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A multi-perspective interpretative phenomenological analysis of patient and bed partner experiences with CPAP therapy adaptation in obstructive sleep apnoea

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This study aimed to explore the lived experiences of patients with Obstructive Sleep Apnea (OSA) and their bed partners as they adapted to Continuous Positive Airway Pressure (CPAP), focusing on the psychological, relational, and experiential processes influencing adherence over time. Semi-structured interviews were conducted with 12 OSA patients and their bed partners, purposefully sampled across three adaptation phases: before starting CPAP, within the first year of use, and after more than one year. Patients also completed the Epworth Sleepiness Scale(ESS) to provide a standardized measure of daytime sleepiness, complementing the qualitative findings. Semi-structured interviews were analyzed according to a Multi-Perspective Interpretative Phenomenological Analysis (MP-IPA) approach, which allowed for the identification of both individual and dyadic meaning-making processes. Three superordinate themes emerged: Making Sense of the Illness, Living the Illness Together, and From CPAP Resistance to Acceptance. Findings illustrate the evolving nature of illness representations, the central but ambivalent role of the partner in facilitating care, and the relational dynamics shaping CPAP engagement. While patients gradually integrated CPAP into their self-management, partners transitioned from active promoters to quieter sources of emotional and practical support. Dyadic tensions, divergent illness perceptions, and shifting motivations influenced the trajectory of adaptation. Results from the ESS indicated that patients with long-term CPAP use reported normalized sleepiness, whereas those in earlier stages experienced clinically significant daytime drowsiness. CPAP adaptation is thus a dynamic, relational process influenced by how both patients and partners conceptualize the illness and navigate the challenges of therapy. Partner involvement plays a key role but must balance support with respect for patient autonomy. Interventions aimed at enhancing adherence should consider the couple as a unit, integrating psychoeducational and relational components. Future research should expand on these findings using larger, more diverse samples and evaluate the impact of tailored interventions and telemedicine in long-term CPAP management.

Keywords OSA, CPAP, Bed partner, Illness management, Clinical psychology

Obstructive Sleep Apnea (OSA) is the most common respiratory sleep disorder, affecting up to 38% of the global population[1]. It is characterized by partial or complete obstruction of the upper airway during sleep, leading to intermittent reductions in blood oxygen levels, recurrent micro-arousals, and non-restorative sleep. These nocturnal alterations result in a range of daytime sequelae, including excessive sleepiness, mood disturbances, reduced quality of life, and cognitive deficits[2,3]. Frequently unnoticed by patients themselves[4], OSA also has

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major implications for physical health due to its association with cardiovascular and metabolic diseases[5]. Therefore, timely diagnosis and referral to treatment are essential. The severity of OSA—classified according to the frequency of respiratory events and clinical symptoms such as increased daytime drowsiness, snoring, and observed apneas—often determines the treatment modality.

Currently, Continuous Positive Airway Pressure (CPAP) therapy is the gold standard treatment for OSA, as it provides continuous airflow to keep the airways open during sleep[6]. CPAP improves sleep quality, reduces daytime symptoms, and enhances overall quality of life[7]. Moreover, evidence shows that its benefits extend to couple relationships, reducing stress and improving relational well-being[8]. However, despite its proven efficacy, CPAP adherence remains suboptimal, with nearly half of patients not maintaining long-term use[9]. Difficulties are particularly evident in the initial phases of adaptation, when patients may discontinue use due to the device's invasiveness, feelings of claustrophobia, or embarrassment about wearing it in front of their partner[10].

The introduction of CPAP can also be stressful for bed partners, especially if they are unprepared to understand its implications. In this context, although still limited, research highlights the importance of involving the bed partner[11]—typically a spouse or another individual who shares the sleeping environment with the OSA patient—as a key factor in promoting adherence[12]. Partners can play a dual role: supporting the patient in managing therapy and coping with OSA but also influencing adherence through their own perceptions of the illness and the treatment. Previous studies have shown that partner involvement enhances relationship quality and sleep[13], reduces stress, and facilitates adaptation to treatment challenges[14]. Partner support is therefore central not only to improving CPAP adherence, but also to fostering patients' psychological well-being and effective sleep co-regulation within the couple.

To interpret these dynamics, the Common-Sense Model of Self-Regulation (CSM-SR)[15] provides a relevant theoretical framework. The model posits that individuals' illness perceptions strongly shape coping responses and health behaviors. Divergent illness representations between patients and partners may hinder therapy adherence and the adaptation process[16]. Although originally developed to explain patients' illness behaviors, the model's extension to the partner's perspective is highly valuable, offering insights into potential sources of misunderstanding or relational strain. Understanding both perspectives can therefore help clinicians design more sensitive and effective interventions aimed at improving CPAP adherence, optimizing sleep quality, and supporting OSA management at the dyadic level.

