N, Chhorvann C, Duc HA, Hanvoravongchai P, et al. Progress toward universal health coverage in ASEAN. *Global health action*. 2014;7(1):25856.
94. Kaiser AH, Rotigliano N, Flessa S, Ekman B, Sundewall J. Extending universal health coverage to informal workers: A systematic review of health financing schemes in low-and middle-income countries in Southeast Asia. *PLoS One*. 2023;18(7):e0288269.
95. Ministry of Health Singapore. Keeping Healthcare Affordable and Sustainable for All Singapore: Ministry of Health Singapore; 2025 [Available from: <https://www.moh.gov.sg/newsroom/keeping-healthcare-affordable-and-sustainable-for-all/>].
96. Providing for Health. Malaysia's basic affordable health insurance scheme concept to be completed by December 2025, with rollout targeted for end-2026 Malaysia: P4H Network; 2025 [Available from: <https://p4h.world/en/news/malaysias-basic-affordable-health-insurance-scheme-concept-to-be-completed-by-december-2025-with-rollout-targeted-for-end-2026/>].
97. National Health Security Office Thailand. Enhancing convenience: 22nd year of UCS Bangkok: NHSO Thailand; 2024 [Available from: <https://eng.nhso.go.th/view/1/DescriptionNews/Enhancing-convenience-22nd-year-of-UCS/587/EN-US>].

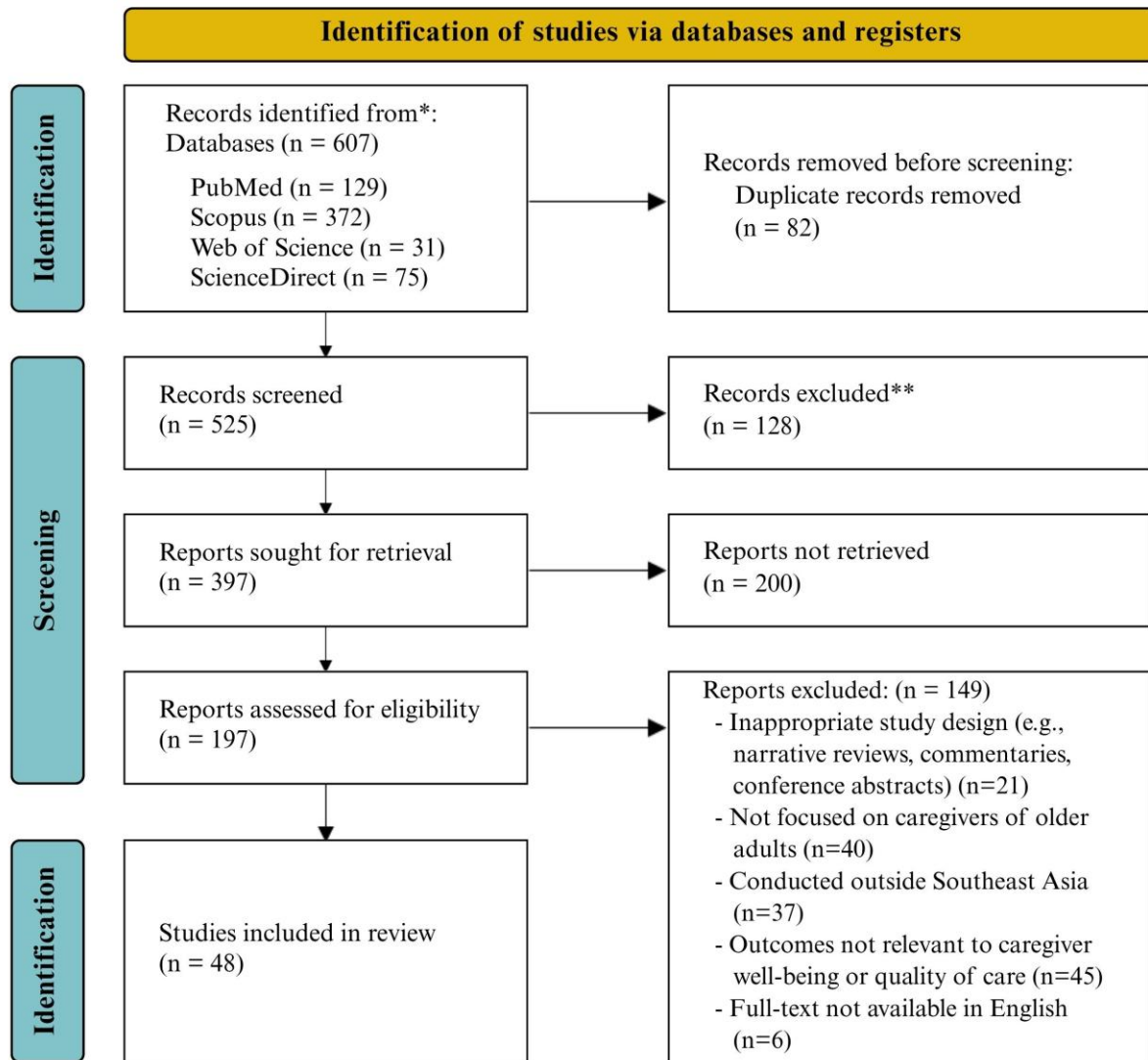
98. Tangcharoensathien V, Patcharanarumol W, Ir P, Aljunid SM, Mukti AG, Akkhavong K, et al. Health-financing reforms in southeast Asia: challenges in achieving universal coverage. *The Lancet*. 2011;377(9768):863-73.
99. World Health Organization. Universal Health Coverage in the Western Pacific Geneva: WHO; 2023 [Available from: <https://www.who.int/westernpacific/health-topics/universal-health-coverage>].
100. World Bank Group. Lao Economic Monitor, Dec 2025: Consolidating Recent Reform Momentum for Stability and Growth. Key Findings: World Bank Group; 2025 [Available from: <https://www.worldbank.org/en/country/lao/publication/lao-economic-monitor-dec-2025-consolidating-recent-reform-momentum-for-stability-and-growth-key-findings>].

