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The unmet needs of patients with chronic obstructive pulmonary disease: A systematic review and meta-synthesis

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Abstract

Background

Chronic obstructive pulmonary disease (COPD) is a progressive condition that requires long-term management and coordinated care. Despite growing attention to person-centred care, patients with COPD continue to experience a range of unmet needs. Understanding how health systems fail to meet these needs is essential for improving COPD management.

Methods

A systematic literature review and meta-synthesis of qualitative studies were conducted. Eleven electronic databases (PubMed, Web of Science, the Cochrane Library, CINAHL, Embase, PsycINFO, MEDLINE, Scopus, CNKI, Wanfang, and VIP) were searched to identify relevant studies reporting patients' experiences and perceptions of unmet needs. Data were synthesized using the Thomas and Harden thematic synthesis approach.

Results

Twenty-two studies involving 342 patients were included. The synthesis identified multiple, interrelated unmet needs across the COPD trajectory: (1) unmet informational and understanding needs; (2) unmet emotional and social needs; (3) Unmet needs for coordinated and continuous support; and (4) unmet needs in healthcare access and quality.

Conclusions

Patients with COPD experience ongoing unmet needs across multiple domains that hinder self-management and well-being. Addressing these needs requires targeted, continuous, and person-centred approaches, including ongoing education, empathetic support, coordinated care, and reduction of structural barriers. The findings provide evidence to inform healthcare policy, service organisation, and the design of interventions aimed at improving the quality, accessibility, and continuity of COPD care.

Trial Registration

PROSPERO (CRD420261297657), registered on 31 January 2026.

1. Background

Chronic obstructive pulmonary disease (COPD) is a progressive and life-threatening respiratory condition characterised by persistent airflow limitation, chronic airway inflammation, and a gradual decline in lung function [1]. It affects approximately 10.6% of the global population, or 480 million people, and is projected to affect nearly 592 million by 2050 [2]. As the third leading cause of death globally, COPD imposes a substantial and continuously growing burden on individuals, families, and healthcare systems [3]. With accelerating population ageing and sustained exposure to risk factors such as tobacco smoke and air pollution, the prevalence of COPD and its associated healthcare utilisation are expected to increase further in the coming decades [2, 4].

Unmet needs generally refer to the divergence between individuals' perceived needs for maintaining health and well-being and the support actually provided by healthcare and community systems [5]. Among patients with COPD, these unmet needs may extend across multiple domains, including informational, emotional, and healthcare support [6, 7]. If left unaddressed, such needs may contribute to emotional distress, anxiety, depression, reduced capacity for self-management, and poorer health outcomes [8]. Given its chronic, progressive, and worsening trajectory, patients with COPD frequently encounter prolonged and complex care challenges, leading to potential unmet needs [9]. Due to the long-term and fluctuating nature of COPD, unmet needs may accumulate and evolve, exacerbating patients' vulnerability and widening health disparities. Understanding the scope and structure of these unmet needs is therefore critical to improving person-centred care and long-term disease management.

Qualitative studies have provided valuable insights into how patients interpret their interactions with healthcare professionals, navigate self-management challenges, and experience transitions across care environments [10]. Previous reviews have synthesised qualitative studies on the needs of patients with COPD, summarising unmet patient needs across multiple domains [11]. However, qualitative research in this field has continued to expand in recent years. At the same time, COPD care models have undergone notable changes, including the increasing adoption of telemedicine and digital health technologies, as well as the growing emphasis on integrated and continuity-oriented chronic disease management. These developments may have reshaped both the experiences and expectations of patients with COPD. Therefore, an updated synthesis of qualitative evidence is required to integrate these findings and gain a more comprehensive understanding of the unmet needs of patients with COPD. To address this gap. This study employs a meta-synthesis approach to comprehensively analyse and summarise existing qualitative evidence. This review aims to identify and synthesise the range of unmet needs reported by patients with COPD, thereby enhancing healthcare professionals' awareness and informing strategies to improve the continuity, accessibility, and person-centredness of COPD care.

2. Method

2.1. Aim

This study aims to systematically synthesise qualitative evidence for a comprehensive understanding of the unmet needs among patients with COPD and to inform person-centred nursing care. The research

question is “What unmet needs do patients with COPD experience?”

2.2. Study Design

This review was registered with PROSPERO (CRD420261297657) and was conducted and reported in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines [12] and the Enhancing Transparency in Reporting the Synthesis of Qualitative Research (ENTREQ) statement [13].

2.3. Search Strategy

Eleven electronic databases, including PubMed, Web of Science, the Cochrane Library, CINAHL (EBSCO), Embase, PsycINFO (ProQuest), MEDLINE (EBSCO), Scopus, CNKI, Wanfang, and VIP, were searched from inception to February 2026.