Objective

This study aims to explore how patients diagnosed with OSA and their bed partners experience and make sense of the process of adapting to and adhering to CPAP therapy. Specifically, it seeks to identify the barriers and motivators influencing adherence, explore the coping strategies adopted, and analyze the interpersonal dynamics that shape this process. Semi-structured interviews were analyzed according to a Multi-Perspective Interpretative Phenomenological Analysis (MP-IPA) approach, complemented by the Epworth Sleepiness Scale (ESS) to contextualize subjective accounts with a standardized measure of daytime sleepiness. By integrating psychological, relational, and experiential perspectives, the study intends to provide deeper insights into the adaptation trajectory and to inform the development of more sensitive, tailored interventions that support couples in managing OSA together.

Methods

Ethical considerations

The study, approved by the Ethics Committee of IRCCS Fondazione Don Carlo Gnocchi in Milan, Italy, on April 26, 2023 (ID: 04_26/04/2023), was conducted in accordance with the Declaration of Helsinki and relevant guidelines. Informed consent was obtained from all participants. Ethical safeguards included ensuring anonymity through coded data, voluntary participation, and the right to withdraw at any time. This qualitative study is part of the registered project "Psychological Aspects in Modifying Apnea/Hypopnea Indices (AHI) and Nadir of Saturation in Obstructive Sleep Apnea Syndrome (OSA)" (ClinicalTrials.gov: NCT06292325).

Study design

To ensure transparency and accuracy in the analysis and presentation of data, the Standards for Reporting Qualitative Research (SRQR) were followed (see Supplementary Material 1)[17].

The study adhered to the principles of Interpretative Phenomenological Analysis (IPA), a qualitative approach focused on the in-depth exploration of individuals' lived experiences and personal perspectives[18]. IPA is widely utilized in health psychology[19] to understand patients' experiences with illness[20,21] and has also been applied to explore caregivers' perspectives[22,23] and multi-perspective studies incorporating both patients' and caregivers' viewpoints[24,25].

This study employed a multi-perspective IPA (MP-IPA) design, involving interviews with both patients and bed partners, based on Larkin et al.'s "Directly Related Groups" approach[26], which is essential for capturing differing viewpoints among individuals at various stages of the same condition immersed in a shared experience[26]. In addition, the Epworth Sleepiness Scale (ESS)[27] was administered to patients solely for descriptive purposes, to provide contextual information on daytime sleepiness, without any integration into the qualitative analysis.

Participants

Sampling and method of recruitment

Participants were recruited from the Sleep Centre Clinic at IRCCS Fondazione Don Gnocchi, Milan, Italy, between June 2023 and May 2024, during appointments with the pulmonologist (EB), with recruitment led by a psychologist (VP). The purposive sampling was characterized by 3–4 participants per subgroup[26].

The subgroups included:

(1) OSA patients and bed partners before starting CPAP therapy (T0),
(2) OSA patients and bed partners within the first year of CPAP use (T1),
(3) OSA patients and bed partners beyond one year of CPAP use (T2).

Inclusion criteria
Patients

- Adult participants diagnosed with mild (AHI 5–15), moderate (AHI 15–30), or severe (AHI >30) OSA by a pulmonologist at the recruitment center, living with a stable bed partner[28];
- Patients awaiting CPAP initiation, currently using CPAP (adherent or non-adherent) within the first year, or long-term users (>1 year);
- Provided informed consent to participate;
- Proficient in Italian.

Bed Partners

- Bed partners in a stable relationship with an OSA patient requiring CPAP therapy or already adapted to it;
- Provided informed consent to participate;
- Proficient in Italian.

Exclusion criteria
Patients

- Lack of informed consent;
- Not proficient in Italian;
- No OSA diagnosis or CPAP not indicated/ongoing;
- Absence of a stable bed partner;
- Presence of major psychiatric or organic comorbidities where OSA is not the primary condition (as per medical records).

Bed Partners

- Lack of informed consent;
- Not proficient in Italian;
- Not in a stable relationship with an OSA patient requiring or undergoing CPAP therapy.

Data collection

Purpose and procedures were explained to participants, who signed the informed consent form, after which VP, a female registered Clinical Psychologist and PhD student in Clinical Psychology, scheduled and conducted private, semi-structured telephone interviews that were audio-recorded, anonymized, transcribed verbatim, and conducted without additional presence. It is important to note that VP had no prior professional relationship with any of the participants before conducting the interviews. In addition to her formal role and credentials, VP had previous training and practical experience in conducting qualitative research interviews, including specific preparation in interpretative phenomenological methods, which supported the rigor and depth of data collection.

Instruments

Socio-demographic and clinical information
Patients provided socio-demographic and clinical information, including sex, age, marital status, years of education, BMI, smoking status, physical activity, comorbidities, baseline AHI, ESS scores, mask type, and CPAP usage duration (hours per night). Average CPAP use per night was reported through subjective self-report, as patients are not monitored remotely beyond the initial adaptation phase due to privacy safeguards. Similarly, bed partners reported socio-demographic and health-related information, including sex, age, years of education, smoking habits, physical activity, and comorbidities.

