

EXPERIENCE OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) PATIENTS IN SELF-CARE

M. Ikhsan Ghifari^{1*}, R. A. Gabby Novikadarti Rahmah², Ervina Lili Neri³, Nita Arisanti Yulanda⁴

^{1,2,3,4} Nursing Department, Faculty of Medicine, Tanjungpura University, Pontianak, Indonesia

***Correspondence:** M. Ikhsan Ghifari

Email: i1031211004@student.untan.ac.id

ABSTRACT

Self-care is a crucial aspect of COPD management, as it can improve quality of life. However, many COPD patients still face challenges in self-care due to various factors, one of which is social support. The purpose of this research is to explore in-depth the support and barriers to self-care in COPD patients. This study was a descriptive qualitative research with a phenomenological approach through in-depth interviews. Participants consisted of 6 people from RSUD Dr. Soedarso Pontianak selected by purposive sampling technique. The inclusion criteria were COPD patients diagnosed for approximately six months, able to participate in interviews, with adequate understanding of their condition, and residing in Pontianak. The exclusion criteria were patients with comorbid acute or chronic illnesses, those experiencing COPD exacerbations, or not residing in Pontianak. The research instruments used were a voice recorder (mobile phone), in-depth interview guidelines, and stationery. Data analysis used the Miles & Huberman analysis method. The study produced three main themes, namely the initial experience and process of self-care, support and expectations in self-care and barriers to self-care. This study shows that the experience of COPD patients in self-care is influenced by supporting and inhibiting factors. Supporting factors include family role support, social environment, quality and expectations of health services that help patients in maintaining health and managing symptoms. Inhibiting factors, such as environmental influences, physical limitations, limitations in medication management and lack of social support and stress that worsen the patient's condition which hinders the patient's self-care process.

Keywords: COPD; Experience; Self-Care

© 2024 The Authors. Nursing Information Journal (NIJ) Published by Center for Research and Community Service - Banyuwangi College of Health Sciences
This is an Open Access Article distributed under the terms of the [Creative Commons Attribution-ShareAlike 4.0 International License \(CC BY-SA 4.0\)](https://creativecommons.org/licenses/by-sa/4.0/), which allows others to remix, tweak, and build upon the work for any purpose, even commercially, as long as the original work is properly cited. Any new creations based on this work must be licensed under identical terms

Article History:

Received: 16 February 2025

Revised: 02 August 2025

Accepted: 14 August 2025

INTRODUCTION

Chronic Obstructive Pulmonary Disease (COPD) is a chronic, progressive respiratory disease characterized by decreased lung function and a primary symptom of shortness of breath. The condition is often exacerbated by exposure to toxic gases or particles, which can significantly impact the patient's quality of life. In addition to shortness of breath, other symptoms such as fatigue and chronic cough often prevent patients from carrying out their daily activities. Global data shows that COPD is the third leading cause of death in the world, with prevalence reaching 10.3% globally and 3.7% in Indonesia. In West Kalimantan, the prevalence of COPD

is recorded at 3.5%, with the number of cases increasing every year (GOLD 2023; Najihah and Theovena 2022).

Previous studies have shown that recurrent COPD exacerbations are associated with reduced quality of life, even in those in the early stages of the disease. Nevertheless, few studies have thoroughly investigated patients' experiences with self-care, especially in the context of West Kalimantan. In addition, symptoms such as dysphagia, sleep disturbances, and malnutrition further worsen the patient's condition. Most patients also report a significant impact of COPD symptoms on their social life, work, and daily activities (Rohmah, Amin, and Makhfudli 2020; Zeb et al. 2021). These findings underscore the importance of understanding patients' self-care experiences to improve their quality of life.

Effective COPD management requires a multidimensional approach, including prevention, symptom management, and self-care. Self-care is an important aspect of COPD control, as it can improve quality of life, reduce exacerbations, and reduce the number of emergency department visits and hospitalizations. However, many patients still face difficulties in carrying out self-care due to various factors, such as lack of knowledge, social support, or physical and psychological constraints. Along with the increasing prevalence of COPD and the chronic nature of the disease, the focus of COPD treatment has shifted from treatment and prolonging life expectancy to focus on improving quality of life, one of the dimensions of which is confidence in the ability to behave healthily. Patients with self-confidence will be more likely to perform self-care skills, so individuals with high self-care will be better able to manage their disease (Reiszadeh et al. 2022; Yulanda and Mita 2019). Optimal health support is needed to help patients understand the importance of self-care, such as medication adherence, breathing exercises, nutritional management, and smoking cessation.

