

ASTHMA IN THE ELDERLY

Insight into Older Peoples' Healthcare Experiences with Managing COPD, Asthma, and Asthma–COPD Overlap

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Objective. The aim of this study was to explore older peoples' experiences of asthma or COPD with reference to their journey in the healthcare system. **Methods.** We recruited older patients with a confirmed diagnosis of asthma or COPD and invited them to participate in a qualitative interview. Interviews were conducted with 21 participants. A line-by-line analysis of the interviews was performed and they were coded for common themes. **Results.** From the data, six main themes emerged, these were; "limits to being", "being with or without a diagnosis", "not being heard or recognized", "expectation, fears, and hopes", "to medicate or not: the underuse, abuse, and misuse", and "needing to understand more". The findings of these interviews provide an important understanding of the behaviors and healthcare needs of older people with asthma and COPD. Older patients' adherence patterns, desire for person-centeredness, and involvement in shared decisions as well as desire for increased objective assessment are described. **Conclusions.** These findings provide an important understanding of the behaviors and healthcare needs of older people with asthma and COPD, an area that has not been well defined. The knowledge gained about older patients' desire for person-centeredness and involvement in shared decisions, as well as desire for increased objective assessment is essential in improving care.

Keywords Aging, Asthma, COPD, Older people, Person-centeredness, Qualitative

INTRODUCTION

Asthma and Chronic Obstructive Pulmonary Disease (COPD) are common conditions among older people that frequently overlap and are associated with a significant disease burden (1–3). The diagnosis and management of these conditions in older people is also complex and is associated with poorer outcomes compared to young people with asthma and COPD (1, 2).

Furthermore, older people with asthma and COPD experience multiple clinical problems related to their condition and co-morbidities, despite the application of guideline-based therapy, and these problems are similar in older people irrespective of their asthma, COPD, or overlap diagnosis (4). As clinicians, we establish treatment goals and interventions; however, we do not always consider whether our goals and concerns match those of the patient (5). Management is often delivered in a disease-centered model; whereby the physician's agenda is addressed (6). As a result, the problems that are important to the patient may not be elicited, acknowledged, or managed when applying the disease-centered approach to care (7). Moreover, the time clinicians spend with patients in both outpatient and inpatient settings is rarely sufficient to understand the depth of the challenges experienced by people with progressive chronic illnesses (8).

Studies using qualitative methodologies have sought to describe older patients' experiences of living with COPD and asthma (9–15). Many of these studies described the experiences, perceptions, symptoms, and care needs of patients with severe end-stage COPD. In several of these studies, common themes emerged; breathlessness, activity and social limitation were major impacts on the lives of patients with COPD (9–15).

Whilst these studies provide valuable insight into the experience of patients with severe COPD, they provide limited insight into the needs of older patients with mild to moderate disease as they journey through the healthcare system.

Similarly, very little is known about the experiences and needs of older people with asthma. A small number of studies investigating the needs of this population show that patients perceive increased breathlessness as associated with getting older which may lead to reduced reporting of symptoms in this group (16, 17).

Whilst a small number of publications have attempted to determine what is important for older people living with asthma and COPD, few have considered patient perspectives of the healthcare journey.

The aim of this study was to explore the older patients' experiences of asthma, COPD, and asthma–COPD overlap with reference to the healthcare system.

METHODS

This qualitative evaluation was a sub study of a larger cross-sectional characterization study ($N = 100$) (4).

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Participants were recruited consecutively, and a subgroup of these participants ($N = 23$) were asked (also consecutively) to complete this qualitative interview sub-study. Of those invited, one declined and one was excluded due to cognitive impairment.

Older adults with stable asthma and/or COPD were consecutively recruited from the respiratory ambulatory care clinics at the John Hunter Hospital, Newcastle, NSW, Australia. Participants were under the care of a respiratory physician and were recruited to the study by clinicians from the outpatient clinics, after the clinicians applied the inclusion and exclusion criteria. There were 11 different respiratory physicians from where the patients were sourced, and each patient had a primary care physician of their choice.

The inclusion criteria were airflow obstruction defined by a pre-bronchodilator forced expiratory ratio (FER) < 0.7 and Forced Expiratory Volume in 1 second (FEV₁) $< 80\%$ of predicted, and age ≥ 55 years. A cutoff of 55 years was chosen as epidemiological studies suggest that this is the age where differentiation of asthma from COPD becomes more challenging in practice (18), and the age that the physiological consequences of aging occur in the lung (19).