The search strategy followed the Joanna Briggs Institute (JBI) three-step approach. The search was structured around three core concepts: chronic obstructive pulmonary disease, unmet needs, and qualitative research. First, an initial limited search was conducted in PubMed and CNKI to identify relevant keywords and index terms related to these concepts. Second, a comprehensive search using refined search terms was performed across the selected databases. Third, the reference lists of all included studies were screened to identify additional eligible studies. Detailed search strategies are presented in **Table S1**.

2.4. Inclusion and Exclusion Criteria

The eligibility criteria followed the PICoS framework recommended by the JBI **(Table 1)**. Due to resource constraints related to translation, only studies published in English or Chinese were included.

2.5. Quality Appraisal

The methodological quality of the included studies was assessed using the Joanna Briggs Institute Qualitative Assessment and Review Instrument (JBI-QARI). Two reviewers independently screened the full-text articles and performed the quality appraisal. Discrepancies were resolved through discussion and, when necessary, consultation with a third reviewer.

2.6. Data Extraction

A tailored data extraction form was developed to systematically extract relevant information from the included studies, including the first author, year and country of publication, methods, sample characteristics, study aims, and key findings. Data were extracted independently by two reviewers trained in evidence-based methodology and cross-checked for accuracy. Discrepancies were resolved through discussion and, when necessary, consultation with a third reviewer.

2.7. Data Synthesis

Data synthesis was undertaken using the thematic synthesis approach proposed by Thomas and Harden[14]. Two reviewers independently conducted the synthesis and engaged in repeated reading of the included studies to ensure immersion in the data. Coding discrepancies were resolved through discussion, and a third reviewer was consulted when consensus could not be reached.

All text labelled as “results” or “findings” that related to the phenomenon of interest was extracted verbatim and imported into NVivo 15 for analysis. The synthesis involved three stages. First, free line-by-line coding was conducted inductively to capture the meaning and content of the extracted findings. Second, codes with conceptual similarities were grouped into descriptive themes. Third, the descriptive themes were further interrogated and synthesised to identify patterns and relationships related to unmet needs. Through iterative discussion and refinement, higher-order analytical themes were developed to provide a deeper understanding of unmet needs among patients with COPD.

2.8. Assessing Confidence in the Review’s Findings

The confidence in the review findings was assessed using the Confidence in the Evidence from Reviews of Qualitative Research (CERQual) approach. This approach evaluates confidence in qualitative evidence based on four components: methodological limitations, coherence, relevance, and sufficiency of data. Two reviewers independently conducted the CERQual assessments for each analytical theme. Discrepancies were resolved through discussion and, when necessary, consultation with a third reviewer.

3. Results

3.1. Study Characteristics

The initial literature search yielded 604 articles, and 441 remained after duplicates were removed. We then reviewed the reports by title and abstract, and 89 articles were retrieved for full-text review. After screening the full text, 22 studies were finally included **(Figure 1)**. Additionally, the reference lists of the included studies were manually screened to identify any potentially eligible studies; however, no further eligible studies were identified.

Figure 1 Flowchart illustrating the screening and selection of literature

3.2. Characteristics of the Studies

Of the 22 included studies, the majority were conducted in Europe (n = 9) and Asia (n = 8), followed by Oceania (n = 3) and North America (n = 2). The original studies in the review were published between 2007 and 2025. In total, 342 participants were included, with sample sizes ranging from 5 to 28. Participants were predominantly older adults, with reported ages ranging from 49 to 89 years. Detailed characteristics of the included studies are shown in **Table 2**.

3.3. Quality Appraisal

Quality appraisal indicated that most included studies met the majority of JBI-QARI criteria. Eight studies [15–22] met all 10 criteria; six [23–28] met nine criteria; three [29–31] met eight criteria; and five [32–36] met seven criteria. Areas of weaker reporting were primarily related to insufficient clarification of the researchers' cultural or theoretical positioning and limited discussion of the potential influence of the researcher on the research process. Detailed appraisal results are presented in **Table 3**. In order to preserve potentially valuable qualitative insights, studies were not excluded based on methodological appraisal.

3.4. Meta-Synthesis of Qualitative Data

Four main themes and 12 sub-themes were identified **(Figure 2)**. To indicate the relative prominence of each sub-theme, the number of citations and the percentage (number of studies contributing to the sub-theme divided by the total number of included studies) were presented in **Table S2**, enabling readers to examine the data collected and analysed by the authors, to understand the origins of the analytical findings, and to assess the plausibility, credibility, and face validity of the claims generated in this synthesis. Seven sub-themes received high confidence rating from the CERQual assessment of confidence in individual review findings, while five sub-themes received moderate confidence rating **(Table S3)**.