Epworth sleepiness scale (ESS)
Daytime sleepiness was assessed using the ESS[29], a self-report questionnaire. Each item describes a common situation where the patient might fall asleep, rated on a 4-point Likert scale (0 = "would never doze" to 3 = "high chance of dozing"). A total score above 10 indicates excessive daytime sleepiness.

Semi-structured interviews
VP conducted the semi-structured telephone interviews, with scripts tailored to either patients or bed partners and their stage of CPAP adaptation (pre-adaptation, T0; first year, T1; post-first year, T2), with some questions varied in phrasing or order based on the conversation's flow (See Tables 1 and 2). All interviews, with participants' informed consent, were audio-recorded and transcribed verbatim.

Data analysis

Descriptive analyses were conducted using IBM SPSS v29.0.1. Qualitative data were analyzed following the principles of Interpretative Phenomenological Analysis (IPA)[18], supported by LiGRE software (v.6.5.1, Logiciels Ex-I-tec Inc.) for data management. Consistent with the epistemological foundations of IPA, the analysis was idiographic, inductive, and interpretative, focusing on how participants made sense of their lived experiences of OSA and CPAP therapy. Reflexivity was maintained throughout the process, acknowledging the researchers' interpretative role in co-constructing meaning.

The analytic process followed several iterative phases.

(1) Initial reading and familiarization: Two researchers (VP, LEA) independently read all transcripts and associated field notes line by line to immerse themselves in the participants' narratives, producing exploratory notes that captured descriptive, linguistic, and conceptual observations.
(2) Development of emergent themes: Initial notes were transformed into emergent themes for each participant, preserving idiographic meaning while allowing patterns of experience to surface.
(3) Collaborative interpretation: A third researcher (EV) joined the analytic dialogue to refine and expand interpretations, supporting depth and trustworthiness through triangulation.
(4) Group-level analysis: Following MP-IPA approach, each participant group (patients at T0, T1, T2; bed partners at T0, T1, T2) was analyzed separately to preserve the integrity of each perspective.
(5) Cross-case synthesis: Finally, convergence, divergence, and complementarity were examined across groups, highlighting areas of resonance, tension, or reciprocal meaning. These were then integrated into superordinate themes, which captured both individual and shared perspectives while retaining sensitivity to context and relational dynamics.

The iterative and layered nature of the analytic process is illustrated in Fig. 1.

Validity of the qualitative analysis

Personal reflexivity was essential, with researchers (VP, LEA, EV) regularly reflecting on their biases and discussing them to ensure objective data interpretation. Themes were connected and organized into a comprehensive table, with co-occurrence analyses to deepen the analysis. Saturation was assessed by EV during interviews and by VP and LEA afterward. The IPA process involved iterative data review, code refinement, and theme reorganization, with additional feedback from researchers (EB, PB) to enhance rigor and validity.

To further enhance trustworthiness, member checks were conducted: after transcription, participants were invited to review their interview transcripts to confirm accuracy and completeness.

Results

Participants

Twelve OSA patients were recruited and divided into three groups (4 patients each) corresponding to different stages of CPAP use: before CPAP adaptation (T0), during the first year of adaptation (T1), and beyond one-year post-adaptation (T2). Additionally, twelve-bed partners were recruited, with four partners for each of the three groups - T0, T1, T2. Figure 2 illustrates the sample selection process.

Tables 3 and 4 present a summary of participant characteristics (mean values and SD) for OSA patients and bed partners, respectively, across the three CPAP adaptation phases.

Supplementary Material 2 shows individual scores for patients, while Supplementary Material 3 presents them for bed partners.

AHI, apnea/hypoapnea index; BMI, body mass index; N, number; M, mean; SD, standard deviation; T0, before adaptation; T1, during the first year of adaptation; T2, beyond one year post adaptation.

Superordinate themes

A total of 24 semi-structured interviews (12 with OSA patients and 12 with their bed partners), across three stages of CPAP therapy (T0, T1, T2), were analyzed using IPA. The interpretative process revealed three interconnected superordinate themes that reflect participants' meaning-making processes:

(1) Making Sense of the Illness, drawing on the CSM-SR, explores how patients and partners understand and make sense of OSA. This superordinate theme is structured around five key dimensions (identity, timeline, causes, consequences, and control), which emerged through participants' narratives, shaping their health behaviors and emotional responses.
(2) Living the Illness Together captures the complex ways in which partners contribute to managing OSA and supporting CPAP use. This theme includes reflections on emotional involvement, practical caregiving, co-regulation of sleep, and relational negotiation.
(3) From CPAP Resistance to Acceptance focuses on the ambivalent and evolving experience of adapting to CPAP. Participants discussed both perceived benefits and challenges—including physical discomfort, embarrassment, emotional resistance, and the influence of partner presence. Strategies for managing discomfort and advice for others also emerged, revealing the dynamic and situated nature of adaptation.

Table 5 presents super-ordinate themes, subthemes, weight and frequencies divided by patients and bed partners and by adaptation phase.

Making sense of the illness

The first superordinate theme, *Making Sense of the Illness*, explores how individuals conceptualize and emotionally respond to OSA, drawing on the five core components of the Common-Sense Model of Illness Representation: identity, timeline, causes, consequences, and control.