All participants must have had a prior diagnosis of an obstructive airway disease, either asthma, COPD, or an overlapping pattern. A diagnosis of asthma, COPD, or asthma–COPD overlap was based on their physician diagnosis upon entry to the study and this was confirmed by a review of the medical record.

All participants must have had satisfactory written and verbal English language skills and be able to perform all of the assessments required for the characterization of the study (4).

Ethics approval was received from the Hunter New England Research and Ethics Committee and participants provided informed signed consent. Pseudonyms have been used to protect patient confidentiality.

An interpretive qualitative descriptive study using in-depth semi-structured interviews guided by questions (Figure 1) was performed. As participants were recruited for the larger study, a smaller sample was invited to participate in face-to-face interviews. Interview data were analyzed concurrently and until data saturation (a point where no new data or themes emerge from the interviews) was achieved.

The interview questions (Figure 1) were developed by the authors; they were guided by the research aims including the need to establish the patient's perspectives of their illness experience. The interviews started with a broad question and ensuing questions related to more specific issues. The questions were open-ended to enable and to encourage participants to speak freely about their experience. All interviews took place in a private office located away from the clinical research setting and ranged between 15–60 minutes.

ANALYSIS

Interviews were audio-recorded and written notes documented by the interviewer. Transcription was performed

by a research administration officer and verified against the sound file. The transcriptions were entered into the qualitative data management software package NVivo version 8 (QSR Qualitative Solutions & Research International, Pty Ltd Melbourne, Australia). A line-by-line analysis was performed, statements were highlighted, and the responses coded and categorized to identify emerging themes.

RESULTS

There were 21 interviews conducted, including 15 women aged between 59 and 82 years. Details of the overall and individual participant characteristics are presented in Tables 1 and 2. From the interview data, six main themes emerged and are described in Table 3. “Limits to being” and “expectations, hopes and fears” have been reported in the literature previously (10, 12, 20, 23, 24), and therefore are not described in this paper. The remaining themes present novel information in regard to older peoples’ experiences.

Being with or without a Diagnosis

“Being with or without a diagnosis” was both disconcerting and frustrating for participants. Participants were frustrated with repeated attempts to have a diagnosis confirmed, some were angered by their diagnosis, and some were relieved. A diagnosis was often affirmation that something was wrong with them. Those participants who were diagnosed with asthma as a child felt they coped better. Others diagnosed later in life, indicated that diagnosis was protracted and that their general practitioners (GP) incorrectly attributed their symptoms to other problems such as heart disease, obesity, or general aging.

Evie, who was 68 years old, describes her concern at learning of her diagnosis and the indignation she felt with being dismissed, year after year. As she said:

Unfortunately my asthma wasn't diagnosed until after I left work. It should have been! The blasted doctor kept telling me it was bronchitis or they'd say “You're not fit because you're overweight” ...//... “I was working and I was always coughing, and I'd go down to the doctor, he just said to me, are you tired, do you want more time off work” I thought, “damn it all, I've lost all my sick leave”. (Evie, Asthma)

Gemma was also diagnosed with severe asthma at the age of 62 and yet she had experienced symptoms of wheeze and dyspnea since she was 48. As she said:

For several years, it was just a matter of banging your head up against a wall and “Yes it is asthma”, “No it's not”, “Yes it is”, “We don't know what it is” and that didn't help, but sort of having the diagnosis it's severe asthma ...//... it's helped a lot ...//... as much as I didn't want it to be, it was a relief to know it was something that had been identified because up until then it was, nobody seemed to know. Yes you have, no you don't, yes you have, no you don't. We're not sure what it is.

- I. Tell me what it is like living with your breathing condition?
- II. What do you see as the main problem or limitation you experience that is due to your breathing condition?
- III. How does this impact on you?
- IV. Would you like to discuss how your treatment program impacts on you?
- V. Do you think these problems are understood or acknowledged by your health care team?
- VI. Describe to me how you see your health care team perceives your problems?
- VII. How do you think other people perceive you?
- VIII. Could you describe any fears or concerns you have relating to your breathing problem?
- IX. What do you see your needs are?
- X. What would you hope to achieve from a treatment program developed for you?