The following sections present the four overarching themes and their associated subthemes. Verbatim quotations from participants, as reported in the original studies, are provided to illustrate and substantiate each theme.

Figure 2 Themes of Unmet Needs

3.4.1. Theme 1: Unmet informational and understanding needs

3.4.1.1. Disease knowledge gaps. This sub-theme is assessed as high confidence. Patients showed an incomplete understanding of COPD as a chronic progressive respiratory condition, particularly regarding its nature, causes, and long-term progression. Misconceptions were frequently reported, with some patients believing COPD is contagious or merely a result of aging [25]. Some patients underestimated the seriousness of their condition and gradually became accustomed to persistent symptoms. In some cases, participants believed that COPD was curable or interpreted ongoing symptoms as evidence that effective treatment was unavailable [22].

"I feared to sleep with my children because it (COPD) will transfer to them, so I sleep alone in the next room." [22]

"A lot of people don't even know what COPD is. Well, I didn't." [28]

"I've had this illness for years. I don't take the breathlessness too seriously anymore — I've kind of gotten used to it. It doesn't feel like a big problem, so I avoid going to the hospital if possible." [35]

3.4.1.2. Treatment and self-management knowledge gaps. This sub-theme is assessed as high confidence. Regarding pharmacological treatment, some patients had insufficient understanding of medication regimens, inhaler techniques, dosing schedules, and potential side effects. Furthermore, several participants reported limited awareness of supportive interventions, such as pulmonary rehabilitation, exercise training, and oxygen therapy, leading to an incomplete understanding of available treatment options. Regarding self-management, patients similarly expressed knowledge gaps, particularly concerning daily symptom control and managing exacerbations, indicating insufficient mastery of effective management strategies.

"This is so complicated. I don't even know if I'm taking it properly." [25]

"Have you ever heard of pulmonary rehabilitation?

Speaker 2: No, I don't even know what that is or where it is. I'll have to, that's something I'd have to look into. I never really looked into other resources I don't think." [34]

"Not sure what I can do to get out of it. Is there anything I can do to feel better?" [25]

3.4.1.3. Gaps in clear and tailored information delivery. This sub-theme is assessed as moderate confidence. Explanations of COPD and its treatment plans often lacked adaptation to patients' individual circumstances, leading to a gap between disease cognition and treatment logic [34]. Additionally, the expression of medical information was overly professional or lacked sufficient explanation, which limits patients' ability to interpret examination results, understand treatment decisions and participate in treatment plans.

"Nothing happened after the tests." [25]

"But I do find leaflets what you've been given here or there they're not exactly in plain English and they do take a lot of understanding, you think what's that word mean you know." [26]

3.4.2. Theme 2: Unmet emotional and social needs

3.4.2.1. Persistent insecurity and emotional distress. This sub-theme is assessed as high confidence. The majority of patients experienced persistent anxiety, fear, low mood and emotional instability, which were linked to the progressive and unpredictable nature of COPD. The fear of suffocation and concerns about dying during exacerbations were recurring themes. A particularly distressing aspect of this fear was the concern about not receiving timely assistance. Several participants expressed anxiety about being alone during symptom exacerbations and worried that help might not arrive quickly enough [18]. In response to these fears, some patients reported reliance on hospital environments or continuous professional monitoring to feel safe.

"I feel suffocated, like dying." [21]

"I am afraid to stay at home alone. If anything happens, nobody can help me. I am afraid that I will be 'out-of-order' (might die)." [21]

"I feel safe there (hospital). I know there is oxygen there and I don't panic then if the nebuliser doesn't do me any good." [18]

3.4.2.2. Stigma and self-blame. This sub-theme is assessed as moderate confidence. Some participants described internalised stigma, characterised by feelings of shame, embarrassment, and self-blame, particularly when attributing their illness to prior smoking. Such internalised perceptions often intensified emotional distress and contributed to reluctance in discussing their condition openly [33]. Some individuals said feeling judged when using inhalers in public settings or chose to conceal their diagnosis to avoid negative reactions [20]. Perceived misunderstanding within family or social networks further reinforced feelings of marginalisation.

"They don't look at you the same – you aren't the person that you used to be. You are somebody else now – ... . And I was walking behind these two people. and my chest was really bad so I was going like that (breathing really deep and raspy) and they were looking round at me like I was some kind of monster you know – because my chest was that bad." [23]

"Well, and then there's the guilt, you know? I really felt that so strongly at first. Didn't want to tell anyone. It's terrible, isn't it (laughs) […]. But I don't go around telling people I have COPD, unless I have to. I just really don't […]. And that may have to do with that as a group we sort of have a feeling that we are not taken as seriously as others? Maybe there's something there?" [16]

3.4.2.3. Social isolation and role change. This sub-theme is assessed as high confidence. As physical limitations and unpredictable symptoms progressively restricted patients' daily activities, their sense of social isolation deepened. Many are reporting increased time spent at home and a gradual reduction in travel or social engagements, leading to shrinking social circles [16, 18].

