

## Supplementary Material 1



### PRISMA 2020 Checklist

Section and Topic	Item #	Checklist item	Location where item is reported
<b>TITLE</b>			
Title	1	Identify the report as a systematic review.	Title page
<b>ABSTRACT</b>			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	Abstract
<b>INTRODUCTION</b>			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	P 4-5
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	p 4-5
<b>METHODS</b>			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	p 6-7
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	p 5 and Flow chart
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	p 5 and Flow chart
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	p 5-6
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	p 6-7
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	p 6-7
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	P 6-7
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	P 6-7
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	NA
Synthesis	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics	p 6-7

Section and Topic	Item #	Checklist item	Location where item is reported
methods		and comparing against the planned groups for each synthesis (item #5)).	
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	NA
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	Tabel 1
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	P 7
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	NA
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	p 6 Table 2
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	p 6 Table 2
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	p 6 Table 2
<b>RESULTS</b>			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	p 10-15 Table 1, Table 2
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	p 6
Study characteristics	17	Cite each included study and present its characteristics.	p 10-15 Tabl1, Table 2
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	p 6-7
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	p 10-15 Table 1, Table 2
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	p-10-15 Table 2
	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	NA
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	NA
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	NA
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	NA
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	p 15 Table 2
<b>DISCUSSION</b>			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	p 16-19

Section and Topic	Item #	Checklist item	Location where item is reported
	23b	Discuss any limitations of the evidence included in the review.	p 17
	23c	Discuss any limitations of the review processes used.	p17
	23d	Discuss implications of the results for practice, policy, and future research.	p 17
<b>OTHER INFORMATION</b>			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	Abstract, p 5
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	P 5 p 24
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	NA
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	acknowledgement
Competing interests	26	Declare any competing interests of review authors.	p 21
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	Most information is to be found in the article and and s information Other information contact the author

## Supplementary Material 2

### Table listing all studies excluded after (n=104).

Reason: Commentary/ Expert report (n=11)

Reason: Studies including multiple diagnoses minority part with COPD (n=5)

Reason: Methodological limitations (n=20)

### Reason for studies excluded

Reference	Reason for exclusion
Alhaddad B, Smith FJ, Robertson T. Patients' practices and experiences of using nebuliser therapy in the management of COPD at home. <i>Open Respiratory Research</i> 2015;2.	Methodological limitations
Alton S, Farndon L. The impact of community pharmacy-led medicines management support for people with COPD. <i>British Journal of Community Nursing</i> . 2018;23.	Methodological limitations
Andersen IC, Thomsen TG, Bruun P, Bødtger U, Hounsgaard L. The experience of being a participant in one's own care at discharge and at home, following a severe acute exacerbation in chronic obstructive pulmonary disease: a longitudinal study. <i>International journal of qualitative studies on health and well-being</i> . 2017;12.	Methodological limitations
Andersen IC, Thomsen TG, Bruun P, Bødtger U, Hounsgaard L. Patients' and their family members' experiences of participation in care following an acute exacerbation in chronic obstructive pulmonary disease: A phenomenological-hermeneutic study. <i>Journal of Clinical Nursing</i> . 2017;26.	Methodological limitations
Apperson A, Stellefson M, Paige SR, Chaney BH, Chaney JD, Wang MQ, Mohan A. Facebook Groups on Chronic Obstructive Pulmonary Disease: Social Media Content Analysis. <i>International Journal Environ Research Public Health</i> . 2019;16.	Methodological limitations
Arabyat R M, Raisch D W. Relationships Between Social/Emotional Support and Quality of Life, Depression and Disability in Patients With Chronic Obstructive Pulmonary Disease: An Analysis Based on Propensity Score Matching. <i>Ann. Behav. Med</i> . 2019;53.	Methodological limitations
Barenfeld E, Ali L, Wallström S, Fors A, Ekamn, I Becoming more of an insider: A grounded theory study on patients' experiences of a person-centred e-health intervention. <i>PLoS One</i> . 2020;15.	Methodological limitations
Blackstock FC, ZuWallack R, Nici L, Lareau SC. Why Don't Our Patients with Chronic Obstructive Pulmonary Disease Listen to Us? <i>Ann Am Thorac Soc</i> . 2016;13.	Expert report
Blumenthal JA, Emery CF, Smith PJ, Keefe FJ, Welty-Wolf K, Mabe S, Martinu T, Johnson JJ, Babyak MA, O'Hayer Vf, Diaz PT, Durham M, Baucom D, Palmer SM. The Effects of a Telehealth Coping Skills Intervention on Outcomes in Chronic Obstructive Pulmonary Disease;	Methodological limitations