FIGURE 1.—Interview Question Guide.

TABLE 1.—Participant Characteristics.

	Larger study <i>n</i> = 100	Total in this study <i>n</i> = 21	Asthma <i>n</i> = 5	COPD <i>n</i> = 7	Overlap <i>n</i> = 9
Gender M/F	42/58	6/15	0/5	3/4	2/7
Age range, mean (SD)	69.5 (7.96),	59–82 years, 68.64 (7.4)	65.4 (3.8)	68.7 (7.7)	70.3 (8.7)
Time since diagnosis, years, mean (SD)	25 (20)	30 (24.63)	16 (21)	28.8 (20.6)	43.2 (25.1)
Current smokers	6/94	0	0	0	0
Pack years, mean (SD)	38.4 (29.8)	49.6 (34.47)	0	57.6 (33.1)	5.6 (16)
Severity-FEV1% predicted, mean (SD)	51.8 (18.4)	51.57 (17.46)	59.6 (15.2)	44 (19.4)	52 (15.6)
FER, mean (SD)	55.2 (12.7)	0.54 (0.14)	60.1 (6.)	44.9 (14.5)	58.4 (15.9)
HR QoL SGRQ units, mean (SD)	43.6 (18.5)	47.7 (19.2)	40.8 (9.9)	47.5 (22)	51.7 (20.4)
HADS Anxiety, mean (SD)	6.6 (3.7)	7.7 (4)	8.6 (2.5)	8.6 (4.8)	6.5 (4.3)
HADS Depression, mean (SD)	5.3 (3.5)	6.1 (4)	6.6 (3.2)	6.8 (4.7)	5.3 (4.5)
Living arrangements	Only assessed in sub study	7 lived alone	2 lived alone	2 lived alone	3 lived alone

Note: HADS, Hospital Anxiety and Depression Scale. A score > 8 and <11 in either respective domain indicates possible anxiety or depression. A score > 11 indicates probable anxiety or depression.

So I suppose there was a relief to actually have a diagnosis ... //... you sort of think these days, they can put a man on the moon but they can't tell me what's wrong with me! (Gemma, COPD)

Paul was 69 years old and had been diagnosed with COPD 12 months earlier. He avoided seeking medical assessment of his symptoms for a year before he was diagnosed. He said:

You just put things off, don't you? I had an idea, and I thought it was the other nasty thing [referring to lung cancer]. Because usually, the COPD is not good but it's better than the other ... //... I don't want COPD either, but I'd sooner have that than the other one. (Paul, COPD)

The absence of a diagnosis or missed diagnosis was a concern for many of the participants. Clinicians acknowledge that diagnosis of asthma and COPD in older people is

challenging (21); these interviews suggest that not having a diagnosis is also frustrating and challenging for the patient and that this can have a profound impact on older persons' lives.

Not being Heard or Recognized

Participants often felt that their own beliefs and concerns were ignored, that their GPs neither had an understanding of their circumstances nor did they have an appreciation of their expectations. Participants also thought that there was a reluctance to provide information surrounding their diagnosis, pathology, treatment, and prognosis.

They said they were not heard, they were just "another number". They believed that not being heard meant a delay in their diagnosis, a failure to try new treatments, and that their relationship with their doctor was a barrier to their ability to manage the exacerbations of their illness.

Donny, a 61-year-old male with COPD describes his frustration with his healthcare consults. He had multiple co-

TABLE 2.—Detailed Description of Individual Participants.