"You have to consider have I got enough oxygen, can I easily take it [oxygen concentrator] there, so all the time I am getting more limited." [19]

With declining functional capacity, maintaining previous family, occupational, and social roles became increasingly challenging. Participants described the transition from independent living to relying on others for daily activities, a shift that often causes significant emotional distress. This loss of autonomy was accompanied by concerns about becoming a burden to family members and a perceived threat to personal dignity.

"Sometimes, when I get out of the bath, sometimes M [carer] has to wipe me down, well most of the time really. She wipes me down ... I think it's just you feel a bit degraded. It is like when it comes to me having to bend down – simple things." [23]

3.4.2.4. Lack of emotional and social support. This sub-theme is assessed as high confidence. Some participants indicated that opportunities for structured psychological support within routine care were limited, with professional counselling or psychological services rarely incorporated into their treatment plans. They also expressed a desire to connect with others living with chronic obstructive pulmonary disease. Peer interaction was regarded as a vital source of emotional encouragement and practical experience sharing.

"I don't want to keep talking to my family, and I keep saying that my family is also annoyed. I think it would be good if there were professional people to enlighten me." [33]

"The hospital or community holds regular lectures, or sets up a special organisation to bring together the whole family to exchange experiences, and it would be best if there were professional doctors and nurses to participate." [36]

Furthermore, at the familial support level, not all home environments provided effective emotional buffering; some patients experienced insufficient understanding or a lack of emotional validation from family members, which conversely intensified their inner vulnerability and sense of loneliness.

"My family said I was too annoying, I gasped and felt uncomfortable; they didn't understand me." [31]

3.4.3. Theme 3: Unmet needs for coordinated and continuous support

3.4.3.1. Lack of ongoing and structured support. This sub-theme is assessed as high confidence. Support following initial diagnosis or pulmonary rehabilitation was often perceived as fragmented or time-limited, leaving patients without ongoing professional guidance after formal programmes conclude. Some patients expressed a desire for healthcare professionals to conduct regular follow-ups and ongoing monitoring to support recovery and bolster their confidence in managing their condition. Due to insufficient family support or accessible home-based services, some patients stated reluctance to leave the hospital or difficulty managing their condition independently [15]. Only a minority of participants received satisfactory home care, particularly when personalised and responsive support was provided by specialised community or palliative care teams.

"You've had somebody sort of caring for you for six week and them being interested in you and then it's just gone you know." [26]

"If there is a specialist who pays attention to our condition for a long time and monitors the rehabilitation effect, it can increase the desire to train." [31]

3.4.3.2. Poor care coordination and continuity. This sub-theme is assessed as moderate confidence. Patients perceived healthcare as fragmented due to poor coordination of services and insufficient continuity across different care stages and disciplines. Emergency department doctors did not have access to the patient's journal during exacerbations [16]. Discontinuity in specialist follow-up further undermined continuity of care, particularly when existing relationships with pulmonologists

cannot be maintained. In certain instances, inadequate coordination between healthcare settings leads to treatment interruptions and unnecessary rehospitalisations, such as when required medications are unavailable in transitional care facilities [29].

"And then I lost my primary physician. I was in limbo." [16]

"I don't have a pulmonologist now because he retired, and I don't like—I have been to the other doctors here…. We're not in a big metropolitan area, so we're very limited." [34]

3.4.4. Theme 4: Unmet needs in healthcare access and quality

3.4.4.1. Deficits in person-centred communication. This sub-theme is assessed as high confidence. Person-centred communication frequently fell short in healthcare interactions. Patients' concerns were not always adequately heard or addressed, with some individuals even perceiving judgment or neglect during exchanges with healthcare professionals [15]. Several patients described discrepancies between healthcare professionals' assessments of disease severity and their own experiential understanding of symptoms. Participation in treatment decisions was sometimes restricted, and discussions regarding future care plans were not always conducted at appropriate junctures or within supportive environments (Stokes et al., 2019).