The number of COPD cases At RSUD Dr. Soedarso Pontianak has increased significantly, from 140 cases in 2021 to 228 cases in 2022, reaching 69 cases in just the first two months of 2024. This increase indicates the need for serious attention to COPD management, including strengthening self-care education for patients from the Pontianak City Health Office. Therefore, this study aims to explore the experiences of COPD patients regarding supportive and inhibiting factors that influence the successful management of this disease.

METHODS

Study Design

This study used a descriptive qualitative research design with a phenomenological approach. The phenomenological approach explores the meaning and essence of human consciousness experience by highlighting the participant's point of view, the process, and the significance of the phenomenon under study. This research relies on theory as a frame of analysis to ensure the suitability of the findings with the existing context (Fiantika et al. 2022).

Setting

This research was conducted at RSUD dr. Soedarso Pontianak City was chosen based on the discovery of problems in the field, namely the lack of research on the experience of Chronic Obstructive Pulmonary Disease (COPD) patients in performing self-care in Pontianak City. Based on hospital data, there were 69 reported cases of COPD. The study lasted for one month, from early July to early August 2024, with each participant's interview duration ranging from 10-60 minutes.

Research Subject

The selection of participants in this study was based on the principles of appropriateness and adequacy, with 6 participants as recommended for IPA research. Participants were COPD patients who visited the outpatient lung clinic at RSUD Dr. Soedarso, Pontianak City. Interviews were stopped after data saturation was achieved.

Inclusion criteria included COPD patients with a disease duration of at least 6 months, being able to cooperate in interviews, having sufficient understanding of their disease, being willing to become participants, and living with family or alone. Exclusion criteria included patients with additional diseases (chronic/acute), currently experiencing flare-ups, or not residing in Pontianak.

Instruments

In this study, the researcher acted as the main instrument in data collection, using in-depth interview guidelines and tools such as voice recorders and stationery. Before the interviews, a self-validity test was conducted by trying out the interview guidelines on one individual not included in the study. The supervisor evaluated the validity test results to ensure interviewing ability and clarity of questions. The research continued after the supervisor passed the validity test.

Data Analysis

Data analysis in this study was conducted using the method Miles and Huberman (1994) that includes three main stages: (1) Data Reduction: This stage began with transcribing the interviews, summarizing the data, and extracting relevant information. The collected data was then categorized, important patterns identified, and organized into temporary themes. This process helped the researcher to focus on information that was essential and relevant to the research questions. Keywords from the interviews were used as a basis for forming categories and themes; (2) Data Presentation: The data that had been reduced was then organized systematically and descriptively. Data presentation was done with a detailed narrative to explain the themes that had been identified. This process helps to illustrate the relationship between the findings and the research context so that readers can understand the characteristics and relevance of the data in depth. (3) Inference Drawing: The researcher draws preliminary conclusions based on provisional findings once data collection is complete. These conclusions were continuously checked and evaluated throughout the analysis to ensure consistency and accuracy. The researcher also reflects on the findings, clarifies unobvious symptoms, and explores the relationships between various data to produce in-depth interpretations.

Ethical Consideration

This study has obtained ethical approval from the Ethics Committee of RSUD dr. Soedarso with number 56/RSUD/KEPK/VI/2024 on 27 June 2024. Several ethical principles were applied in this study 1) Informed Consent, participants were given an explanation of the purpose and benefits of the study, and only those who agreed signed the consent form; 2) Beneficence this study provides benefits in the form of increasing participants' knowledge about COPD self-care; 3) Non-maleficence, the study did not harm the participants, with personal questions avoided and interview times adjusted to the participants' convenience; 4) Justice, all participants were treated fairly throughout the research process; 5) Anonymity, the identity of the participants was maintained by using initials instead of names; 6) Confidentiality, participants' data, such as names and addresses, were kept confidential, and only relevant data were used for analysis.

RESULTS

Based on the results of interviews conducted by researchers about the Experience of Chronic Obstructive Disease (COPD) Patients in Performing Self-Care at RSUD dr. Soedarso Pontianak City, researchers identified the description of the interview results in 3 main themes, namely (1) Initial experiences and self-care, (2) Support and Expectations in Self-Care, and (3) Barriers in Self-Care. The themes generated by this research are discussed separately. Still, the themes are interconnected with each other to describe more deeply the Experience of Chronic Obstructive Disease (COPD) Patients in Performing Self-Care at Dr. Soedarso Hospital, Pontianak City.

