

Family care in chronic obstructive pulmonary disease: What happens when the carer is a man?

Runing head: Family care in COPD

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Abstract

Chronic Obstructive Pulmonary Disease (COPD) is a major cause of disability, morbidity and mortality in old age, representing a significant burden for family carers. However, knowledge regarding the specific issues faced by men in the COPD caregiving role is non-existent. This study explored the experience of husbands and sons providing care to a family member with moderate-to-severe COPD. A cross-sectional qualitative study using in-depth, semi-structured individual interviews was conducted with twelve men carers: seven husbands (70.9 ± 8.8 years old) and five sons (43.4 ± 10.5 years old). The interviews were analysed for recurrent themes using thematic analysis. Main findings suggest that men are committed and dedicated carers; however differences between husbands and sons related to “meaning”, “challenges and constraints”, “fears and concerns about the future”, “needs” and “positive aspects” have emerged. These differences reflect relationship and generational differences and are of relevance when planning adequate community support interventions.

Keywords: men carers, qualitative research, COPD, family caregiving

Word count: 4926

INTRODUCTION

Chronic Obstructive Pulmonary Disease (COPD) is a major cause of morbidity, mortality and health-care costs worldwide (1, 2). At early stages, COPD is characterised by cough, sputum production and breathlessness associated with persistent airflow obstruction. As the disease progresses, exacerbations and comorbidities severely affect patients' quality of life (3). The gradual disability often leads to dependence on family, who become central to assist with activities of daily living, manage complex treatment technologies, monitor breathlessness, provide emotional support, participate in decision-making and facilitate communication with health care providers (4, 5). Caring for a patient with moderate-to-severe COPD can be a burdensome experience (2, 6), associated with poor quality of life (7), poor self-rated mental health (8), and high levels anxiety/depression symptomatology (9). Sleep problems, restrictions in social and professional life, and financial strain have also been reported by COPD carers (4, 9). While these studies provide valuable knowledge on the COPD caregiving experience, they have been conducted with samples composed almost entirely by women, keeping the men's reactions overlooked. However, the caregiving role may be experienced differently in men and women. To the best of our knowledge, there are no studies focusing on men's caregiving experience in COPD.

Men's caregiving research

With the demographic changes occurring in most of Western societies, an increasing number of men have been involved in caregiving roles (10, 11). Nevertheless, as caring for an ill family member has traditionally been described as a women's activity, a significant body of the caregiving literature has focused on women's experience.

Research have supported gender differences in caregiving, with women more likely to engage in personal care, perform a wider range of tasks (12), and reporting higher levels of burden and depressive symptoms (13) than men. These suggest that men “weather” the caregiving process better (14). Some would argue that men are more able to keep emotional distance from their caregiving role or to rely more on problem solving coping strategies than women (15), whereas others would suggest that men are motivated by love and women act out of duty (16). Nonetheless, most studies use men as a contrast group to show the additional challenges faced by women, thereby overlooking the unique experience of men as carers and hiding within-groups variation (e.g., husbands vs. sons providing care) (10, 17, 18). Kramer (19), however, has found high rates of depressive symptoms among husbands caring for wives with dementia and high psychological distress among older husband caregivers over time has also been reported (10). Studies comparing men carers with men non-carers found greater symptoms of depression, lower levels of marital satisfaction and poorer quality of life for the former (20-22). The few existing qualitative studies also suggest that men carers experience personal conflict, loss, guilt and loneliness (23-26). Yet, the caregiving roles differ for husbands and sons: while husbands tend to see it as an extension of their marital role, *in sickness and in health*, (23, 24, 27), sons seem to perceive caregiving as a reversal of the parent-child role (28).

A number of researchers have proposed examining men carers as a group in and of themselves (11, 18, 29). Still, these studies are limited in number, focusing mainly on husbands and centred on chronic conditions such as dementia (11, 25, 30) or cancer (31, 32). As different chronic conditions present distinct caregiving demands (33-35), research needs to demarcate each disease’s specificities from the general aspects of caregiving (36). Therefore, this study aimed to

explore the experience of husbands and sons providing care to a family member with moderate-to-severe COPD.