Across the three phases of CPAP adaptation (T0, T1, T2), patients and bed partners shared convergent and divergent views about the nature of the illness, its seriousness, and the extent to which it could be managed.

At T0, patients often struggled to conceptualize their condition clearly, frequently using metaphors or expressing confusion. One patient described the diagnosis as *"una cosa che non pensavo mi riguardasse, tipo il diabete, che hanno gli altri" ("Something I never thought would concern me — like diabetes, that other people get")*, illustrating a sense of detachment and misperception. Partners, however, were typically more attuned to the manifestations of OSA, particularly the night-time symptoms: *"sentivo che smetteva di respirare… era inquietante" ("I could hear him stop breathing… it was unsettling")* (BP_T0_1). This discrepancy reflected a shared illness experience that was not always mutually acknowledged, with partners often playing the role of first detectors of the disorder.

By T1, as patients began using CPAP, there was a shift in illness identity. Many patients began to acknowledge the seriousness of OSA, even if still inconsistently: *"ho capito che era importante usare la macchina, però ogni tanto mi sembra di stare bene anche senza" ("I understand that using the machine is important, but sometimes I feel like I'm fine even without it")* (PT_T1_3). Partners' understanding of the condition also evolved, becoming more nuanced and grounded in daily observations: *"ora se anche si dimentica la maschera, non succede niente… forse è guarito" ("Now even if he forgets the mask, nothing happens… maybe he's healed")* (BP_T2_4). This quote reflects a common misconception at this stage, in which symptomatic improvement was at times interpreted as resolution of the illness rather than a result of effective management through CPAP.

At T2, a clearer and more stable representation of the illness emerged in most patients, often integrating both its chronic nature and the role of CPAP in maintaining health: *"ormai ho capito che senza la macchina non dormo, ma con la macchina mi sento normale" ("By now I've realized that without the machine I can't sleep, but with it, I feel normal")* (PT_T2_1). Interestingly, while patients tended to accept the necessity of treatment over time, partners sometimes maintained an ambivalent relationship with the condition. One partner shared: *"non mi sono mai accorto di niente… lei diceva che stava male, ma io dormivo come un sasso" ("I never noticed anything… she kept saying she felt bad, but I was out like a light")* (BP_T2_3), highlighting a persistent asymmetry in illness awareness even after long-term treatment.

In terms of perceived causes, early-phase accounts often attributed OSA to lifestyle or stress (e.g., *"forse il peso, o l'ansia" – "maybe the weight or the anxiety"*), whereas by T2, there was greater medicalization in the narratives, with patients and partners referring to anatomical or age-related explanations, often learned through medical consultation or peer experiences.

Control beliefs also shifted over time. At T0, CPAP was viewed with suspicion or fear (*"mi faceva impressione la maschera, sembrava un ospedale"—"The mask freaked me out—it looked like something from a hospital"*, BP_T2_4), while by T2 it was largely reframed as a necessary or even friendly presence (*"la maschera alla fine si è rivelata un'amica"—"in the end, the mask turned out to be a friend"*). However, patients' sense of agency varied: while some felt empowered by the positive effects of CPAP, others still experienced ambivalence, especially when adherence was irregular or perceived as externally motivated.

Overall, this theme reveals the dynamic and evolving nature of illness representations in both patients and partners. The dyadic experience is characterized by asymmetries in awareness and understanding, with partners often acting as early sensors of risk, but sometimes minimizing their own distress. Over time, CPAP becomes a central element around which these representations reorganize, offering not only symptomatic relief but also a shared framework through which the illness can be reinterpreted and normalized.

Living the illness together

The experience of OSA and CPAP adaptation emerges from the earliest stages as a shared journey, in which patient and partner mutually construct meaning and support. During the pre-adaptation phase (T0), the entry into the illness condition is often mediated by the partner, who acts as the first detector of symptoms. Many patients reported having been pushed toward diagnosis by their partner's reports of snoring, apnea episodes, or abrupt awakenings: *"Se non fosse stato per mia moglie che ha insistito, io non avrei fatto niente"* ("*If it hadn't been for my wife insisting, I wouldn't have done anything*") (PT_T0_3). Some partners described their involvement in emotionally intense terms, portraying a progression from concerned observers to active initiators of the diagnostic process: *"All'inizio ho cercato di convincerlo dolcemente, poi sono passata alle litigate" ("At first, I tried to persuade him gently, then I moved on to arguments")* (BP_T0_4).

In the first year of CPAP therapy (T1), motivations to seek care become more complex. Partners' disrupted sleep or fear of health consequences often serve as strong triggers to seek medical help: *"Non dormivo più. Ho detto: o lo fa o io me ne vado in un'altra stanza" ("I couldn't sleep anymore. I said: either he does it, or I'm moving to another room")* (BP_T1_1). Some patients admitted that they initially accepted CPAP just to "reassure" their partner, although eventually acknowledging its benefits: *"All'inizio era solo per farla stare tranquilla… poi ho visto che funzionava" ("At first, it was just to keep her calm… then I saw it actually worked")* (PT_T1_2).