Pseudonym	Gender	Diagnosis	Age (years)	Age at Sx onset	Age of Dx	SGRQ	FEV1 %pred	FER	Pack years	Living
Paul	Male	COPD	69.4	67	68	24	35.4	34.7	82.5	Spouse
Harry	Male	Overlap	82.7	3	3	68.4	47	41.7	0.2	Alone
Donny	Male	COPD	60.6	48	52	83.1	16.4	25.3	70	Alone
Ike	Male	COPD	79.1	78	78	53.5	67.7	61.7	102.5	Alone
Sally	Female	Overlap	79.6	60	61	53.8	71.8	78.7	0	Spouse
Gemma	Female	COPD	65.2	48	62	35.3	77	66.4	0	Spouse
Evie	Female	Asthma	68.5	62	63	28.4	75	64	0	Alone
Teya	Female	Overlap	70.2	62	68	52.8	49.3	59.1	51	Spouse
Tammi	Female	Overlap	75.6	2	20	58	42.6	73.5	0	Alone
India	Female	Overlap	62.7	1	5	41.4	45.3	56.6	0	Spouse
Nelly	Female	Asthma	59.0	18	18	55.3	53.5	64.3	0	Alone
Gabriella	Female	Asthma	68.2	17	23	28.7	48.1	50.6	0	Spouse
Tabbitha	Female	Asthma	76.4	50	50	23.4	65.3	43.3	46.5	Spouse
Odella	Female	Overlap	60.6	1	30	51.7	71.8	71.4	0	Spouse
Maria	Female	Asthma	66.0	6	27	60.7	44.7	55.3	0	Spouse
Oliver	Male	Overlap	60.9	5	5	38	22.3	28.5	0	Spouse
Madeline	Female	COPD	65.5	7	7	37.3	38.1	48.1	17	Spouse
Lily	Female	COPD	61.4	58	61	75.1	41.4	56.6	27	Spouse
Rose	Female	Overlap	63	38	38	33.6	54.8	53.4	0	Alone
Ruby	Female	Overlap	72.4	14	14	86.2	63.4	62.3	0	Spouse
Billy	Male	COPD	75.9	8	20	51.1	42.4	55.8	53.7	Spouse

Note: Sx, Symptom; Dx, Diagnosis; FER, Forced Expiratory Ratio; FEV1, Forced Expiratory Volume in 1 second; SGRQ, St George Respiratory Questionnaire.

TABLE 3.—Themes that Emerged from the Interviews.

Theme
'being with or without a diagnosis'
'not being heard or recognized',
'to medicate or not? the underuse, abuse, and misuse'
'needing to understand'

morbidities and believed that these additional medical concerns seemed to only distract his doctor.

My doctor keeps telling me "Oh yeah, we've got to do things about this and about that, but nothing ever happens". I went in there the other day and she told me she wanted to check up my bladder and my pulse rate, and my cholesterol was up and it looked like I had some disease, ...//... but I walked out of there, as though I hadn't been there, nothing happened. My doctor ...//... just gets confused when I get in there. She starts reading the charts and finding out what things have come back and all of a sudden she seems to get distracted. You finish up going out and remembering the last thing she says to you, "Do you want any prescriptions?" Nothing seems to happen after that until the next time you go". (Donny, COPD)

Ruby also describes the frustration she felt within the healthcare environment, she felt that her problems did not get heard by her GP and this caused annoyance. She also described her desire for objective tests to confirm her symptoms and guide future management, she felt annoyed that these tests were not performed.

He gives me nothing ...//... he's a doctor that will not test you, he won't test your lungs, he won't listen to your heart! (Ruby, Asthma-COPD)

Participants thought that their doctors were "stubborn" and single disease-focused. Billy, a 75-year-old gentleman with COPD and ischemic heart disease talked about his experience in trying to manage both conditions and the existence of different opinions among his treating team. He was frustrated by the single disease approach to managing his health. He said;

My heart doctors, they're not interested in the lungs. I'll bring it up and say, look my lungs are the problem, not me heart. I said to Professor and I've said it to my GP, "I want something to fix me lungs, get them fixed, get me back active". But no, they're not interested, "We won't rock the boat, we'll leave the boat", that's his saying, "we'll leave things as they are". He wasn't interested in lungs; he was only interested in the heart ...//... I definitely thought my lungs are worse than my heart now. (Billy, COPD)

There was also a lack of confidence or trust in the management of their condition. Evie questioned how much her doctor knew about managing asthma, she described how most of her disease knowledge was gained through books she had borrowed from the library, she highlighted the need for more patient education about asthma.

When I came up here, you actually checked how I was using the ventolin, which was wrong, and how I was using the other one, which was wrong. Yes, and I felt, gee Dr K hasn't checked that Dr K hasn't ever asked me "How are you coping with your medication, do you think we should change it", and I think she just thinks that I'm looking after myself okay. (Evie, Asthma)

Whilst Evie had her lung function measured by the GP, she believed that no one really knew how to use the equipment,

nor was she provided with any feedback in respect to her results. She felt devalued by the lack of feedback.