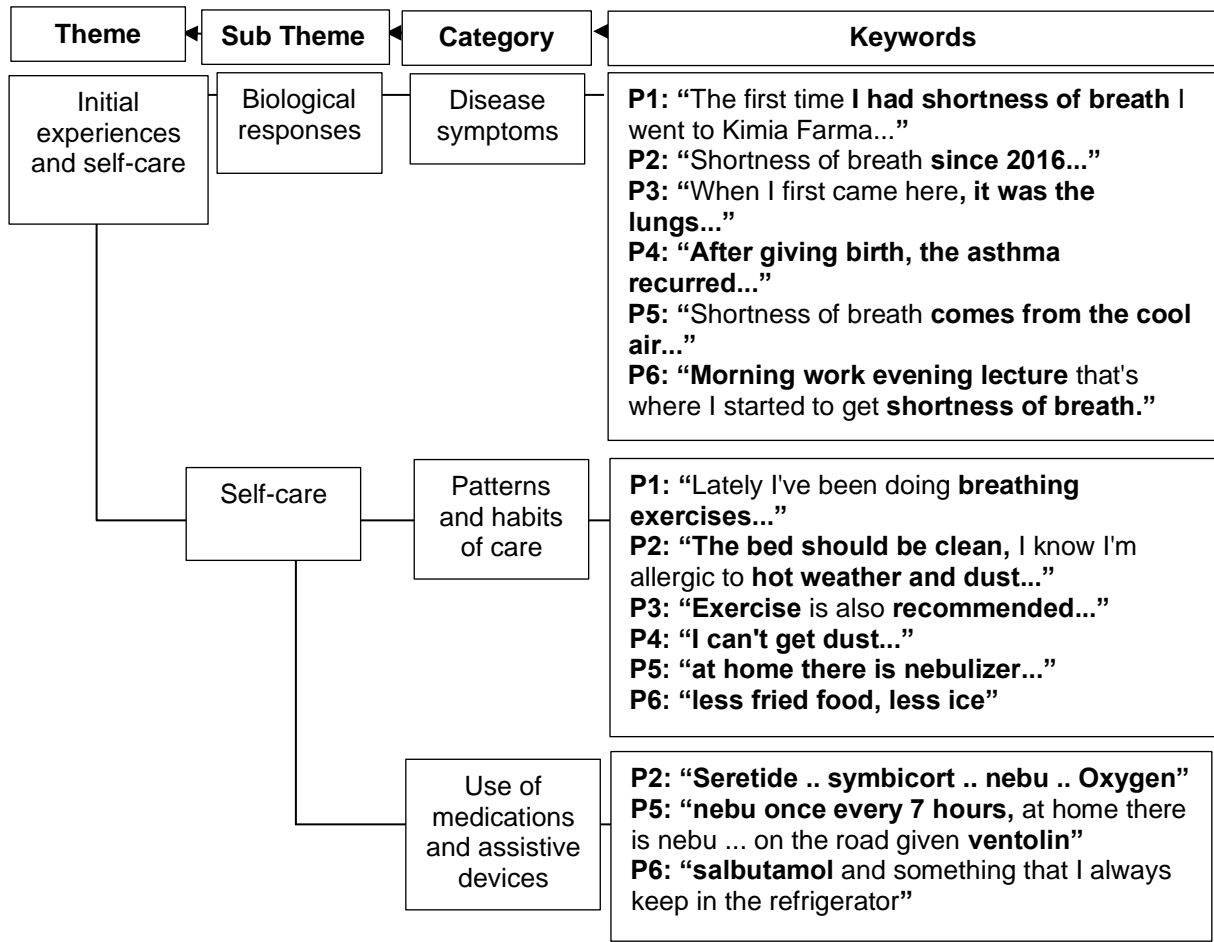


Figure 1. Schema of Theme 1: Initial Experience and Care Process

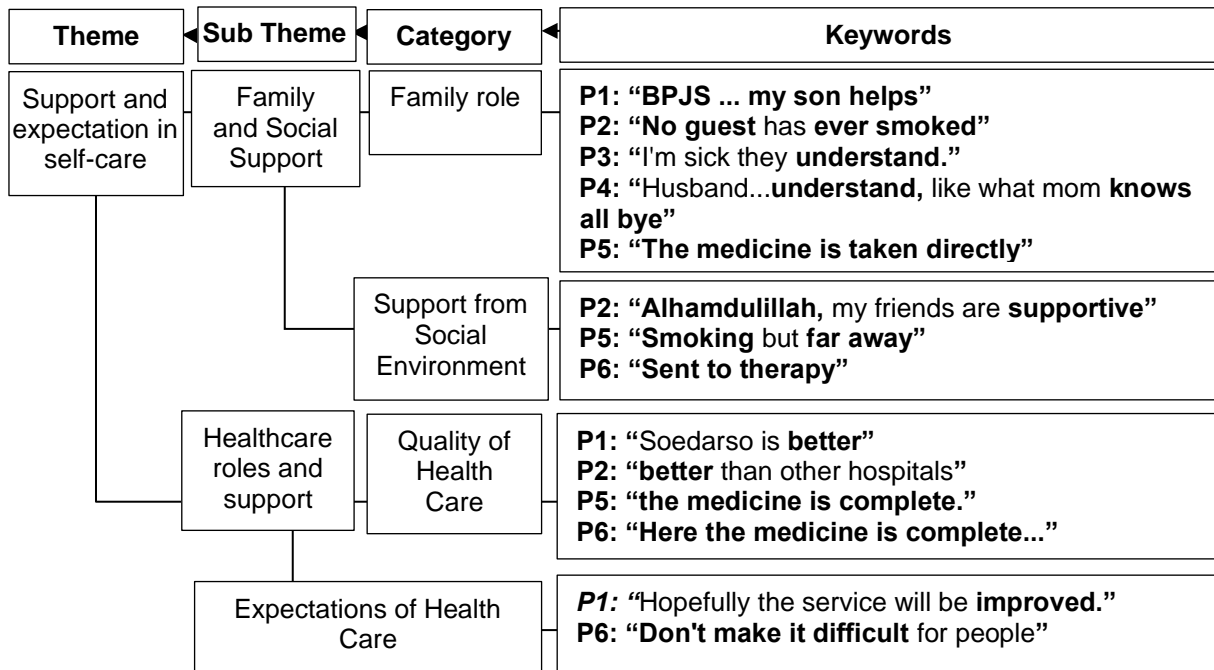


Figure 2. Schema of Theme 2: Support and Expectations in Self-Care

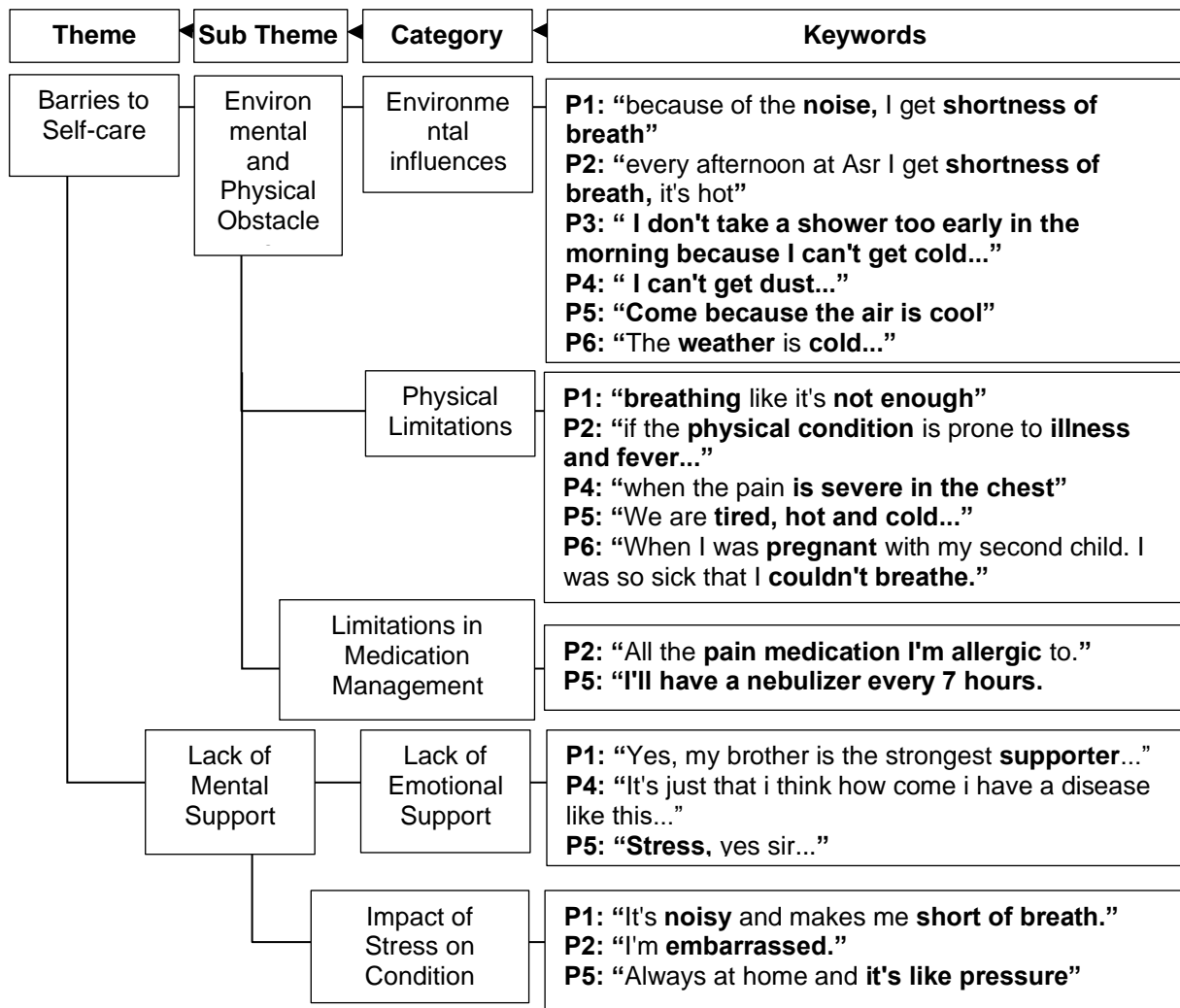


Figure 3. Schema of Theme 3: Barriers to Self-Care

Participants described the initial experience of respiratory symptoms, particularly shortness of breath, as a pivotal point that raised awareness of the need for ongoing self-care. The symptoms often appeared in specific situations such as after childbirth, strenuous activity, exposure to cold or hot air, or when exhausted. This experience forced them to start paying attention to their body condition and identify triggers for recurrence. Over time, participants developed self-care patterns that included regular breathing exercises, keeping their beds clean, avoiding dusty environments, and limiting trigger foods such as ice and fried foods. These adaptations were not only based on the advice of health professionals, but also the result of self-exploration from years of experience. They also started using assistive devices such as nebulizers, inhalers, or oxygen on a scheduled basis. Some even set usage times such as every 7 hours. In addition, they also noted the body's response to triggers and created an environment that they considered comfortable for breathing, including adjusting sleeping positions and home ventilation. All of this suggests that self-care develops as a result of a combination of symptom awareness, personal experience, and the individual's ability to adapt daily life to their chronic condition.