After over a year of CPAP use (T2), the couple's relationship appears to have evolved through this shared journey. In the most positive cases, partners retain a central role as "health guardians," sometimes adopting directive or persuasive attitudes: *"Mia moglie è peggio di un maresciallo… non avevo scelta" ("My wife is worse than a drill sergeant… I didn't have a choice")* (PT_T2_1). The couple's dynamic often shifts toward greater mutual awareness, transforming the initial struggle into a negotiated balance in which support becomes more silent yet still active.

Across all three phases, concern for the partner's health emerges as a key motivating factor—both in initiating the diagnostic process and in promoting adherence to treatment. In the narratives of partners, anxiety about the patient's vulnerability is especially prominent, as one partner put it: *"Non riesco a dormire serena se so che lui respira a fatica… mi fa paura pensare che possa avere un infarto nel sonno" ("I can't sleep peacefully knowing he's struggling to breathe… it scares me to think he could have a heart attack in his sleep")* (BP_T0_2). This concern persists over time, although it becomes more pragmatic: *"Ora che ha la CPAP almeno so che fa quello che deve fare" ("Now that he has the CPAP, at least I know he's doing what he's supposed to")* (BP_T2_3).

Another key dimension is the partner's role as a source of emotional and practical support. Across all stages, efforts to support the patient are described—even amidst relational strain or frustration: *"Abbiamo passato mesi a litigare… ma io non ho mollato" ("We spent months arguing… but I didn't give up")* (BP_T0_4). Over time, support becomes more attuned and integrated with treatment strategies: *"Mi aiutava a regolare la mascherina, mi spronava a tenerla"* ("*She helped me adjust the mask and encouraged me to keep it on*") (PT_T1_3). Several patients recognized that their ability to overcome initial resistance was largely due to their partner's sustained involvement: *"È grazie a lei se oggi riesco a dormire di notte" ("It's thanks to her that I can sleep at night now")* (PT_T1_3).

In some cases, the partner even served as a model of reflected self-efficacy, particularly if they had previous experience with CPAP: *"Vedevo che per lui funzionava e mi son detto: perché no?" ("I saw it was working for him, and I thought: why not give it a try?")* (PT_T1_4). In others, the partner presented CPAP as the only viable option to preserve the relationship or household functioning: *"Non si poteva più andare avanti… o si curava o avremmo dovuto dormire separati per sempre" ("We couldn't go on like that… either he got treated or we'd have to sleep in separate beds for good")* (BP_T2_1).

Partner support, however, is not without ambivalence. Some patients perceived their partner's involvement as pressuring or even coercive, at times experienced as intrusive: *"Mi ricattava dicendo che una volta mi aveva già salvato la vita… e non lo avrebbe fatto una seconda" ("She guilt-tripped me, saying she'd already saved my life once… and she wouldn't do it again")* (PT_T2_1). This highlights how support is interpreted differently within the dyad: while partners view it as a caring act, patients may experience it as an additional stressor.

Overall, the superordinate theme *Living the Illness Together* captures a relational trajectory evolving from asymmetry (partner as symptom detector and treatment promoter) toward a more balanced co-management. However, even in the long-term adaptation phase, substantial differences persist between patient and partner experiences—particularly in emotional investment, perception of change, and sense of self-efficacy.

From CPAP resistance to acceptance

The transition from initial resistance to the acceptance of CPAP therapy emerged as a dynamic, emotionally nuanced, and deeply relational process. At T0, the anticipation of CPAP use was often accompanied by discomfort, fear, or skepticism, reflecting limited awareness about the device and its implications. Participants expressed concerns regarding aesthetics, intimacy, noise, and side effects—frequently shaped by a lack of information and by negative narratives from acquaintances. As one patient shared, *"Se penso a dormire con quella cosa addosso, mi viene male… mi sentirei come un malato terminale" ("Just thinking about sleeping with that thing on makes me feel sick… I'd feel like a terminally ill patient"*) (PT_T0_3), while a partner echoed, *"Non ce lo vedo proprio con quella maschera lì… non è una cosa che mi fa sentire tranquilla"* (*"I just can't picture him with that mask on… it doesn't make me feel at ease"*) (BP_T0_2).

Over the course of treatment (T1), experiences became more grounded in daily realities. Patients began confronting concrete barriers, such as physical discomfort and technological adaptation, and developed initial strategies to cope—some focusing on technical adjustments, others relying on psychological reframing. Acceptance was often partial, accompanied by ambivalence or resignation. One patient shared: *"Mi ci sto abituando, ma certe notti la maschera mi dà fastidio e la tolgo"* (*"I'm getting used to it, but some nights the mask bothers me, so I take it off"*) (PT_T1_2), while a partner admitted: *"All'inizio era difficile dormire con il rumore… poi mi sono detta che è per la sua salute e ho cercato di non pensarci" ("At first it was hard to sleep with the noise… then I told myself it was for his health, and I tried not to think about it"*) (BP_T1_3).