Well, I guess I don't talk to her [referring to GP] very much, I mean a lot of what put me off, the respiratory system [referring to the spirometer]. They don't know how to work them and they have nurses there who don't know how to work them. I mean they may know now, but twice I've been down and they don't know how to work them and the doctor herself said, "I don't know how to do it" and when they did use it, I got absolutely no feedback at all. You know and I was sort of waiting in the waiting room I thought well they're going to tell me something, and the secretary came over and said, "You can go home, we don't want you anymore", and I thought well you've just done this test, I'm feeling damned awful, and you haven't told me anything. (Evie, Asthma)

This major theme provides the insight that participants feel their doctors are single disease-focused and uninterested in their health concerns or objectives. Some lacked confidence in their GP and thought that their own personal concerns were irrelevant. Importantly, many also expressed a desire for more objective testing and feedback regarding the results.

To Medicate or not: the Underuse, Abuse, and Misuse

Most of the participants talked about taking their doctor's advice by using their medications as prescribed. There were, however, participants who did not adhere to the advice of their doctor, including taking medications, exercising as prescribed, or using oral corticosteroids (OCSs) judiciously.

Inhaled corticosteroid (ICS) and long-acting β_2 -agonist (LABA) combination inhalers and in some cases, long-acting anti-muscarinic therapy were often underused. The reasons given by participants were that these medications did not benefit them, and using a puffer was difficult to remember and a nuisance.

Madeline talked openly about how she managed her medications, as she said. "Oh I have got those, what do they call it, it's a purple one, Seretide, yeah." When asked if she takes this treatment she says, "Oh only when I'm really bad." I asked further, "why do you only take it when you are bad?" She replied "Well I don't think I've got a need for it. I find that when I use my nebulizer, that's when I use the Seretide, that's when I use that".

Whilst Madeline's doctor told her she should take the Seretide twice each day, she only took it when needed. Madeline was asked if there was anything that would encourage her to use her medications as prescribed and she said:

Oh I don't know, no, probably not. Probably yeah, well if I had to, I suppose I would, but it's a bloody nuisance ... // ... standing there and turning it back and puffing it and then turning it back again and then puffing it and then rinsing your mouth out, oh!

As participants did not take their combination ICS/LABA medication because they "did not need it," this suggests an erroneous understanding of how these medications work.

In the next exemplar, Nelly shares her experience of taking medication as prescribed and supplementing her regime with additional OCS treatment because these medications energize her and she can be more active. Because Nelly engages in this practice without her GP's knowledge, she sought reassurance that this information would not be shared with her doctor. As she said:

If I have something coming up, I'll take some Prednisone, extra ones so I can do it, otherwise I can't. Depending how sick I feel, I might start at 50 and I might get down to 25 a day, 12½ and then I'll just stop and I might get one or two weeks free of them and then I just go downhill ... // ... If I take them, well yesterday I painted a cupboard out in the carport ... // ... if I hadn't been taking them, I couldn't do it! (Nelly, Asthma)

When I asked how she thought her physician might view her use of prednisone, "I don't tell him," she said. "You're not going to tell anyone, are you?" She asked with concern. This exemplar shows that some people conceal aspects of their treatment. The extent of this type of practice is unknown.

These findings suggest that the participants titrate their treatment regime according to how they feel, want to feel, or what they want to achieve for themselves; they either stopped using treatment because they did not need it or they increased the dosages because it made them feel better.

Needing to Understand

Needing to understand depicts the participants' desire for greater knowledge about their disease, its treatments, and prognosis. Some wanted to be able to prevent exacerbations of their illness; they wanted to stay "healthy". Others asked for a "magic wand", while some explored the idea of a cure or the possibility of a lung transplant. All participants wished for better lungs or at least to feel better. They expressed the futility of hoping for better treatment; they believed there was nothing more available to them.