The support received by participants comes from various parties and is an important factor in maintaining the continuity of self-care practices. Family played a major role in providing emotional and practical support, such as helping to manage BPJS, accompanying during treatment, and understanding participants' daily needs without judgment. Some mentioned children or spouses who were very involved in encouraging adherence to therapy and the use of breathing apparatus. In addition to family, social environments such as neighbors and

friends also provided support in the form of motivation, invitations to therapy, and information on the best health services. Feeling understood and cared for socially increased their confidence in managing their disease. Participants' experiences also showed that the quality of health services was very influential. Complete facilities, fast service, and clear procedures were considered to facilitate access and increase comfort. This trust is strengthened by the consistency of services and the presence of health workers who are communicative and open to the patient's condition. On the other hand, there is still hope for health services that are more accessible, less complicated, and more friendly to chronic patients. These aspirations suggest that social and systemic support are not just complements, but essential elements in the effectiveness and continuity of long-term self-care practices.

Despite strategies and support, participants faced a number of complex and often overlapping barriers. Environmental barriers such as noise, dust exposure, extreme temperatures and poor air quality often triggered symptom recurrence. These conditions led participants to limit activities and even stop certain routines such as breathing exercises. Physical barriers were also dominant, such as body fatigue, chest pain, and severe shortness of breath when climbing stairs, working, or when pregnant. Barriers to medication management