By T2, most patients and partners described a more stable and confident engagement with CPAP. Acceptance was not necessarily enthusiastic but had become integrated into the couple's nightly routine and shared life narrative. The device was reframed as a companion to health rather than a symbol of illness. As one long-term user remarked, *"Adesso se non la metto mi manca… è diventata una specie di coperta di Linus"* (*"Now if I don't wear it, I miss it… it's kind of become my security blanket"*) (PT_T2_1), and a partner noted, *"All'inizio mi sembrava di stare in ospedale… ora invece è un amico, come dico io"* (*"At first it felt like being in a hospital… now I call it a friend, that's how I see it"*) (BP_T2_4).

A recurring theme was the shift in perceived impact on intimacy. While initial fears of reduced attractiveness or emotional distance were common, some couples at T2 reported that improvements in the patient's mood, energy, and general well-being enhanced relational quality, even if practical changes (e.g., sleeping separately) remained. As one bed partner described, *"Non dormiamo più nello stesso letto ma stiamo meglio… non litighiamo più per ogni cosa"* (*"We don't sleep in the same bed anymore, but we're better off… we don't argue about everything like we used to"*) (BP_T2_3). However, others still struggled with unresolved tensions, especially when initial expectations of quick improvement were unmet.

Coping strategies evolved along the way. Patients described a learning curve characterized by trial and error, emotional regulation, and reliance on healthcare providers. Seeking peer support, customizing the device, and reframing the experience as self-care were common strategies. A partner shared, *"Abbiamo parlato con il cognato che la usa… e ci siamo tranquillizzati. Non era poi così spaventosa"* (*"We talked to my brother-in-law who uses it… and we felt reassured. It didn't seem so scary after all"*) (BP_T2_3).

Notably, acceptance was relational. The presence of a supportive partner—both emotionally and practically—was frequently mentioned as key to sustaining use. The partner's role, however, was not static. While at T0 and T1 it often involved encouragement and reassurance, by T2, many partners described a step back, allowing patients greater autonomy while remaining emotionally available. This was mirrored by patients who acknowledged the shared effort of adaptation: *"All'inizio era dura, ma ora è parte della nostra routine… anche lei ci ha fatto l'abitudine"* (*"At first it was tough, but now it's just part of our routine… she's gotten used to it too"*) (PT_T2_4).

Finally, participants' expectations for the future became more optimistic yet realistic. Some expressed hope for improved device comfort or increased public awareness, while others simply wished for continuity. One partner summarized this sentiment: *"Spero solo che continui così… dormiamo, stiamo bene, litighiamo meno. Va bene così"* (*"I just hope it stays like this… we sleep, we're doing well, we argue less. This is good enough"*) (BP_T2_3).

Table 6 summarizes the main similarities and differences in the experiences of patients and bed partners across the three phases of CPAP adaptation.

Discussion

This study aimed to explore the lived experiences of patients diagnosed with OSA and their bed partners as they adapted to CPAP therapy over time. Using a multi-perspective interpretative phenomenological approach, we identified three interconnected themes that illustrate the evolving individual and relational processes underpinning CPAP adaptation: *Making Sense of the Illness*, *Living the Illness Together*, and From *CPAP Resistance to Acceptance*.

Consistent with participants' narratives, descriptive ESS scores confirmed a progressive reduction in daytime sleepiness across adaptation phases (T0: M = 11 ± 3.92; T1: M = 4.75 ± 3.95; T2: M = 3.5 ± 1.73). These findings align with reports of improved energy and functioning, supporting the experiential accounts of patients and partners. However, the ESS was used solely as a descriptive complement and not integrated into the qualitative analytic process.

Dynamic illness representations and shifting agency

The findings confirm that illness representations are not static but evolve across the adaptation process, shaped by direct experience, relational feedback, and medical information. In line with the CSM-SR, patients initially demonstrated fragmented or externalized conceptualizations of OSA, often relying on metaphor or denial. This resistance to fully acknowledging OSA as a pathological condition echoes the concept of "illness identity" in the CSM-SR framework, and was observed among patients and, to a lesser extent, their partners.

Consistent with prior research, interviews revealed frequent instances of misperception, in which patients tended to normalize symptoms such as fatigue or poor concentration by attributing them to stress, smoking, or lifestyle, rather than to OSA. These discrepancies between subjective and objective assessments of sleep highlight the risk of underestimating OSA's cardiovascular and systemic consequences[30]. Such asymmetries in awareness—even at later stages—underscore the importance of addressing both members of the dyad when fostering adaptive health beliefs and treatment adherence.

CPAP as a dyadic, relational process

A key contribution of this study lies in its in-depth portrayal of the relational nature of CPAP adaptation. From the earliest stages, the partner often acted as a catalyst for diagnosis and treatment, a finding that aligns with previous research on spousal influence in chronic illness management[12]. In several cases, the partner was the first to recognize apneic episodes or disrupted breathing, effectively acting as the "symptom detector" and prompting medical consultation[31].