"They [ambulance staff] often come and say that you should inhale, and then you feel better. And then they [ambulance staff] say "-Now your oxygenation is good". But I don't think at all I'm good enough. I've always started by saying, "-Before you leave, I want to go to the toilet". And then I go, and when I get halfway to the toilet, they say, "-Wait, we'll help you". Then they [ambulance staff] will take me to the hospital." [15]

"[…] I have had a short-term stay in nursing home, and [the nurse] screamed at me and waved her arms right up in my face, telling me: "you've recovered, you're not supposed to have more [medicine]!" […] "There's missing a tablet, the one from [the hospital]." And she exploded, "you're not getting more medicine, you've recovered!" [29]

3.4.4.2. Concerns about professional competence and care quality. This sub-theme is assessed as moderate confidence. Some patients felt that responses from non-specialist staff, including telephone operators and primary care physicians, were vague or unhelpful, undermining their confidence in existing advice and support [15]. Doubts about healthcare staff competence were particularly pronounced when primary care settings failed to adequately address COPD concerns or when patients perceived non-specialist professionals as lacking sufficient expertise to manage their condition. Medication errors, prescribing mistakes, and uncertainties regarding medication management further amplified patient anxieties [30].

"No, they know nothing. They know so little." [16]

"[…] Because if you ask the doctor about [side effects], then they are very dismissive. They can reply with something like: "all tablets have side effects" and then they are done. And that doesn't help much." [29]

3.4.4.3. Barriers to healthcare access. This sub-theme is assessed as high confidence. Participants expressed structural and resource-related constraints that limited timely and appropriate care, including shortages of specialised services, restricted availability of medications, and limited capacity at primary care facilities. In some cases, treatment was delayed or perceived as inaccessible due to systemic limitations.

"The doctor said I had to test albumin and electrolytes two weeks after discharge… We found a nurse in the village to draw blood, but they couldn't do blood gas testing. If there were professional home services, I would really welcome that." [33]

Financial burden emerged as a significant barrier, with patients reporting out-of-pocket expenses for medications, consultations, and transportation that constrained their ability to seek or continue care. Geographical and logistical challenges further impeded access. Difficulties related to transportation, distance to healthcare facilities, and complex appointment systems were commonly described, particularly among individuals living in rural or underserved areas.

"Could the state offer a higher reimbursement ratio for chronic diseases like ours?" [31]

"I mean, if I was going to Hope Hospital instead, I would still go in a taxi because I don't want to park across the road at Stott Lane and then have to walk to the hospital, but I could go through the door there and find one of the hostesses who'd find me a wheelchair and take me wherever I was going ... but here you can't even be dropped off at the door. I bet it's a man designed it." [23]

Digital barriers were also identified. While remote healthcare services were increasingly utilised, older adults and individuals with limited digital literacy reported difficulties navigating telehealth platforms.

"This application is good, but for the elderly, it is inconvenient to use mobile phones. Communicating in tongues, and you can't understand them, and you don't know how to type." [33]

"Despite the ease, they experienced some issues with the devices. The informants encountered issues with logging in, forgot to charge the tablet, or even misused the thermometer." [30]

4. Discussion

This review synthesises qualitative research evidence on unmet needs among patients with COPD. The findings indicate that these unmet needs are multidimensional and interrelated. The included studies identified significant gaps in disease-related knowledge and self-management, emotional and social support, continuity and coordination of care, and healthcare access. Compared with the earlier synthesis [11], this review incorporates more recent qualitative studies and reflects evolving contexts of COPD care, including digitalisation, the increasing recognition of psychosocial dimensions, and persistent structural barriers. In addition to these well-established domains, this review highlights several emerging or underexplored areas, including challenges related to digital health engagement, behavioural consequences of stigma and self-blame, concrete instances of care fragmentation, and the interactive

influence of family support on emotional well-being. These findings provide a more nuanced understanding of the evolving and multidimensional needs of patients with COPD, underscoring the importance of shifting from fragmented, disease-centred care models towards more comprehensive, continuous, and person-centred approaches.

Consistent with the findings reported before [11], the need for disease-related information remains a frequently mentioned issue among individuals with COPD. Many patients begin their disease trajectory without a clear understanding of their condition. Some were uncertain about what COPD actually is, confused it with other respiratory conditions, or only came to understand their diagnosis after living with symptoms for many years [16, 21]. The gaps in understanding may undermine patients' ability to effectively manage their condition and respond appropriately to symptom changes [37–39]. Importantly, informational needs also evolve, shifting from understanding the disease at diagnosis to practical self-management during the illness course and, in advanced stages, concerns about future care and palliative support [30, 34, 40]. However, these evolving needs are not always adequately addressed [41]. This may partly reflect the episodic nature of many clinical encounters, in which information is often delivered briefly or ambiguously at the time of diagnosis and not revisited as patients' needs change over time. The way information is communicated may also affect understanding, particularly when it is overly technical or insufficiently tailored to patients' individual backgrounds, underscoring the importance of personalised education strategies.