METHOD

Study design

An exploratory qualitative study was conducted with twelve men carers, recruited from two primary health care centers. The study received full approval from the Institutional Ethics Committees. Men carers were included if they were: ≥ 18 years old; husbands or sons of a person with COPD; the primary carer (i.e., the person who provided the largest amount of physical and/or supportive care without receiving any payment); able to understand the purpose of the study and agreed to voluntarily participate. Clinicians from the health care institutions were asked to identify and classify outpatients with moderate-to-severe COPD (3), who were cared by men carers. Eligible outpatients were contacted by telephone by a clinician's assistant, who informed about the study and asked their willingness to be contacted by the researchers. Interested participants received a telephone call from researches, were informed about the study specific objectives and were asked to identify their primary carer. A total of 16 men carers were identified and invited to participate. All agreed to participate and a meeting was scheduled in the primary health care center. Four carers failed the meeting due to health deterioration of the cared-for person, and a final sample of seven husbands and five sons was composed. Written informant consents were obtained prior to any data collection.

Data Collection

Socio-demographic data and information on the caregiving situation were collected through a structured questionnaire. In-depth, semi-structured individual interviews were conducted.

Interview questions were informed by extensive review of research on general family caregiving, COPD caregiving and men's caregiving. Specifically, participants were asked about: the meanings ascribed to the caregiving role ("Why did you become the primary carer of your cared-for person?"; "How do you see your role as a carer?"); the impacts and challenges ("What are the main challenges that the caregiving role brought to your life?"; "Which are your main difficulties in providing care to your loved-one with COPD?"); fears and concerns ("What are your main concerns?"); and positive aspects ("Can you find any reward/positive aspect in your caregiving experience?"). The interviews were conducted by a gerontologist with experience in COPD research and qualitative interviewing, but without personal experience with COPD diagnosis. On average, interviews lasted 50 ± 5 (44-59) minutes. All interviews were digitally audio-recorded with participants' permission for further transcription and analysis.

Data Analysis

The interviews were transcribed verbatim. The transcripts were analysed using thematic analysis(37). Carers' identification was coded and fictitious names were used to preserve anonymity. In the first step of the analysis, one interview transcript was read repeatedly and in depth by the researchers. Interpretative notes were made and the emerging subthemes were grouped together into major themes. After this process, the themes and subthemes were listed and connections were looked for between researchers. No substantial differences were found. In a second step, the other transcripts were read to look for new themes/subthemes and confirmation of the themes/subthemes already encountered.

After independent analysis, the researchers compared and discussed the findings to reach a consensus. Consensus was obtained based on the richness and importance of the theme/subtheme in the transcripts. To assure credibility the *peer debriefing technique* was performed (38). This

technique consisted in a review of the methodology procedures and data by a third researcher independent to the study, who challenged the researchers' assumptions and asked questions about method and interpretations. To ensure the reflexivity, the research team held regular group meetings to reflect and discuss issues related to the study (39).

Participants

A total of twelve men carers have participated: seven husbands with a mean age of 70.9 ± 8.8 years old and five sons with a mean age of 43.4 ± 10.5 years old. Most lived with the cared-for person ($n=10$), were married ($n=10$) and caring for more than four years ($n=8$). The majority of husbands were retired ($n=5$) and sons had a full-time employment ($n=5$). Care receivers had a mean age of 72.1 ± 9.4 years old and were mostly retired ($n=11$) (Table 1). According to the Global Initiative for Chronic Obstructive Lung Disease (GOLD) criteria (3), eight care receivers had moderate and four severe COPD (forced expiratory volume in 1 second $61.3 \pm 15.3\%$ of the predicted), diagnosed for \geq two years (Table 1).

< Insert Table 1 about here >

Both husbands and sons identified the type of care provided. Husbands were more likely to perform household work, emotional support and medical appointments accompaniment when compared with sons (Figure 1). Only one carer, a son, received formal support, particularly from home care services.

< Insert Figure 1 about here >

FINDINGS

Although common themes have emerged, analysis revealed different subthemes regarding the sons or husbands' caregiving experience (Table 2). Participants' perspectives are presented with representative statements.

< Insert Table 2 about here >

Husbands' perspective

Caregiving as an extension of the marital role. The experience of providing care to wives was perceived as part of the husband's role, contributing to a sense of continuity in the marital relationship. All husbands maintained the usual dedication and attention in everyday life: "*I have always given the best support when she needed. Nothing has changed, our relationship is exactly the same*" [August]; "*I don't see much difference. I have adapted to the situation.*" [Albert] However, caring for wives also meant a constant concern. Two husbands expressed the importance of a commitment to wives' care, especially due to the unpredictability nature of COPD exacerbations and hospitalizations: "*I have always paid attention to my wife, but now I pay even more. She tries not to show her frailty... She thinks she has to do everything. But I'm always there and I do whatever it takes*" [Ernest]