As the process unfolds, the partner's role shifted from active instigator to a more silent but sustaining presence, mirroring the transition from external to internal motivation observed in many patients. However, this relational support was not without ambivalence. While most partners described their involvement as care-driven, some patients interpreted it as controlling or even coercive. These tensions reflect the complexity of interdependence in close relationships managing chronic health conditions and suggest that support needs to be perceived as autonomy-enhancing to foster adherence and relational well-being.

Awareness of CPAP's benefits—such as reduced irritability, improved concentration, and better cardiovascular and psychological functioning[32]—was often described as a turning point for adherence. This process suggests that promoting accurate illness perceptions in both patients and partners can reinforce motivation and treatment engagement[33].

Acceptance is gradual, embodied, and context-dependent

The trajectory from CPAP resistance to acceptance was neither linear nor uniform. Initial fears were often aesthetic, symbolic, or relational (e.g., appearing sick, losing intimacy, disrupting partner sleep), whereas later phases were marked by practical challenges (e.g., mask fit, noise, heat) and emotional recalibration. Importantly, acceptance did not always mean enthusiasm; rather, it reflected a reframing of the device from invasive to habitual, and eventually, health-sustaining. These findings are consistent with models of behavior change that emphasize experiential learning, emotional regulation, and the progressive internalization of external motivators.

Clinical implications

Several implications emerge for clinical practice. First, CPAP education should be tailored to both patients and their partners, addressing not only the technical aspects but also the emotional and relational dimensions of adaptation. Second, interventions should move beyond individualistic adherence models and consider dyadic dynamics—particularly when distress, conflict, or asymmetrical representations are present. Third, involving partners early and continuously may help normalize the treatment, buffer resistance, and improve sleep co-regulation[34]. However, clinicians should also be aware of potential tensions and promote supportive behaviors that respect patient autonomy.

Moreover, our findings highlight the importance of continuous support during the early phases of CPAP adaptation, when discontinuation is most likely[35]. Telemedicine can provide valuable ongoing monitoring and reassurance[36], while brief psychoeducational interventions[37] or cognitive-behavioral therapy may address misconceptions, enhance motivation, and facilitate acceptance of the device[38]. Importantly, these interventions should involve partners, who themselves may experience poor sleep and relational strain, and thus require support to effectively assist the patient.

Strengths and limitations

To our knowledge, this is one of the first studies to investigate CPAP adaptation using a dyadic IPA approach. By examining both patient and partner perspectives over time, the study highlights the relational and evolving nature of illness representations and treatment adherence. A major strength lies in its multi-perspective, progressive design, which enabled a rich, idiographic exploration of individual and shared experiences. The use of IPA allowed for a nuanced interpretation of participants' meaning-making processes and interpersonal dynamics. Nonetheless, some limitations should be acknowledged. Although the sample size was appropriate for in-depth qualitative inquiry, it may not capture the full heterogeneity of experiences across different cultural, gender, or socioeconomic groups. Furthermore, while telephone interviews ensured participant privacy, they may have limited access to non-verbal cues that could have enriched the understanding of embodied aspects of adaptation. A conclusive limitation may stem from the fact that the same individuals were not interviewed over time; instead, different couples at various stages of adaptation were selected to represent distinct phases of the adjustment process. Future research should address these dimensions and consider broader, more diverse samples to enhance transferability.

Conclusion

The findings highlight the critical role of a multidisciplinary approach in enhancing OSA management and CPAP adherence. By examining the lived experiences of both patients and their bed partners, this study sets a foundation for deeper exploration into the relational and psychological factors that influence CPAP use. Importantly, the results of this analysis also suggest concrete directions for clinical practice. In particular, they highlight the need for interventions that actively involve both members of the couple, address asymmetries in illness representations, and support the dyadic negotiation of CPAP adaptation.

From a practical standpoint, these findings may inform the design of psychoeducational and relationally oriented programs, aimed at fostering partner support while preserving patients' autonomy and motivation. Moreover, the emphasis on partners' role as first symptom detectors and treatment motivators underscores the value of involving them early in the diagnostic and therapeutic pathway.

Future research should incorporate larger and more diverse samples and conduct long-term follow-ups to evaluate the sustained impact of CPAP adaptation. While controlled studies remain necessary, the insights provided here already offer a valuable framework to guide the development of tailored interventions for patients and their partners. In conclusion, integrating educational components, psychological support, and the active involvement of bed partners has the potential to substantially improve adherence to therapy and overall quality of life for individuals living with OSA.

Data availability

Quantitative data are provided in Supplementary Materials. Data that support the findings are available upon request from the corresponding author. Transcripts of interviews are not publicly available due to privacy restrictions.

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Author contributions

V.P.: Conceptualization, Methodology, Data analysis, Writing—Original draft preparation. E.B.: Clinical data provision, Supervision (clinical aspects). L.E.A.: Data analysis, Writing—results section. P.B.: Supervision (clinical aspects). E.V.: Supervision, Writing—Review & Editing.