Primary Results from the INSPIRE-II study. <i>Psychosom Medicine</i> . 2014;76.	
Bond C S, Worswick L. Self Management and Telehealth: Lessons Learnt from the Evaluation of a Dorset Telehealth Program. <i>Patient</i> 2015;8.	Including multiple diagnoses minority part with COPD
Bonsaksen T, Fagermoen MS, Lerdal A. Trajectories of self-efficacy in persons with chronic illness: An explorative longitudinal study. <i>Psychology &amp; Health</i> . 2014;29.	Including multiple diagnoses minority part with COPD
Coventry PA, Blakemore A, Baker E, Sidhu M, Fitzmaurice D, Jolly K. The Push and Pull of Self-Managing Mild COPD: An Evaluation of Participants Experiences of a Nurse-Led Telephone Health Coaching Intervention. <i>Qualitative Health Research</i> . 2019;29.	Methodological limitations
Dieperink KB, Møller J-J k, Mikkelsen TB, Nissen, Cour KC, Rottmann N. The Danish landscape of providing support for caregivers of people with potentially life-threatening disease: A cross-sectional study among representatives of health services in Danish municipalities and hospitals. <i>Scandinavian Journal of Public Health</i> , 2024;52.	Including multiple diagnoses minority part with COPD
Fan VS, Coultas D B. Peer Support and Chronic Obstructive Pulmonary Disease Self-Management: A Promising Approach? <i>Annals of the American Thoracic Society</i> . DOI: 10.1513/AnnalsATS.202207-591ED	Commentary/ Editorial
Ferreira DH, Kochovska S, Honson A, Phillips JL, Currow DC. Two faces of the same coin: a qualitative study of patients' and carers' coexistence with chronic breathlessness associated with chronic obstructive pulmonary disease (COPD). <i>Palliative Care</i> . 2020;19.	Methodological limitations
Forough Rafii, Akbar Soleimani Babadi & Farshad Heidari-Beni (08 Mar 2023): Prevention as a prominent self-management strategy in men with chronic obstructive pulmonary disease: A qualitative study, <i>Journal of Human Behavior in the Social Environment</i> , DOI: 10.1080/10911359.2023.2185722	Methodological limitations
Fors A, Blank E, Ali, Ekberg-Jansson A, Fu M, Lindström Kjellberg I. Effects of a person-centred telephone-support in patients with chronic obstructive pulmonary disease and/or chronic heart failure-A randomized controlled trial. <i>PLoS ONE</i> . 2018;13.	Including multiple diagnoses minority part with COPD
Fratantoro M. COPD patients need social support to manage care. <i>RT for Decision Makers in Respiratory Care</i> . 2017	Commentary/ Editorial
Grifths S, Stephen G, Kiran T, Grifths OK. „She knows me best“: a qualitative study of patient and caregiver views on the role of primary care physicians follow-up post- hospital discharge in individuals admitted with chronic obstructive pulmonary disease or congestive heart failure. <i>Family Practice</i> . 2021;22.	Including multiple diagnoses minority part with COPD
Guo Su-Er, Huang Chiung-Yu, Hsu Hsin-Tien. Information needs among patients with chronic obstructive pulmonary disease at their first hospital admission: priorities and correlates. <i>Journal of Clinical Nursing</i> . 2014;23.	Methodological limitations
Göris S, Kılıç Z, Elmali F, Tutar N, Takci O. Care Burden and Social Support Levels of Caregivers of Patients with Chronic Obstructive Pulmonary Disease. <i>Holistic Nursing Practice</i> . 2016;30.	Methodological limitations