Emotional distress constitutes a prominent and enduring dimension of unmet need among patients with COPD. Living with COPD often involves progressive breathlessness, declining physical function, and increasing dependence on others in daily activities, which can substantially alter patients' sense of autonomy and control over their lives and intensify feelings of frustration, helplessness, and vulnerability [19, 42]. In addition, the unpredictable nature of exacerbations and the distressing sensation of suffocation during acute episodes can evoke profound fear and even a perception of impending death, further amplifying emotional distress [24]. Experiences of stigma, blame, or feeling judged, particularly in relation to smoking, may further undermine patients' sense of dignity and willingness to seek support, reinforcing isolation and silence around their distress [23]. These emotional burdens have important consequences for patients' engagement with care and self-management. For example, feelings of stigma or anticipated judgment can shape attitudes toward treatment, with some individuals reluctant to openly discuss their condition or adhere to visible therapies such as inhaler use due to concerns about being labeled or misunderstood [20]. In this context, emotional distress does not occur in isolation but is closely intertwined with patients' social environments. While family members can serve as an important source of emotional support, not all home environments provide effective understanding or validation of patients' experiences. When emotional struggles are minimized, misunderstood, or left unacknowledged within close relationships, patients may feel further marginalized, which can deepen feelings of loneliness and psychological vulnerability [22].

Patients with COPD commonly require long-term disease management, experience recurrent exacerbations, and interact with multiple healthcare providers across different settings. However, some

patients perceive a lack of continuity in professional support [16]. Fragmented care across healthcare settings can create uncertainty about responsibilities for different aspects of disease management, leaving patients to navigate complex care pathways largely on their own. The absence of familiar or consistent healthcare contacts may lead patients to delay or even refuse seeking care, particularly during exacerbations, out of fear of being misunderstood or receiving inadequate support [15]. This discontinuity can lead to inconsistent guidance, gaps in follow-up, and confusion about treatment plans, ultimately undermining patients' confidence in managing their condition and in adhering to prescribed therapies [34]. Over time, these challenges may increase vulnerability to acute exacerbations, emergency visits, and avoidable rehospitalisations, while also amplifying patients' stress and sense of insecurity within the healthcare system [32].

Although patients with COPD often require regular monitoring and timely intervention, the findings suggest that access to appropriate services is not always convenient [32]. Patients may experience misalignment between their perceptions of disease severity and healthcare professionals' assessments, and opportunities for shared decision-making are frequently limited [16]. The gaps can result in care that is insufficiently tailored to individual needs. Geographic distance, long waiting times, and limited availability of specialised respiratory services may further delay or restrict access to care [43]. At the same time, several patients expressed concerns about the professional competence of healthcare providers who lacked specific expertise in COPD management, which could undermine confidence in the care they received [29]. Such experiences may lead patients to question the reliability of medical advice or feel uncertain about the adequacy of their treatment. Difficulties in accessing care, combined with perceived variations in quality, not only affect clinical management but may also erode trust in the healthcare system and reduce patients' willingness to seek help during exacerbations.

5. Implications for Practice

The findings of this review point to important implications for clinical practice and health policy. Given the persistent unmet informational and understanding needs, healthcare professionals should provide ongoing, tailored education and reinforce self-management support throughout the disease trajectory. To address unmet emotional and social needs, incorporating empathetic communication, psychological support, and family or peer involvement into routine care is essential to alleviate anxiety, stigma, and role disruption.

In response to unmet needs for coordinated, continuous support, greater emphasis should be placed on strengthening continuity of care by clarifying care pathways, improving communication across healthcare settings, and establishing stable patient–healthcare professional relationships. Emerging digital health approaches, such as telehealth and remote monitoring, may further enhance information delivery, facilitate timely communication, and support ongoing disease management. Addressing unmet needs in healthcare access and quality also requires reducing structural barriers, including improving the availability of specialised services, shortening waiting times, and mitigating financial and geographic constraints. At the same time, ensuring accessibility for patients with different levels of digital literacy

and access is crucial. Engaging patients and family caregivers in the design and evaluation of COPD services could further ensure that care models align with their priorities and preferences. These approaches are essential for better addressing patients' evolving needs and improving the responsiveness of COPD care.

6. Limitations and Future Implications

This review synthesised qualitative evidence from diverse countries and healthcare contexts, enhancing the transferability of findings. The use of thematic synthesis and CERQual strengthened methodological transparency and allowed assessment of confidence in each subtheme. Nevertheless, several limitations should be acknowledged. First, the primary studies provided only limited detail regarding patients' experiences, which may constrain the depth of interpretation in the synthesis. Second, as with all qualitative syntheses, the analysis inherently relies on researchers' interpretations, which may be influenced by their professional background, prior beliefs, or experiences. Third, this review was restricted to studies published in English and Chinese, potentially introducing language bias and excluding relevant evidence reported in other languages. Fourth, due to resource constraints, grey literature and unpublished studies were not searched, which may have led to the omission of some relevant studies. Nevertheless, the comprehensive search of 11 peer-reviewed databases, combined with reference list screening, likely captured the majority of available qualitative evidence on this topic. Future research should explore interventions tailored to the evolving information, emotional, and care-coordination needs of patients with COPD. Evaluating the effectiveness of continuity-oriented and person-centred care models across diverse healthcare settings may help identify strategies to improve self-management, reduce disparities, and enhance overall care experiences.