Evie wanted specific information about her medication and the age-related effects on her health. As she said:

I'd like to know that my medication is suited to my asthma and if my asthma is actually getting a little bit more difficult to control as I'm getting older that the changes in medication will suit my age and suit me. (Evie, Asthma)

Rose wanted her medications reviewed; however, she didn't believe this would improve her symptoms. She also wanted a better understanding of her condition. She said;

A review of my medications, because I've been on the same thing except for the Spiriva for a long while. ... // ... I don't expect to any way improve it. I would actually like to know, what the chronic thing is. I think I've got scarring in the

bronchi but I suppose I'd like a better understanding of what it is that's happened, you know. I always imagined it was the alveoli not working properly so it was harder for me to breathe and the significance of that scarring and whether that's likely to get any worse or that kind of thing. (Rose, Asthma-COPD)

This theme suggests that older people have a desire to know more about their disease and its management in order that they self-manage their condition and health better.

DISCUSSION

From the data, six themes emerged, we have presented four of these. The two remaining themes, "Limits to being" and "expectations, hopes, and fears" have been reported in the literature previously (10, 12, 20, 23, 24), and therefore are not described in this paper. We have presented the 4 themes that provide novel information in regard to older peoples' experiences.

These data highlight the needs, wants, and concerns of older people with asthma and COPD and the gaps in current management approaches from the patients' perspective. Of particular importance was older persons' desire for an approach that valued their individuality; who they were and what they wanted. They pointed to the need for timely diagnosis and better understanding and education about their condition. To do this, they needed ongoing assessment of their disease and relevant feedback on their progress.

Some participants were frustrated by their attempts to secure a diagnosis for their symptoms or have a diagnosis confirmed. Their doctors often attributed their respiratory symptoms to other etiologies such heart disease, obesity, or aging itself. This contrasts the studies that show that clinicians believe that it is the older patients that delay seeking help for their symptoms as they consider their breathlessness to be a symptom of aging or lack of fitness (22, 25, 26).

Objective assessment of airflow obstruction is important in the assessment and diagnosis of respiratory symptoms; however this is underutilized in practice (27). Participants expressed a desire for more objective testing involving spirometry. These findings support the need to improve the use of objective measurements in clinical settings and to consider the desires of patients in terms of performing the tests and receiving feedback.

This study also provides some insight into the behavior of older patients in terms of adhering to prescribed treatments. Those that discussed the use of medications and other therapies discussed their treatment adherence as either under- or overuse of medication. The health behavior that the participants described was around intentional non-adherence (28), where they described how they titrated their treatment according to their perceived needs and symptoms. This is consistent with previously published work in older people and particularly those with asthma and COPD (25, 29, 30, 31).

When participants described intentional non-adherence, they explained how they weighed up the benefit or necessity of treatment against the perceived risk or concern. It is known that non-adherence is more likely to occur as the complexity and duration of the treatment regime increases (30). This is an important factor in this population as older people have complex regimes related to their multiple co-morbidities and pharmacotherapies.

Several important descriptions about patient-clinician relationships emerged from the data. The theme "not being heard or recognized" had a large impact on the participants' experience. Leidy et al. suggest that COPD patients feel disconnected from healthcare providers rather than being in a collaborative relationship and that this detachment affects their decisions about when and where to seek additional care (32). This present study supports this observation and like Cicutto et al. (9), these participants also described the importance of individualized treatment and the receipt of information from a multidisciplinary team.

The findings of this study indicate the absence of an individualized approach to the treatment and management of asthma and COPD in older people. Participants described how they were at times not listened to and not involved in their treatment decisions. Questionnaire-based studies in general practice settings report that preferences for involvement in shared decision making declined with advancing age (33) and that older people did not rate the need for good communication as strongly as middle-aged adults (34). These studies suggest that communication and shared decision making is less important to older people. The findings of these interviews suggest otherwise. We used open-ended questions and participants were asked what their needs were, whether they thought their problems were understood, and how they thought the healthcare team perceived their problems. This approach may have facilitated the participants to speak more freely and express themselves differently than they could have in a questionnaire. Recognizably however, there may have been selection bias as the sample size was smaller than the quantitative studies described. Additionally, these were patients with moderate disease who were already engaged in tertiary level care not primary care or a community-based sample. These data however, still add insight into the needs and preferences of older people with OAD and reinforce the need for an individualized or person-centered approach to care where the patient's preferences for communication and management are elicited and agreed upon (5).

Poor patient-clinician partnerships have negative effects on health outcomes and in asthma by including patients in decision making, outcomes such as adherence can be improved (35).