To protect and help their wives, husbands felt they should be proactive and adapt to the new demands of COPD: "*When I was employed I couldn't give that support, now [that I can] I had to learn how to do it.*" [Anthony]; "*I became more concerned with her. When she's coughing, she's fragile, and therefore she must eat well. She tries to resist but I take care of her.*" [Ernest]

Providing household tasks. All husbands were actively learning to adjust to COPD demands. Performing new daily tasks that used to be undertaken by their wives, such as planning meals, cooking, cleaning and laundry, was a challenge. "*There are things I can do, but I'm a man. I don't know much about cooking. The soup cannot fail, but the most difficult is to cook*

other things. I have no difficulties with the laundry but I don't know how to iron. But everything ends up being done." [Albert]; "*The housework is the most difficult. I've worked away from home and my wife did everything. Starting to learn is hard for me, I have to cook and I have to ask her how. I really need more help at home.*" [Paul]

The cooperation within the couple facilitates the adjustment to family roles' changes. Husbands' difficulties in performing housework were attenuated by wives' orientations: "*I do the shopping and the daily cooking but with her orientations. Usually she's lying down resting and I ask her how it's done. I learnt things that I have never done in my whole life.*" [August]

Preserving wives' integrity. Three husbands seek to preserve the dignity and self-esteem of their wives. They engage their wives as active participants in care and day-to-day decisions. However, some of them were afraid that wives' self-confidence and self-efficacy could gradually decrease due to the worsening of the symptoms and deterioration of their health condition: "*The concern is always on my mind because she was always a fighter, always worked, she couldn't be stopped. I'm afraid when she starts to lose her strength. She has difficulties doing her tasks and that worries me a lot. I am afraid that she starts feeling bad about it*" [August]

Losing the life partner. All husbands reported the fear of losing their life partner. This fear was mainly related to the uncertainty and unpredictability of COPD symptoms: "*I feel that she has to stop and sit on a chair, to rest a bit, to receive oxygen and then start again, but after an extra activity she needs to sit again. This worries me a lot.*" [August]

Husbands were afraid of their wives having a painful death due to asphyxia. "*Death! I am afraid that my wife will suffocate... we do not have the means to protect from happening, we must immediately go to hospital.*" [Albert]; "*I'm afraid of losing her suddenly.*" [James]

Fears of losing a major source of support were raised when husbands anticipated the loss of their spouses, as they felt emotionally dependent on them. "*I'm afraid that COPD will get worse and I am a person who depends a lot on her. I always say I want to die first. It is my wish because I know she has a lot of strength and courage to face it. I do not have it.*" [Ernest]; "*If one day she's not there for me, I won't have any chance.*" [Anthony]

Practical skills to manage COPD and adequate treatment. All husbands felt they should improve their ability to care. Specifically, they expressed the need to respond appropriately to worsening of symptoms (e.g., recognise when an exacerbation is occurring). Husbands wished to learn how to manage exacerbations, e.g., to help their wives when they were short of breath. "*I have no knowledge. If I'll need to take her to the hospital, I will. But dealing with the specific medication [bronchodilators] is more difficult. She knows what to do, I don't.*" [Ernest]; "*A sudden complication or worsening symptoms, how can I help? I'd really like to know, to be informed. I am interested to learn all about her illness.*" [August]

Given the lack of information and limited access to adequate health services, husbands claimed an appropriate treatment for their wives, which could lead to improvements in their respiratory symptoms and quality of life: "*She needs an adequate clinical management of her disease. She really needs specialised care so that the disease does not get worse.*" [Anthony]; "*She needs someone, a person to help and take care of her. We've been looking everywhere for good specialists.*" [Paul]

Wives' self-confidence and emotional strength. All husbands recognised their wives' self-confidence and strength as positive aspects of caring. Given the difficulties and constraints of being a men carer, wives's support and positive attitude towards the disease strengthened their caregiving role: "*The disease never brings anything good, but if I can point something positive*

about this situation, is seeing how strong she is... [emotional crying] If it was not her courage and inner strength the situation would be much worse. Sometimes she is the one who gives me courage and hope..." [August]; *"She has the same vitality and strength that she had 10 years ago. She never runs out of energy. For a woman with her age and with a respiratory problem, she really does a lot [Laughs]"* [Albert]; "Even with such a hard health condition, she is very strong" [Louis].