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Declarations

Competing interests

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Fig. 1. Iterative process of MP-IPA analysis. Notes. PT= patients; BP= bed partner; PT_T0= patients before CPAP adaptation; PT_T1= patients during the first year of adaptation; PT_T2= patients after the first year of adaptation; BP_T0= bed partner of patients before adaptation; BP_T1= bed partner of patients during the first year of adaptation; BP_T2= bed partner of patients after the first year of adaptation.

Fig. 2. Sample selection process.

Main questions	Prompts
How would you describe your condition to someone unfamiliar with it?	How do you feel during the day after a night of sleep disrupted by apneas? How much do the apneas affect the quality of your sleep and the quality of your life?
What role has your partner played in your condition?	Did your partner help you in any way to contact the pulmonologist? What kind of support has he/she provided in managing the issue?
What are your expectations about the CPAP use?	What benefits do you expect? What concerns do you have about using CPAP?
What kind of experience have you had with the CPAP?	What benefits have you noticed? What difficulties have you encountered? What strategies have you adopted to improve your experience?
What are your expectations for the future regarding your condition?	What problems would you like to solve? What concerns do you have? What could help improve your experience?

Table 1. Semi-structured interviews for OSA patients.

Main questions	Prompts
What does it mean to live with a partner who suffers from sleep apnea?	How does your partner's sleep apnea affect your sleep? How much do your partner's apneas affect the quality of your life? How does sleep apnea impact the physical and psychological well-being of your partner?
What role have you played in your partner's condition?	What kind of support have you provided in managing your partner's problem?
What are your expectations about the CPAP use?	What benefits do you expect? What concerns do you have about using CPAP?
What kind of experience have you had with the CPAP?	What benefits have you noticed? What difficulties have you encountered? What strategies have you adopted to improve your experience?
What are your expectations for the future regarding your condition?	What problems would you like to solve? What concerns do you have? What could help improve your experience?

Table 2. Semi-structured interview for OSA bed partners.

Setting	T0 (*N* = 4)	T1 (*N* = 4)
Sex (males)	3	2
Age (M ± SD)	61.25 ± 10.37	54.75 ± 15.97
BMI (M ± SD)	28.08 ± 2.16	32.07 ± 3.81
Marital status (N married couples)	2	4
Marital status (N not married couples)	2	0
Smoking habits (N smokers)	1	3

Setting	T0 (*N* = 4)	T1 (*N* = 4)
Smoking habits (N non-smokers)	2	1
Smoking habits (N ex-smoker)	2	0
Physical activity (N never)	1	2
Physical activity (N rarely)	3	1
Physical activity (N frequent)	2	1
Years of education (M ± SD)	14.25 ± 2.5	13 ± 4.08
AHI baseline (M ± SD)	27.52 ± 24.01	59 ± 18.84
ESS (M ± SD)	11 ± 3.92	4.75 ± 3.95
CPAP hours/night (M ± SD)		4.5 ± 1.47
Type of mask (N oronasal)		3
Type of mask (N nasal)		1
Cardiac comorbidities (N)	4	4
Respiratory comorbidities (N)	0	1
Other comorbidities (N)	0	1 (Hypotiroi

Table 3. Main characteristics of the OSA patients' sample, categorized according to the three phases of CPAP adaptation. A
T0, before adaptation; T1, during the first year of adaptation; T2, beyond one year post adaptation.

Setting	T0 (*N* = 4)	T1 (*N* = 4)
Sex (males)	1	2
Age (M ± SD)	55.75 ± 4.99	52 ± 8.76
Smoking habits (N smokers)	0	1
Smoking habits (N non-smokers)	2	3
Smoking habits (N ex smoker)	2	0
Physical activity (N never)	1	0
Physical activity (N rarely)	2	2
Physical activity (N frequent)	1	2
Years of education (M ± SD)	15.5 ± 2.89	10.5 ± 2.89
Cardiac comorbidities (N)	0	0
Respiratory comorbidities (N)	0	0
Other comorbidities (N)	2 (Diabetes)	0

Table 4. Main characteristics of the bed partners' sample, categorized according to the three phases of CPAP adaptation.

Super-ordinate themes	Themes	Sub-themes
Making Sense of the Illness	Identity	Illness metap
		Self-represen
		Perceived thr
		Misperceptio
		Shared illnes
	Time-Line	Lifelong sym
		Permanent s
	Consequences	Health probl
		Cognitive pr
		Work-related
		Family probl
		Couple probl
		Social proble
		Psychologica
	Causes	Ageing
		Sedentary lif
		Smoking hab
		Alcohol cons
		Overweight
		Pre-existing
		Stress
	Control	Hope in CPA
		Out of contr
Living the Illness Together	First-Symptoms Detector	Reporting ni
		Reporting da
	Motivator to Schedule the First Medical Visit	Inability to sl
		Concern for
	Motivator to Undergo CPAP Therapy	Reassuring al
		Partner as C
		Concern for
	Source of Support	Overcoming
		Standing by