LIMITATIONS

This study was a qualitative descriptive study which sought to gain insight into the healthcare experiences of older people with asthma and COPD. As such, we report the themes and experiences of a small population recruited from a tertiary

care respiratory clinic. From these data, we cannot extrapolate whether these results relate specifically to an older population with obstructive airways disease or older people with chronic disease in general, or are specific to the population studied. We did not perform a quantitative analysis of the themes according to the diagnostic group, this was not possible with the given sample size or part of the study design. We have previously reported that in older people with asthma and COPD, the number and nature of clinical problems are similar irrespective of the diagnosis group (4). In this study, we can also see that patients from each diagnosis group discussed similar themes.

Despite a large sample size ($n = 21$) for a qualitative study, there was a gender imbalance with the participants who were largely female. It is possible that an equal gender balance may have provided different perspectives, and therefore insights into the participants' problems, concerns, and issues with living with asthma and COPD. Furthermore, none of the participants were current smokers and as a result, the experiences of people who continue to smoke may not be reflected in these interviews.

CONCLUSIONS

In summary, the findings of these interviews provide insights into the behaviors and healthcare needs of older people with asthma, COPD, and asthma-COPD overlap; an area that has not been well defined. We have reported qualitative data that conflict with previously published quantitative data, and therefore further research is warranted into the self-management perspectives of older people with asthma and COPD. A greater understanding of older patients' desire for person-centeredness and involvement in shared decisions, as well as desire for increased objective assessment is essential in informing management for older people with obstructive airways disease. In this population, patients reported an absence of person-centeredness. Developing an improved understanding of the experiences of older people is needed to improve the outcomes for this population.

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REFERENCES

1. Gibson PG, McDonald VM, Marks GB. Asthma in the older adult. *Lancet* 2010; 374(9743):803–813.
2. McDonald VM, Higgins I, Gibson PG. Managing older patients with coexistent asthma and COPD: diagnostic and therapeutic challenges. *Drugs Aging* 2013; 30(1):1–17.
3. McDonald VM, Higgins I, Wood LG, Gibson PG. Multidimensional assessment and tailored interventions for COPD: respiratory utopia or common sense? *Thorax*, 2013; 16th March; [Epub ahead of print].
4. McDonald VM, Simpson JL, Higgins I, Gibson PG. Multidimensional assessment of older people with asthma & COPD: Clinical management and health status. *Age Ageing* 2011; 40(1):42–49.
5. McDonald VM, Higgins I, Simpson JL, Gibson PG. The importance of clinical management problems in older people with COPD and asthma; do patients and physicians agree?. *Prim Care Respir J* 2011; 20(4):389–395.
6. Levenstein JH, McCracken EC, McWhinney IR, Stewart MA, Brown JB. The patient-centred clinical method. 1. A model for the doctor-patient interaction in family medicine. *Fam Pract* 1986; 3(1):24–30.
7. Kravitz RL, Callahan EJ, Paterniti D, Antonius D, Dunham M, Lewis CE. Prevalence and sources of patients' unmet expectations for care. *Ann Intern Med* 1996; 125(9):730–737.
8. Michael SR. Integrating chronic illness into one's life: a phenomenological inquiry. *J Holist Nurs* 1996; 14(3):251–267.
9. Cicutto L, Brooks D, Henderson K. Self-care issues from the perspective of individuals with chronic obstructive pulmonary disease. *Patient Educ Couns* 2004; 55(2):168–176.
10. Barnett M. Chronic obstructive pulmonary disease: a phenomenological study of patients' experience. *J Clin Nurs* 2005; 14:805–812.
11. Jones I, Kirby A, Ormiston P, Loomba Y, Chan KK, Rout J, Nagle J, Wardman L, Hamilton S. The needs of patients dying of chronic obstructive pulmonary disease in the community. *Fam Pract* 2004; 21(3):310–313.
12. Gore JM, Brophy CJ, Greenstone MA. How well do we care for patients with end stage chronic obstructive pulmonary disease (COPD)? A comparison of palliative care and quality of life in COPD and lung cancer. *Thorax* 2000; 55(12):1000–1006.
13. Ek K, Ternstedt BM. Living with chronic obstructive pulmonary disease at the end of life: a phenomenological study. *J Adv Nurs* 2008; 62(4):470–478.
14. Goeman DP, Douglass JA. Understanding asthma in older Australians: a qualitative approach. *Med J Aust* 2005; 183(1 Suppl):S26–7.
15. Goeman DP, O'Hehir RE, Jenkins C, Scharf SL, Douglass JA. 'You have to learn to live with it': a qualitative and quantitative study of older people with asthma. *Clin Respir J* 2007; 1(2):99–105.
16. Gooberman-Hill R, Ayis S, Ebrahim S. Understanding long-standing illness among older people. *Soc Sci Med* 2003; 56(12):2555–2564.
17. Morgan R, Pendleton N, Clague JE, Horan MA. Older people's perceptions about symptoms. *Br J Gen Pract* 1997; 47(420):427–430.
18. Marsh SE, Travers J, Weatherall M, Williams MV, Aldington S, Shirlcliffe PM, Hansell AL, Nowitz MR, McNaughton AA, Soriano JB, Beasley RW. Proportional classifications of COPD phenotypes. *Thorax* 2008; 63:761–767.
19. Sharma G, Hanania NA, Shim YM. The aging immune system and its relationship to the development of chronic obstructive pulmonary disease. *Proc Am Thorac Soc* 2009; 6(7):573–580.