included difficulty scheduling regular therapy, dependence on devices such as nebulizers, and side effects or allergies to certain medications. In addition, psychosocial distress came in the form of shame about the condition, lack of emotional support, and stress due to household demands and economic burdens. In some cases, participants felt unable to meet the demands of long-term therapy due to mental exhaustion or frustration with a condition that was not improving. These barriers often do not exist in isolation, but rather reinforce each other and reduce participants' consistency in self-care. Therefore, self-care practices are not just a matter of willpower, but are largely determined by the extent to which individuals are able to overcome physical, emotional and environmental barriers simultaneously and sustainably.

DISCUSSION

The discussion of this study highlights the supporting and inhibiting factors in COPD patients' self-care experiences. In the first theme, the initial experience and process of self-care, it was found that symptoms such as shortness of breath and cough were the main complaints. The researcher considered that these symptoms indicate the importance of proper self-care management, such as avoiding triggering factors and maintaining respiratory stability, which aligns with the research Sari, Nugroho, and Iskandar (2021) Imamah and Utami (2022). Signs and symptoms such as productive cough and mucus hypersecretion are often a barrier to breathing for patients, so mucolytic therapy is recommended to help thin the sputum (Agustin, Inayati, and Ayubbana 2023). In addition, cold weather is known to aggravate COPD symptoms, as revealed by Lima (2023) the narrowing of the airway due to cold air, which increases the risk of hypoxia and the exacerbation of symptoms.