Table 1. PICOS framework of the systematic review.

PICOS element	Description
Population (P)	Both informal/family caregivers and formal caregivers of older adults in institutional, community-based, and household settings in Southeast Asia.
Intervention/Exposure (I)	Structural and functional conditions (e.g., working conditions, role demands, organizational support, caregiving intensity, financial strain), sociocultural contexts (e.g., filial piety, family obligation, religious beliefs, community norms), and policy-related determinants (e.g., health and welfare policies, social support systems, and policy gaps).
Comparison (C)	Not applicable.
Outcomes (O)	Caregiver health, well-being, caregiver burden, and quality of care provided to older adults (as examined in non-randomized studies or RCTs). Additional outcomes include economic impacts, coping strategies, training, and service utilization.
Study Design (S)	Eligible studies were empirical studies, including both observational designs (e.g., cross-sectional, cohort, case-control, qualitative, and mixed-methods studies) and randomized controlled trials (RCTs).

Table 2. Distribution of Evidence on Caregiving Outcomes across Southeast Asian Countries by Thematic Domain.

Outcomes		Number of Articles Identifying Specific Themes									
Structural Factors	Resources & Organizational Support	3	1	6	5	2	2	1	1	1	0
	Policies and Social Welfare Systems	2	0	5	3	1	2	1	1	1	0
	Working Conditions	7	0	5	4	0	0	1	0	0	0
	High workload with inadequate resources	3	1	6	3	2	1	1	1	0	0
	Role of training in managing complex care needs	1	2	3	2	1	3	0	0	0	0
Functional Factors	Caregiving Intensity	8	0	2	4	3	1	2	0	0	0
	Dementia-related & Clinical Symptoms	7	1	2	2	3	3	1	0	0	0
	Caregiver–Older Adult Relationship	3	1	3	4	2	2	1	0	1	1
	Care dependency & policy constraints	5	0	3	6	5	2	2	1	1	1
Health & Well-being	Mental Health & Emotional Burden	9	2	6	10	6	2	1	0	1	1
	Physical Health	4	0	2	6	4	3	0	0	1	1
	Quality of Life	7	2	7	9	6	3	1	1	1	1
Sociocultural Values	Filial piety & family obligations	1	1	4	7	4	0	2	1	1	1
	Family relationships & insecure employment	4	0	4	2	2	1	0	0	1	0
	Religion and spirituality	0	1	3	4	1	0	1	0	1	0
	Ethnicity and cultural norms	3	0	2	4	3	1	0	1	1	1
	Family structure changes	3	1	0	2	1	0	0	1	1	1
	Gender norms & caregiving roles	5	3	7	9	4	2	1	0	0	0
Policy Gaps	Insufficient financial & welfare support	4	2	6	4	3	1	1	1	1	1
	Limited formal LTC infrastructure	2	0	2	5	1	2	2	1	1	1
	Restricted access to caregiver training, & psychosocial support	2	2	6	6	3	3	0	0	1	0
	Weak linkages between policy, society, and community	1	0	2	5	2	0	1	1	1	1
Country		Singapore	Philippines	Malaysia	Thailand	Indonesia	Vietnam	Myanmar	Cambodia	Brunei	Timor-Leste