Additionally, the presence of a nurturing relationship and emotional commitment was referred as a strength in the care relationship: *"The positive part is her companionship, she's very important to me. She gives me the support I need; she's very strong, stronger than me. She helps me a lot, emotionally. She's very positive in all situations, she's an excellent partner..."* [Ernest]

Sons' perspective

Fulfilling a sense of duty. All sons stated that their sense of duty to care for their ill parent led them to assume the caregiving role. The care receivers' restrictions caused by COPD and the unpredictability nature of the symptoms led sons to care for their parents. A son's commitment to care was intimately related to feelings of filial obligation: *"This was a year of many respiratory problems and I have always made an effort to accompany. I'm his son and this is my duty."* [Simon]; *"He's a bit anxious because of this disease and so I can't leave him when he drives and goes to the farm. I have to take care of him."* [David]

For one participant, the sense of familial obligation was justified by a sense of guilt regarding the past. The reason for feeling guilty was related to the lack of attention with her mother before the onset of the disease. As John said: *"The truth is: for a long time, I wasn't correct as a son. I didn't see the problems, I lived my life so quietly and I didn't worry... When I realised that we had problems, I recognised that maybe something had to change. If I was not the carer, nobody*

could be. I had to take care of my mother [silence] I was forced to be more present and closer."

[John]

Conciliating personal and professional life with caregiving. Three sons reported difficulties in conciliating their role as carers with the personal and professional life. Being a carer and a worker was a significant challenge. Some sons had to give up rewards and opportunities of career development to take care of their parents. Sons reported the lack of support from other family members (e.g., siblings) that could help them in providing care, sharing commitments and responsibilities. They expressed the need to have time to provide care.

"I lost many projects, both at professional and personal levels, due to having to care for my father. Unfortunately, health problems have also financial consequences (...) especially because we have not a third person that I can say: 'I have a family member who will help us!' In fact, my sister does not help me taking care of him!" [Julius]

"I need a job with some flexibility to be able to take care for my mother. Probably the severity of disease increases with age and it will require more of myself and I need flexibility at work"

[John]

Providing personal and intimate care. Four sons described constraints in providing personal and intimate care to their parents, such as bathing, dressing and toileting. Caring for parents with COPD was not only a daily challenge for sons (e.g., balancing work with care), but also an ambivalent situation regarding their role as a man, child and, simultaneously, as a carer. Although three sons had never provided personal care to their parents, they were concerned and anticipated difficulties: *"I had a grandfather who suffered from Alzheimer's disease and in his last six years he lived with us. I had no problems with bathing, shaving or dressing him, but that's because he was my grandfather. But my mom...she's a woman, it will probably be*

awkward. I am starting to convince myself that it won't be so troublesome, I hope, I will be strong enough, but I'm afraid." [John]; "*What concerns me, and I know that it can happen, is the need to help my father* [silence], dressing, take care of his hygiene, but I can't turn back."

[Simon]

One son used strategies to avoid getting involved in personal care but also to protect care receivers' intimacy, such as assigning this task to a female family member (e.g., daughter-in-law) or care receivers' wore a bathing suit to protect privacy: "*My wife and my daughter help me with my father's bathing; he wears a bathing suit. For now, we are doing like this. But if he gets worse I'll need help because I have no courage, he's my father.*" [Julius]

Becoming ill and be unable to provide care. The fears expressed by sons were focused on future dilemmas of care, anticipating the difficulties that have not emerged yet. All sons believed that, with COPD progression, parents would need more attention and care, and they feared not having the resources to support them. Specifically, two participants feared to become ill and not being able to provide care: "*What I fear the most is that one day I'll also need help. I am afraid of getting the same disease and not be able to take care of him.*" [Peter]; "*Not being able to help her is my biggest concern. The worst is that in the future she will need me more than she needs today.*" [John]

Information about COPD and self-confidence. All sons agreed on the importance of having information about their parents' disease, however, three recognised that they did not have sufficient knowledge. Sons mentioned they needed more information to become aware of the disease severity, to deal with the care receiver's breathlessness and to cope better with the disease: "*It's essential to have more information about this disease and to know what I can do when my father is short of breath. I've never had information about his breathing problems.*"

[Peter]; "*I try to simplify information and to explain it to my father, such as how to use bronchodilators. But I need to know more. My father also needs more information to understand and accept the disease. The hardest part is the psychological pain, he needs emotional control. Sometimes, I don't have the skills to help him*" [Simon]