In terms of self-care patterns and habits, patients reported doing breathing exercises, maintaining hygiene, avoiding oily foods, and exercising regularly. These lifestyle adjustments effectively manage symptoms and improve the patient's quality of life. Clari et al. (2024) and Scoditti et al. (2019) state that regular breathing exercises increase lung capacity while exercise strengthens respiratory muscles and reduces tightness. Hygiene habits and smoke avoidance also contribute significantly to better COPD management.

Regarding drug and assistive device use, this study found that patients often used nebulizers, Ventolin, and Symbicort in daily care. Nebulizer therapy is proven effective in delivering drugs directly to the respiratory tract, with quick effects and minimal side effects, as described by Nurmayanti et al. (2019). As a bronchodilator, Ventolin helps relax airway smooth muscle, reduce spasms, and reduce mucus production, as revealed by Almubarak and Putra (2024). Symbicort, which contains budesonide and formoterol, is a highly effective anti-inflammatory and bronchodilator in COPD therapy, with efficacy dependent on the patient's inhalation technique (Farkas et al. 2019).

The results showed that support from family, social environment, quality of health services, and expectations of health services play an important role in the self-care of COPD patients. Family support, both in emotional and educational aspects, improves patients' ability to manage symptoms and undergo self-care. This aligns with the opinion that family knowledge and skills can help patients cope with symptoms and prevent complications, thereby improving the patient's quality of life. Family support also provides confidence for patients in dealing with daily routines and obstacles due to their illness (Shirvani et al. 2020).

In addition to family support, a positive social environment, such as supportive, smoke-free colleagues, motivates patients to maintain their self-care behaviors. Researchers found that this support helped patients avoid triggers that could worsen the condition, such as cigarette smoke or air pollution, and encouraged to undergo therapy. Research Shirvani et al. (2020) showed that strong social support from family and the environment contributed to better self-care behaviors, including breathing exercises and symptom management.

The quality of health services also had a significant effect on COPD patients' ability to self-care. Patients expect improved health services, especially those involving trained health workers and technology to support disease management. Kermelly and Bourbeau (2022) State Effective health services empower patients with the tools and skills necessary to adopt and maintain healthy behaviors. This is supported by Hosseinzadeh and Shnaigat (2019) emphasizing the importance of education sessions, physical activity promotion, smoking cessation counseling, and a multidisciplinary team approach in improving patients' self-care behaviors. In addition, accessible and sustainable health services, as stated Adiana (2022), are key factors in improving patient health outcomes and reducing inefficient health service utilization.

The study also revealed that barriers to self-care in COPD patients include five main categories, namely environmental influences, physical limitations, limitations in medication management, lack of emotional support, and the impact of stress on the patient's condition. The environment has a significant influence on patients' self-care ability. A clean and pollution-free environment has been shown to help reduce symptoms such as prolonged coughing and shortness of breath, as described by Ainurrachman, Lukman, and Yamin (2024). Conversely, exposure to indoor pollution, such as cooking smoke and mosquito coils, and outdoor, such as vehicle fumes, can worsen patients' conditions (Lestari and Perangin-angin 2024; Tabrani 2016). A supportive environment can naturally motivate patients to stay active and improve their quality of life.

In addition, physical limitations are also a major barrier to self-care. Respiratory distress due to COPD reduces patients' ability to perform daily activities such as dressing and cooking and reduces their overall quality of life. Some patients report difficulty getting around in bad or hot weather, exacerbating their symptoms (Sumner et al. 2023). Economic factors also affect patients' ability to access care, as suggested Adiana (2022).

Another barrier identified was limitations in medication management. Reliance on nebulizers is often necessary to manage symptoms that cannot be managed with standard inhalers (Terry and Dhand 2020). However, this dependency can be an obstacle, especially in long-term therapy. In addition, drug allergies pose a major challenge as they limit therapeutic options and increase patient anxiety, which can decrease adherence to treatment. An allergic response may require the cessation of an essential medication, which can hinder the effective management of the primary illness and negatively affect patient outcomes. In addition, concerns about potential allergic reactions in the future may cause patients to avoid taking their medications as prescribed, further reducing treatment efficacy. (Anagnostou et al. 2024; Poedjijo, Raveinal, and Elvira 2024).

Lack of emotional support also has a significant impact on patient self-care. Patients who experience stress tend to have low self-efficacy and find it more difficult to follow the treatment

plan (Sutrisno and Rondhianto 2024). Depression due to lack of emotional support can also affect a patient's understanding of their illness and decision to accept or refuse therapy (Annisa 2022). This increases the risk of symptom exacerbation and decreases their quality of life (Zohal et al. 2020).