20. Fraser DD, Kee CC, Minick P. Living with chronic obstructive pulmonary disease: insiders' perspectives. *J Adv Nurs* 2006; 55(5):550–558.
21. Marks GB, Poulos LM, Jenkins CR, Gibson PG. Asthma in older adults: a holistic, person-centred and problem-oriented approach. *Med J Aust* 2009; 191(4):197–199.
22. Barua P, O'Mahony MS. Overcoming gaps in the management of asthma in older patients: new insights. *Drugs Aging* 2005; 22(12):1029–1059.
23. Williams V, Bruton A, Ellis-Hill C, McPherson K. What really matters to patients living with chronic obstructive pulmonary disease? An exploratory study. *Chron Respir Dis* 2007; 4(2):77–85.
24. Haras MS. Planning for a good death: a neglected but essential part of ESRD care. *Nephrol Nurs J* 2008; 35(5):451–458.
25. Goeman DP, Douglass JA. Optimal management of asthma in elderly patients: strategies to improve adherence to recommended interventions. *Drugs Aging* 2007; 24(5):381–394.
26. Andrews KL, Jones SC. "We would have got it by now if we were going to get it. . . ." An analysis of asthma awareness and beliefs in older adults. *Health Promot J Austr* 2009; 20(2):146–150.
27. Walters JA, Hansen EC, Johns DP, Blizzard EL, Walters EH, Wood-Baker R. A mixed methods study to compare models of spirometry delivery in primary care for patients at risk of COPD. *Thorax* 2008; 63(5):408–414.
28. Compliance HR. Adherence, and concordance - implications for asthma treatment. *Chest* 2006; 130(1 Suppl):65S–72S.
29. Banning M. Older people and adherence with medication: A review of the literature. *Int J Nurs Stud* 2008; 45(10):1550–1561.
30. Rand CS. Patient adherence with COPD therapy. *Eur Respir Rev* 2005; 14(96):97–101.
31. Bozek A, Jarzab J. Adherence to asthma therapy in elderly patients. *J Asthma* 2010; 47(2):162–165.
32. Leidy NK, Haase JE. Functional performance in people with chronic obstructive pulmonary disease: a qualitative analysis. *ANS Adv Nurs Sci* 1996; 18(3):77–89.
33. Schneider A, Körner T, Mehring M, Wensing M, Elwyn G, Szecsenyi J. Impact of age, health locus of control and psychological co-morbidity on patients' preferences for shared decision making in general practice. *Patient Educ Couns* 2006; 61(2):292–298.
34. Little P, Everitt H, Williamson I. Preferences of patients for patient centered approach to consultation in primary care: observational study. *BMJ* 2001; 322(7284):468–472.
35. Wilson SR, Strub P, Buist AS, Knowles SB, Lavori PW, Lapidus J, Vollmer WM; Better Outcomes of Asthma Treatment (BOAT) Study Group. Shared treatment decision making improves adherence and outcomes in poorly controlled asthma. *Am J Respir Crit Care Med* 2010; 181(6):566–577.