7. Conclusion

This review provides an updated synthesis of qualitative evidence on patients' unmet needs with COPD, reflecting the expanding body of research and evolving models of COPD care. The findings indicate persistent unmet needs across informational, emotional, and healthcare support domains. Addressing these needs requires greater emphasis on person-centred and coordinated care that supports patients throughout the long-term trajectory of the disease. Future research should focus on developing and evaluating interventions that effectively respond to these complex needs.

Abbreviations

COPD
chronic obstructive pulmonary disease
CERQual
the Confidence in the Evidence from Reviews of Qualitative Research
ENTREQ
the Enhancing Transparency in Reporting the Synthesis of Qualitative Research

JBI
the Joanna Briggs Institute
JBI-QARI
the Joanna Briggs Institute Qualitative Assessment and Review Instrument

Declarations

Ethics approval and consent to participate

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Consent for publication

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Competing interests

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Author Contribution

J.L: Conceptualization, Methodology, Formal analysis, Data curation, Writing original draft, Writing review & editing. **X.P:** Conceptualization, Supervision, Writing review & editing. **Z.Z:** Methodology, Formal analysis, Writing review & editing. **Y.Y:** Data curation, Investigation, Writing review & editing. **Y.Z:** Validation, Visualization, Writing review & editing. **N.Y:** Project administration; Writing review & editing. All authors reviewed and approved the final version of the manuscript.

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Data Availability

All data analysed in this study are derived from published studies included in this review. No original datasets were generated.

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Tables

Tables are available in the Supplementary Files section.