Stress is the final factor that worsens the patient's condition. Emotional stress can exacerbate COPD symptoms such as shortness of breath, creating an ever-increasing cycle of anxiety (Benzo, Novotny, and Benzo 2022). The absence of social and emotional support harms a patient's quality of life, especially mental and physical health. Therefore, emotional support must be integrated into managing patients' care to improve their quality of life (Arabyat and Raisch 2019). One of the patient in this study state *"Since being diagnosed with this disease, I have experienced difficulty engaging in daily activities both inside and outside the home. This has led to a monotonous lifestyle, causing significant psychological burden and stress."*

This study identifies family support, healthcare access, and medical team involvement as key enablers of COPD self-care at Dr. Soedarso Hospital. Environmental challenges, physical limitations, and limited psychosocial support impede patient self-management. Addressing and resolving these factors is essential to improve COPD patients' quality of life.

CONCLUSION

This study reveals that supporting and inhibiting factors influence the experience of chronic obstructive pulmonary disease (COPD) patients when performing self-care at RSUD, Dr. Soedarso Pontianak. Family support, access to adequate health facilities, and the involvement of the medical team are the main supporting factors that help patients manage symptoms and maintain health. Families play an important role through practical assistance, such as providing nebulizers, creating a smoke-free environment, and encouraging treatment adherence. The availability of health facilities and medicines at the hospital and education from medical personnel also motivates patients to undergo more regular and effective treatment. In contrast, inhibiting factors included environmental conditions such as air pollution and cold weather that exacerbated symptoms, physical barriers such as difficulty breathing and fatigue, and lack of emotional and social support that affected patients' psychology and decreased motivation for self-care. The results of this study emphasize the importance of family support and quality health services in supporting successful self-care of COPD patients while taking into account the negative influence of environmental factors, physical limitations, and limited social support to improve patients' quality of life.

SUGGESTIONS

Educational institutions should proactively enhance nursing education and clinical training programs that focus on the care of COPD patients, emphasizing the role of family involvement and effective symptom management. Healthcare providers need to improve access to essential medications and respiratory devices, while also delivering structured self-care education through consultations and patient support groups. COPD patients are encouraged to take an active role in managing their health by practicing consistent self-care routines and fostering open communication with both family members and healthcare professionals. Researchers are encouraged to conduct studies in more varied clinical and community settings, and to examine external influences—such as environmental or socioeconomic factors—to broaden the evidence base and inform more comprehensive COPD care policies.

ACKNOWLEDGMENT

The authors would like to express their deepest gratitude to all individuals and institutions who have contributed to the successful completion of this research and the preparation of this manuscript. Thanks to My supervisors are Mrs. R.A Gabby Novikadarti Rahmah, Mrs. Ervina Lili Neri and Mrs. Nita Arisanti Yulanda for their invaluable guidance and support throughout the research process.

Our heartfelt appreciation is also extended to our colleagues and family for their encouragement and understanding, which have been instrumental in completing this work. Lastly, we acknowledge RSUD dr. Soedarso Pontianak for providing the resources and environment necessary for conducting this research.

DECLARATION OF INTEREST

The authors declare that there is no conflict of interest

FUNDING

This research was entirely self financed by the author and did not obtain any external funding.

AUTHOR CONTRIBUTION

Author 1: Responsible for the formulation of research problems, data collection, data analysis, preparation of the initial draft of the manuscript, and completion of research in accordance with the direction of the supervisor.

Author 2: Provides supervision in designing research methodology, provides input related to data analysis, and revises and evaluates the entire manuscript.

Author 3: Provides guidance in the preparation of literature reviews, assists in the preparation of discussions, and ensures the suitability of the manuscript with journal standards.

Author 4: Provide additional input for the development of research ideas, assist with final editing, and ensure the academic integrity of the manuscript.