Hill K, Dolmage TE. Take a Deep Breath More Support for Noninvasive Ventilation During Exercise in People With COPD. CHEST.2021;160.	Commentary/ Editorial
Hughes S, Lewis S, Willis K, Rogers A, Wyke S, Smith L. Participants' experiences of and perceived value regarding different support types for long-term condition self-management programmes. Chronic Illness. 2021;17.	Methodological limitations
Lewis A, Dullaghan D, Townes H, Green A, Potts J, Quint JK. An observational cohort study of exercise and education for people with chronic obstructive pulmonary disease not meeting criteria for formal pulmonary rehabilitation programmes. Chronic Respiratory Disease. 2019;16.	Methodological limitations
Lavesen M, Bastrup-Madsen M K, Bove DG. A new way of organising palliative care for patients with severe chronic obstructive pulmonary disease. International Journal of Palliative Nursing 2018; 24.	Commentary/ Short report
Locke ER, Young JP, Battaglia C, Simpson TL, Trivedi R, Simons C, Fortney J C, Hebert P., Swenson ER, Edelman J, Fan V S. Fan. Care-seeking and delay of care during COPD exacerbations. Primary Care Respiratory Medicine. 2022;32.	Methodological limitations
Mackenzie Moore. Social support improves self-care by patients with chronic obstructive pulmonary disease. British Journal of Hospital Medicine. 2017;78.	Expert report/ Clinical
Mahmudah RL, Ikawa Z, Wahyono D. A Qualitative study of perspectives, expectations and needs of education in Chronic obstructive pulmonary disease. International Journal of Current Pharmaceutical Research. 2017;9.	Methodological limitations
Moriyama M, Takeshita Y, Haruta1 Y, Hattori1 N, Ezenwaka CE. Effects of a 6-Month Nurse-Led Self-Management Program on Comprehensive Pulmonary Rehabilitation for Patients with COPD Receiving Home Oxygen Therapy. Rehabilitation Nursing. 2015;40.	Methodological limitations
No Author listed. Specialist nurse support for patients with COPD cuts unscheduled acute admissions. Nursing Standard, 2016;30.	Commentary/ Expert report
No author listed. Social Support Really Helps COPD Patients. AARC Times. 2017;41.	Expert report
Sandelowsky H, Krakau I, Modin S, Ställberg B Nager A. Primary care patients with mild or stable chronic obstructive pulmonary disease need more support in disease management: a secondary analysis of a cluster randomized controlled trial. Scandinavian Journal of Primary Health Care. 2023;41.	Methodological limitations
Siltanen H, Jylhä V. Supporting the supporter: a focus on families of patients with chronic obstructive pulmonary disease. JBI Database of Systematic Reviews and Implementation Reports DOI: 10.11124/JBISRIR-D-19-00329	Commentary/ Editorial
Stoilkova-Hartmanna A., Franssena F M.E, L. Augustin I M, Woutersa E F.M., Barnard K D. COPD patient education and support – Achieving patient-centredness. Patient Education and Counseling. 2018;101.	Commentary/ Expert report

<p>Vaske I, Thöne MF, Kühl K, Keil DC, Shürmann W, Rief W, Stenzel NM. For better or for worse: a longitudinal study on dyadic coping and quality of life among couples with partner suffering from COPD. <i>Journal Behavioral Medicine</i>. 2015;38.</p>	<p>Methodological limitations</p>
<p>Vincent, E, Scullion J. Carers' experience of looking after a person with chronic obstructive respiratory disease. 2014;24.</p>	<p>Commentary/ Expert report</p>