

What are the interventions or support resources available for patients and carers to deliver respiratory care tasks in the home setting? A systematic review

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Background: As the prevalence of respiratory diseases continues to grow, there is increasing demand and reliance on patients and carers (both paid and unpaid) to perform complex respiratory care tasks in the home setting. There is a need to understand the types of intervention and support that are available for patients and carers to deliver respiratory care tasks in the home.

Objectives: Primary aim: To identify and synthesise the evidence on the interventions or support resources that are available for patients and carers (paid and unpaid) to deliver respiratory care tasks within the home.

Methods: A comprehensive search of academic and grey literature was conducted across multiple databases, including MEDLINE, CINAHL, EMBASE, and Web of Science. Eligible studies described interventions or support resources that facilitated respiratory care in the home setting. Data extraction and quality assessment were performed using the QuADS tool for academic literature and the AACODS checklist for grey literature. A lay leader representative and a clinician were involved in this work and helped to provide key expertise and insights.

Results: The review identified 25 academic studies and 19 grey literature resources. From the academic literature, most interventions were educational programs incorporating simulation-based or practical skills training, with most studies focusing on providing support for tracheostomy care tasks. Outcomes varied and measures included caregiver confidence, competency, and hospital readmission rates. Studies focused on support for routine tasks there was limited evaluation of emergency management training. The grey literature identified support resources for home oxygen therapy, tracheostomy tasks and ventilator support tasks. General information was provided on how to manage respiratory care tasks and equipment at home safely. These were in the form of written information on webpages or PDFs available to download. Health inequalities are an exacerbating factor for respiratory conditions and negatively affect patient outcomes. However, no interventions or support resources in the included studies or grey literature materials considered any inequalities in their training interventions that set out to support with the delivery of respiratory care tasks in the home.

Conclusion: The existing training and support resources highlight potential benefits in improving self-efficacy and preparedness to perform respiratory care tasks in the home, as well as decreased emergency visits, readmissions and reduced carer burden. However, significant gaps remain in understanding long-term effectiveness of interventions. There is a need for future research to focus on developing, tailor and assessing interventions which consider the various health inequalities that patients and caregivers may face.

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A systematic review

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INTRODUCTION

- As the prevalence of respiratory diseases continues to grow, there is increasing demand and reliance on patients and carers (paid and unpaid) to perform complex respiratory care tasks in the home (Clarke et al, 2016).
- There is a need to identify and synthesise the evidence on the types of interventions and support available to help patients and carers to perform respiratory related care tasks in the home.

OBJECTIVE

- To identify and synthesise the evidence on the interventions or support resources that are available for patients and carers to deliver respiratory care tasks within the home.

METHODOLOGY

- Searches:** Academic searches conducted in MEDLINE, Webs of Science, CINAHL and Embase. Grey literature was also searched.
- Eligibility criteria:** Interventions or support resources that facilitated respiratory care tasks in the home.
- Quality assessment:** QuADS tool for academic literature and the AACODS checklist for grey literature.



RESULTS

GREY LITERATURE = 19 SUPPORT RESOURCES

Interventions and support resources for the following home care tasks:



Tracheostomy tasks



Ventilator support



Home oxygen therapy

Resources developed by the NHS & Charity organisations

Includes online information pages, instructional videos, downloadable guides, and formal training

Aimed at patients & unpaid carers. Only 1 resource available for paid carers

ACADEMIC LITERATURE= 25 QUANT STUDIES

Mostly aimed at supporting patients and unpaid carers

Educational programs with simulations/practical skills training

Health inequalities not considered in training development or delivery

Increased self-efficacy, increased competency & decreased emergency visits after interventions

Routine management training. no emergency management

CONCLUSION

- Most of the available support is aimed at patients and unpaid carers, and there is a need to develop support for paid carers.
- There is a significant gap in the available support in terms of health inequities and health inequalities. Further work needs to consider these and tailor interventions accordingly.

REFERENCES

Clarke, B. T. (2016). Home care in respiratory therapy. Canadian Journal of Respiratory Therapy: CJRT: Revue Canadienne de la Therapie Respiratoire: RCTR, 52(2), 51.