However, two sons stated that they had information about the disease, but they felt insecure about providing personal care. Despite this feeling of insecurity, a son reported that it was essential to convey confidence in care provision: "*Yes, I consider that I have knowledge. But I can be wrong because it is in practice that we see if we are able or not. For example, when I need to provide another type of care (...) I can tremble inside, but outside I will certainty say: 'let's go! Transmiting confidence is crucial for her and for us.*" [John]; "*I have some knowledge. The problem is that if he becomes unable to perform basic activities of daily living, I don't have skills to take care of him.*" [Julius]

Opportunity for personal growth. Four sons reported that the caregiving experience was an opportunity to learn more about themselves and to become aware of the strengths they did not know they had: "*The positive part is that I feel more relaxed. I have learned to be more relaxed with his illness!*" [David]; "*It forces you to be more cautious, responsible, and more mature. Now, I have a higher sense of meaning and purpose in life*" [John]

Despite these positive impacts, one son was unable to identify any reward from the caregiving role. "*Honestly, I can't see the positives aspects of this situation.*" [Peter]

DISCUSSION

This study focused on the men's experience in providing care to family members with moderate-to-severe COPD. The general findings suggest that men are competent, nurturing and dedicated

carers, however husbands and sons respond differently to the COPD caregiving experience. These differences reflected the relationship and the generational discrepancies.

A strong sense of commitment to care was an overriding feature across the interviews. All men accepted this responsibility as “theirs”, although the meaning of commitment varied between sons and husbands. For sons, a sense of filial obligation was very clear in their accounts, which for some came with personal and professional costs. Research found that feelings of filial obligation among son carers can predict a greater involvement in the caregiving role (40). However, sons encountered challenges and constraints associated with work and personal care conflict. Difficulties in balancing between full time job and caregiving responsibilities were reported, representing one of the most challenges described by the literature (41). Some had to give up promotional opportunities due to the caregiving demands and claimed the need for more flexibility from the employment entities. Another constraint was related to providing intimate care. Particularly, feelings of embarrassment and inappropriateness about seeing and touching the naked body of a frail parent were anticipated. Cross-gender taboos might explain these results, as it is less expected and accepted for men, than for women, to provide intimate care, particularly to mothers (28, 40, 42).

For husbands, the caregiving seemed to be an extension of their marital role. Consistent with previous research, they appeared to face caregiving as part of their marital vows, *in sickness and in health*, and the result of a constructed ongoing reciprocity between spouses (23, 24, 27, 43, 44). Husband carers in COPD, like in cancer or dementia, were open to change household routines and to actively learn basic household tasks usually associated to the feminine role (23, 45, 46). Preserving the dignity and a sense of control of their wives was also present in the husbands’ accounts, being part of what Bowers (47) has described as preservative care. Despite

the challenging nature of the caregiving role, husbands seemed to consider their experience as a “*labor of love*” (48), where the nurturing and emotional commitment are significant aspects of care to the point that they feel capable to do “*whatever comes up*” to protect their loved wives. However, husbands wished to gain more practical skills to deal with COPD, particularly those related to the management of acute exacerbations, one of their greatest fears, because patients are constantly “*living in the proximity of death*” (49). For husbands, anticipating their wives’ death meant to lose a companion, a confidant and the unique source of emotional support. They desired a more adequate medical treatment towards their wives from the health care services. Previous research on general COPD caregiving have already recognised the ongoing uncertainty of acute exacerbation as a major stress factor (50), underlying the importance of having a “back-up”, i.e., someone in the health care system to contact in a crisis (50). Moreover, COPD carers tend to be poorly informed about the long-term prognosis of their care receiver’ disease or about what to expect toward the end of life, especially when compared with other diseases such as cancer or acquired immunodeficiency syndrome (51, 52). In line with earlier studies (2, 53), better support with symptoms control and more useful information about COPD course were important needs identified by both husbands and sons.

The role of sons and husbands also differed in relation to caregiving intensity and function. Compared to sons, husbands provided more emotional and instrumental support (e.g., accompaniment to medical appointments, managing finances and medication, doing household work), and were unique in providing personal and intimate care such as bathing. Again, the gendered nature of sociocultural assumptions and expectations towards caregiving might help to understand sons’ less involvement in certain types of assistance, particularly personal care (40), which is probably provided by their own wives, i.e., the care-receivers’ daughters-in-law.

However, in line with recent studies (29, 54), the current findings challenge the traditional assumption that men are not very much involved in household work or personal care, nor having the emotional acumen to deal with it.