*Consider, if feasible to do so, reporting the number of records identified from each database or register searched (rather than the total number across all databases/registers).
**If automation tools were used, indicate how many records were excluded by a human and how many were excluded by automation tools.

Source: Page MJ, et al. BMJ 2021;372:n71. doi: 10.1136/bmj.n71.

Figure 1. A PRISMA flow diagram of the study selection process.

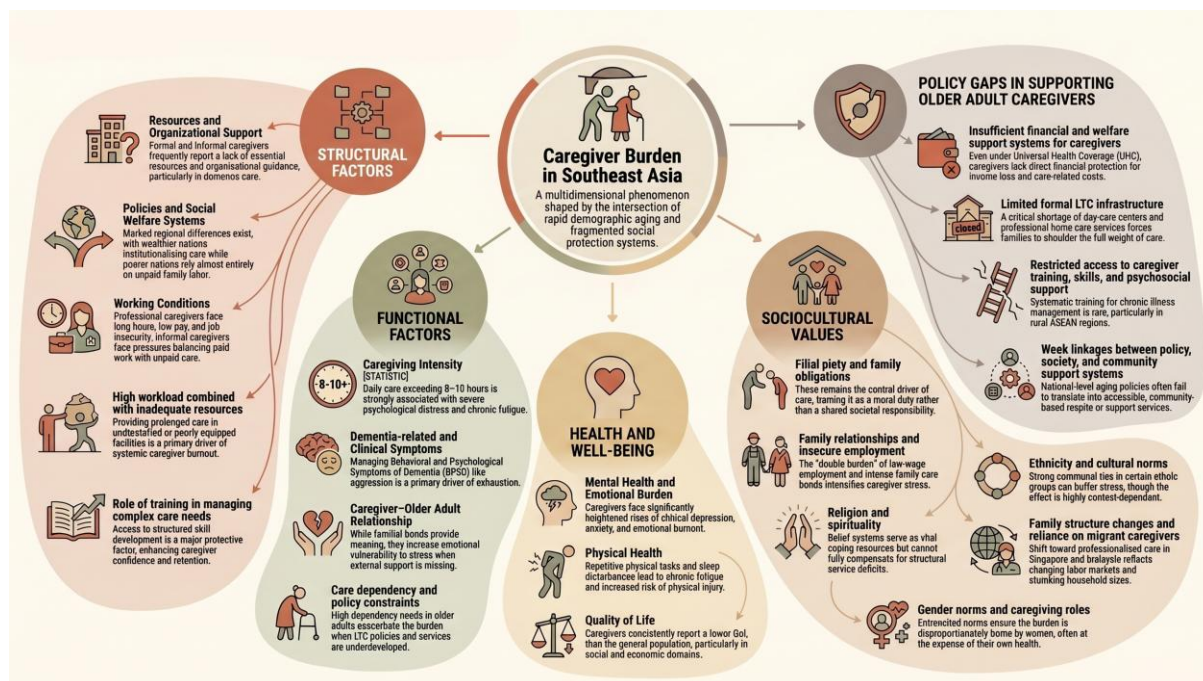


Figure 2. Caregiver Burden Dimensions in Southeast Asia.

Supplementary Files

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- [Tables.docx](#)
- [SupplementaryPRISMA2020checklist.pdf](#)
- [Supplementarytable1.pdf](#)