### Reviewing and applying qualitative research to inform management of chronic obstructive pulmonary disease

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## What is qualitative research and is it robust?

This special collection 'Looking Beyond the Numbers: Qualitative research in Respiratory Medicine' celebrates research using qualitative methodologies to enable understanding of an individuals' subjective experience and to address questions about meaning, perspectives, feelings and values. The qualitative researcher systematically gathers, organises, interprets and explains data from narratives (verbal and textual) or naturalistic observations (visual). Data collection techniques are tailored according to the research question. Focus groups are useful to understand normative beliefs and behaviour (i.e. what are peoples' perceptions of e-cigarettes?), semistructured interviews glean views on focused topics (i.e. perceptions of the withdrawal of medications?), in-depth interviews seek to comprehend a condition or experience (i.e. what is the experience of adults with cystic fibrosis?) and analysis of text and documents, such as social media posts and websites, shed light on public knowledge (i.e. how do people view those with lung cancer?).<sup>1</sup>

The robustness of qualitative research has been questioned due to concerns about small sample sizes leading to lack of generalisability and biases linked to researchers' own experiences and expectations. However, seeking generalisability is at odds with the focus of understanding a specific issue in a particular population and context. The integrity of qualitative research can be defended by addressing trustworthiness using quality criteria: credibility (the confidence in the truth of the findings), transferability (the degree to which the results can be transferred to other contexts), dependability (the stability of the results over time) and confirmability (the degree to which the results can be confirmed by others).<sup>2</sup> Techniques to demonstrate trustworthiness may include triangulation of findings, member checking, providing a rich account of the data and ensuring transparency of findings by producing an audit trail.<sup>3</sup>

# Informing clinical practice and behaviour change

Evidence derived using qualitative methods is cited in international guidelines for chronic obstructive pulmonary disease (COPD) informing clinical practice.<sup>4</sup> For example, studies seeking to understand the experience of living with severe COPD have elucidated knowledge of patient needs leading to recommendations for disease education and management of psychological symptoms.<sup>5–7</sup> Another study exploring perceptions on opioid use for refractory breathlessness has offered insight into the likelihood of successful treatment uptake. This information is particularly important when findings from quantitative literature are conflicting, meaning no clear clinical recommendations can be made.<sup>8</sup> In this collection, a study using transparent expert consultation methods, which draws on qualitative techniques (gathering views, transparency, analysis of themes), has generated evidence-based recommendations for

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mphasising **Conclusions** 

clinical practice, policy and research, emphasising the need for patient-centred flexible care for people living with chronic breathlessness in advanced disease.<sup>9</sup>

Encouraging behaviour change is challenging but qualitative research may be helpful. I have focused on disease management or pulmonary rehabilitation (PR) programs as examples of positive health behaviour to illustrate how and have cited examples from this special collection as well as from the broader literature. In a recent study, the narratives of patients with COPD who had declined a chronic management program portraved social challenges (i.e. poverty and debt) and personal beliefs reflecting feelings of shame and distrust.<sup>10</sup> Awareness and understanding of factors influencing a persons' readiness to change behaviour can enable healthcare professionals (HCPs) to communicate in a way that reflects compassion and understanding. As well as recognising the views of those who do not engage in certain behaviours, it is important to glean insight from those that do, for example, a proportion of patients chose to repeat PR, driven by a desire to improve fitness, symptoms and confidence.<sup>11</sup> With this knowledge, HCPs can tailor the information they provide to patients about an intervention or service, with the aim of influencing patients' beliefs about its appropriateness and increasing the likelihood of engagement.

Qualitative exploration of patients' treatment preferences can enable patient choice and inform alternative modes of delivery. For example, varied views were expressed by patients regarding the timing of PR post-acute exacerbation of COPD and some preferred the idea of a gradual start,<sup>12</sup> meaning it may be appropriate to initially offer only education to a proportion of patients before suggesting enrolment in comprehensive PR. By enabling choice the program is more suited to patients' needs, it is individualised and patients' sense of empowerment can be heightened by participation in shared decision-making. It is also important to understand the potential benefits of alternative choices and modes of PR. Qualitative researchers have sought understanding of patients' experiences participating in home-based PR finding it to be the most appropriate for those who value convenience and have strong social support.<sup>13</sup> This information can assist HCPs to support patients making informed choices, potentially improving access to PR.

This special collection promotes well-conducted qualitative research, which has an important role in informing clinical recommendations. It can facilitate effective communication that reflects compassion and understanding, enabling HCPs to offer informed treatment choices and support shared decision-making. Adoption of these approaches can heighten feelings of self-worth, trust and empowerment, which are necessary for engaging in positive health behaviour.

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#### References

- Hammarberg K, Kirkman M and de Lacey S. Qualitative research methods: when to use them and how to judge them. *Hum Reprod* 2016; 31(3): 498–501.
- Lincoln YG. *Naturalistic inquiry*. Newbury Park, CA: Sage Publications, 1985.
- Korstjens I and Moser A. Series: practical guidance to qualitative research. Part 4: trustworthiness and publishing. *Eur J Gen Pract* 2018; 24(1): 120–124.
- Singh D, Agusti A, Anzueto A, et al. Global strategy for the diagnosis, management and prevention of COPD. *Eur Respir J* 2019; 53(5): 1900164.
- Disler RT, Green A, Luckett T, et al. Experience of advanced chronic obstructive pulmonary disease: metasynthesis of qualitative research. *J Pain Symptom Manag* 2014; 48(6): 1182–1199.
- Pinnock H, Kendall M, Murray SA, et al. Living and dying with severe chronic obstructive pulmonary disease: multi-perspective longitudinal qualitative study. *BMJ* 2011; 342: d142.
- Kessler R, Stahl E, Vogelmeier C, et al. Patient understanding, detection, and experience of COPD exacerbations: an observational, interview-based study. *Chest* 2006; 130(1): 133–142.
- Rocker G, Young J, Donahue M, et al. Perspectives of patients, family caregivers and physicians about the use of opioids for refractory dyspnea in advanced chronic obstructive pulmonary disease. *CMAJ* 2012; 184(9): E497–E504.
- 9. Brighton LJ, Tunnard I, Farquhar M, et al. Recommendations for services for people living with chronic breathlessness in advanced disease: results of a

transparent expert consultation. *Chron Respir Dis* 2019; 16: 1–9. DOI: 10.1177/1479973118816448.

- Goodridge D, Bandara T, Marciniuk D, et al. Promoting chronic disease management in persons with complex social needs: a qualitative descriptive study. *Chron Respir Dis* 2019; 16: 1479973119832025.
- 11. Storey S, Erbas B and Holland AE. Why do people with chronic obstructive pulmonary disease repeat pulmonary rehabilitation? Perspectives of patients and health professionals. *Chron Respir Dis* 2019; 16: 1479973118816420.
- Janaudis-Ferreira T, Tansey CM, Harrison SL, et al. A qualitative study to inform a more acceptable pulmonary rehabilitation program after acute exacerbation of COPD. *Ann Am Thorac Soc* 2019. Epub ahead of print 15 May 2019. Doi: 10.1513/AnnalsATS.201812-854OC.
- Lahham A, McDonald CF, Mahal A, et al. Home-based pulmonary rehabilitation for people with COPD: a qualitative study reporting the patient perspective. *Chron Respir Dis* 2018; 15(2): 123–130.