Figures

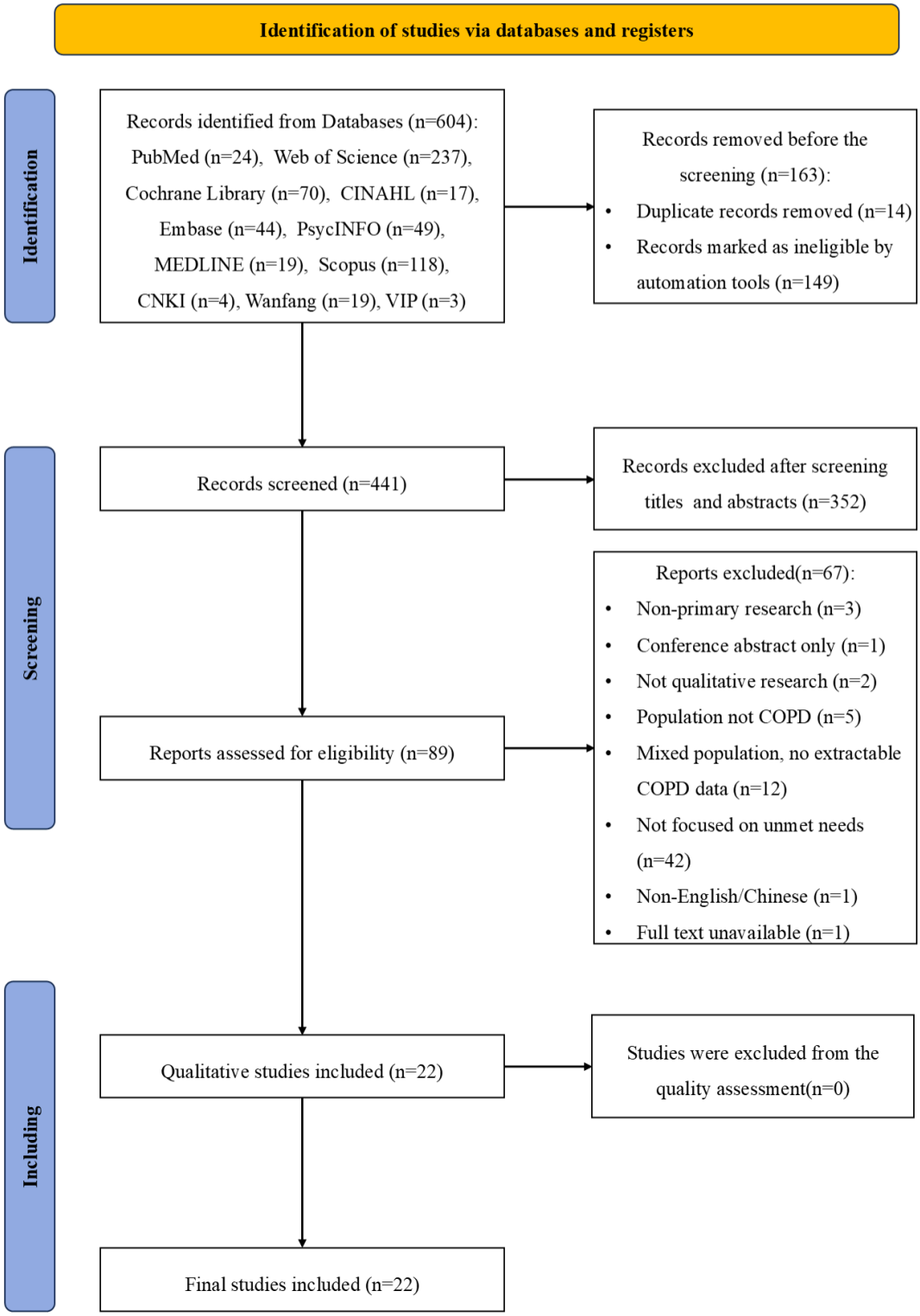


Figure 1

Flowchart illustrating the screening and selection of literature

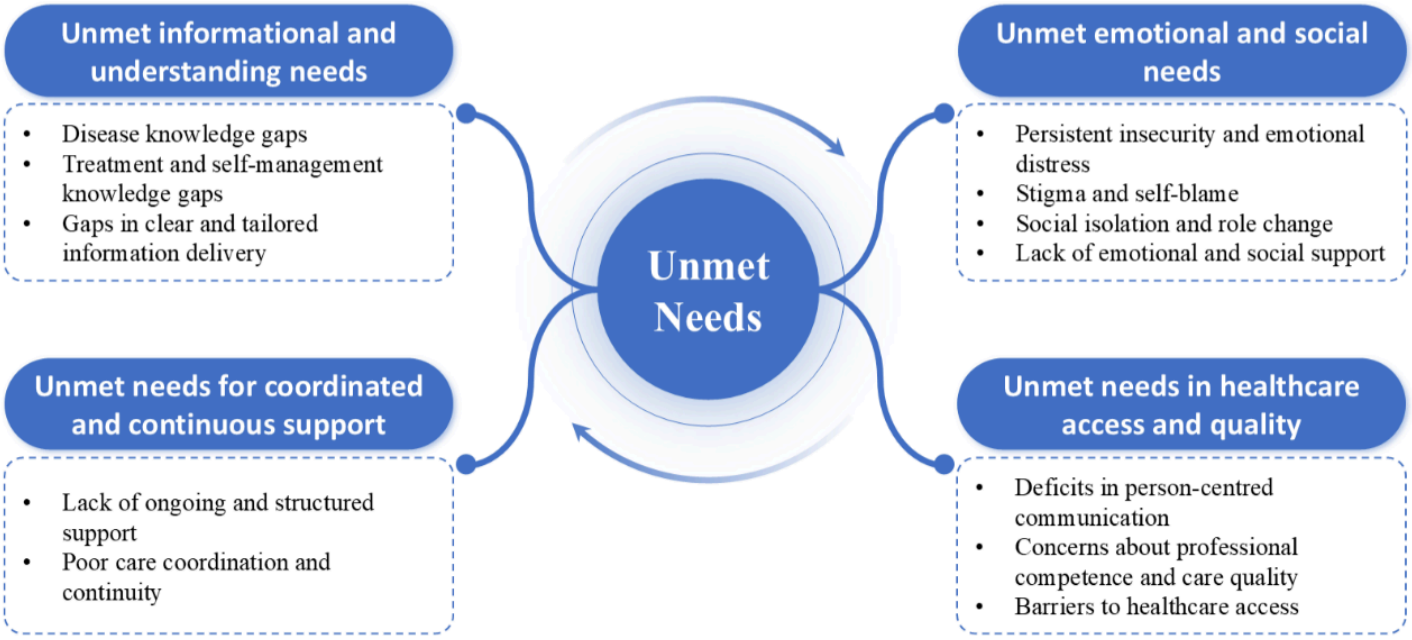


Figure 2

Themes of Unmet Needs

Supplementary Files

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- Table1Inclusionandexclusioncriteriaofthestudyselection.docx
- Table2Descriptivefindingsofthestudysamples.docx
- Table3Resultsofqualityassessment.docx
- SupplementaryTable1SearchStrategy.docx
- SupplementaryTable2ThemessubthemesandCorrespondingCitationsfromPatientPerspectives.docx
- SupplementaryTable3SummaryoffindingsandCERQualassessments.docx