Despite the constraints of the COPD caregiving, participants found personal gains from the experience. For sons, caregiving was an important means for personal growth and development. Through their caregiving roles, sons have the opportunity to learn more about themselves and become aware of the strengths they did not recognise they had by learning how to successfully cope in different situations (55). For husbands, the experience represented an opportunity to be aware of their wives inner-strength and be encouraged by them, and to strengthen conjugal relationship. In particular, spousal carers who maintain continuity in their marital relationship (i.e., who continue to receive companionship and affection from their marriage), have been found to experience greater gratification from caregiving (56).

Some limitations need to be acknowledged. This study was cross-sectional in design and conducted with a small sample of husbands and sons. Longitudinal studies with larger samples exploring how men's caregiving experience change over the course of COPD are still needed. Despite the small sample size, participants were identified through patients' records at primary health care centers, contributing to lessen sample bias. As underlined by Houde (18), methods of recruitment that rely on community support services for carers threats the sample's representativeness, as men are more hesitant to seek help or participate in support groups than women, thus those who participate may not represent men carers in general. Despite these limitations, our findings expand prior knowledge at least in two major ways. To the best of our knowledge, this is the first study to explore men's caregiving experience in COPD. Secondly, by differentiating husbands and sons carers' perspectives, it addresses a previous gap in research in

which men are aggregated into the category “male carers”, hindering the diversity of the caregiving experience shaped by birth cohort or family relationships. Various aspects of men’s reactions to COPD caregiving however remains unexplored and need to be investigated. Additional efforts are required to determine the type of support services COPD men carers identify as relevant to their needs and if these differ according to their relationship to the cared-for person (*husbands versus sons*).

CONCLUSIONS

COPD is a major cause of disability which often leads to dependency on family carers. Men represent a growing group of carers for whom it is crucial to deepen theoretical, empirical and practical knowledge. This study extends the current caregiving literature by deepening understanding of the particular strengths and vulnerabilities faced by men (husbands and sons) as carers in COPD. Continued efforts to recognise men’s experience in COPD caregiving role are determinant to understand if their needs are being adequately met.

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Table 1. Characteristics of the men carers and cared-for persons.

Carers										Cared-for persons	
Fictitious names	Age (years)	Academic qualifications	Work status	Marital Status	Caregiving hours per week	Caregiving period (years)	Geographical proximity	Family Relationship	Age (years)	COPD Severity	
August	59	Primary School	Full-time employment	Married	0-8h	>4	Cohabitation	Husband - Wife	63	Severe	
Anthony	62	Primary School	Unemployment	Married	8-20	1-2	Cohabitation	Husband - Wife	60	Severe	
Albert	65	No qualifications	Retirement	Married	8-20h	>4	Cohabitation	Husband - Wife	79	Moderate	
Louis	73	Secondary School	Retirement	Married	0-8h	>4	Cohabitation	Husband - Wife	69	Moderate	
James	77	Primary School	Retirement	Married	8-20h	2-4	Cohabitation	Husband - Wife	77	Moderate	
Paul	80	Primary School	Retirement	Married	20-40h	>4	Cohabitation	Husband - Wife	81	Severe	
Ernest	80	High school	Retirement	Married	8-20h	>4	Cohabitation	Husband - Wife	78	Moderate	
John	30	Secondary School	Full-time employment	Single	0-8h	2-4	Cohabitation	Son - Mother	55	Moderate	
Peter	36	High school	Full-time employment	Single	0-8h	<1	Cohabitation	Son - Father	64	Moderate	
Simon	44	University	Full-time employment	Married	20-40h	>4	Live in the same street	Son - Father	77	Moderate	
David	52	Secondary School	Full-time employment	Married	8-20h	>4	Live in the same village	Son - Father	82	Moderate	
Julius	55	Primary School	Full-time employment	Married	>40h	>4	Cohabitation	Son - Father	80	Severe	

Table 2. The men's caregiving experience in COPD: husbands' and sons' perspectives.

Themes	Subthemes	
	Husbands' perspective	Sons' perspective
Meaning	Caregiving as an extension of the marital role	Fulfilling a sense of duty
Challenges and constraints	Providing household tasks	Conciliating personal and professional life with caregiving
	Preserving wives' integrity	Providing personal and intimate care
Fears and concerns about the future	Losing the life partner	Becoming ill and be unable to provide care
Needs	Practical skills to manage COPD and adequate treatment	Information about COPD and self-confidence
Positive aspects	Wives' self-confidence and emotional strength	Opportunity for personal growth