REFERENCES

- Adiana, I. Nengah. 2022. "Hubungan Antara Tingkat Pengetahuan and Status Ekonomi Dengan Perilaku Perawatan Diri Pasien Ppok." *Caring* 6(2):35–43. doi: [10.36474/caring.v6i2.249](https://doi.org/10.36474/caring.v6i2.249)
- Agustin, Nyoman Ayu, Anik Inayati, and Sapti Ayubbana. 2023. "Penerapan Clapping and Batuk Efektif Terhadap Pengeluaran Sputum Pada Pasien Dengan Ppok Di Ruang Paru RSUD Jend. a Yani Kota Metro Tahun 2022." *Jurnal Cendikia Muda* 3(4):513–20. ISSN : 2807-3469
- Ainurrachman, Yessi, Mamat Lukman, and Ahmad Yamin. 2024. "Gambaran Intervensi Keperawatan Home-Based Walking Exercise, Pursed Lips Breathing, and Effective Cough Pada Keluarga Dengan Penyakit Paru Obstruktif Kronis (PPOK)." *SENTRI: Jurnal Riset Ilmiah* 3(3):1275--1289. doi: [10.55681/sentri.v3i3.2409](https://doi.org/10.55681/sentri.v3i3.2409)
- Almubarak, Allama Zaki, and Muhammad G. A. Putra. 2024. "Case Report of a Patient With Ineffective Breathing Pattern in Copd in the Marwah and Raudhah Rooms of Pku Muhammadiyah Hospital Yogyakarta." *JTH: Journal of Technology and Health* 2(1):23–39. doi: [10.61677/jth.v2i1.144](https://doi.org/10.61677/jth.v2i1.144)
- Anagnostou, Aikaterini, Christopher Warren, Jennifer Dantzer, and Audrey Dunn Galvin. 2024. "Patient-Reported Outcome Measures in Food and Drug Allergy." *The Journal of Allergy and Clinical Immunology in Practice* 12(10):2591–98. doi: [10.1016/j.jaip.2024.04.053](https://doi.org/10.1016/j.jaip.2024.04.053)
- Annisa, Mutiara. 2022. *Kualitas Hidup: Studi Pada Pasien Penyakit Paru Obstruksi Kronik (PPOK)*. Adab.
- Arabyat, Rasha M., and Dennis W. Raisch. 2019. "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." *Annals of Behavioral Medicine* 53(10):918–27. doi: [10.1093/abm/kaz002](https://doi.org/10.1093/abm/kaz002)
- Benzo, Maria V, Paul Novotny, and M. S. Roberto P. Benzo. 2022. "Chronic Obstructive Pulmonary Diseases : Adding Granularity of COPD Self-Management to Impact Quality of Life." *Journal of the COPD Foundation* 9(2):277–84. doi: [10.15326/jcopdf.2021.0277](https://doi.org/10.15326/jcopdf.2021.0277)
- Clari, Marco, Federica Riva-Rovedda, Valerio Dimonte, and Maria Matarese. 2024. "Self-Care Styles of Patients with Chronic Obstructive Pulmonary Disease: A Mixed Methods Case Study." *Heart & Lung: The Journal of Cardiopulmonary Adn Acute Care* 68(1):231–41. doi: [10.1016/j.hrtlng.2024.07.011](https://doi.org/10.1016/j.hrtlng.2024.07.011)
- Farkas, Árpád, Frantisek Lizal, Jan Jedelsky, Jakub Elcner, Alpár Horváth, and Miroslav Jicha.

2019. "Simulation of Airway Deposition of an Aerosol Drug in Copd Patients." *Pharmaceutics* 11(4):1–10. doi: [10.3390/pharmaceutics11040153](https://doi.org/10.3390/pharmaceutics11040153)
- Fiantika, Feny Rita, Mohammad Wasil, Sri Jumiyati, Leli Honesti, Sri Wahyuni, Erland Mouw, Imam Mashudi, Jonata, Nur Hasanah, Anita Maharani, Kusmayra Ambarwati, Resty Noflidaputri, Nuryami, and Lukman Waris. 2022. *Metodologi Penelitian Kualitatif*. Padang: Global Eksekutif Teknologi.
- Global Initiative For Chronic Obstructive Lung. 2023. *A Guide for Health Care Professionals*. Sydney: GOLD.
- Hosseinzadeh, Hassan, and Mahmmoud Shnaigat. 2019. "Effectiveness of Chronic Obstructive Pulmonary Disease Self-Management Interventions in Primary Care Settings : A Systematic Review." *Australian Journal of Primary Health* 25(3):195–204. doi: [10.1071/PY18181](https://doi.org/10.1071/PY18181)
- Imamah, Ida Nur, and Dyah Rahmawatie Ratna Budi Utami. 2022. "Perbedaan Pengaruh Kombinasi Terapi Nebuliser Dengan Batuk Efektif and Pursed Lip Terhadap Sesak Nafas Pasien PPOK." *Profesi (Profesional Islam) : Media Publikasi Penelitian* 20(1):1–16. doi: [10.26576/profesi.v20i1.98](https://doi.org/10.26576/profesi.v20i1.98)
- Kermelly, Sophie B., and Jean Bourbeau. 2022. "EHealth in Self-Managing at a Distance Patients with COPD." *Reproductive and Developmental Biology* 12(6):773. doi: doi.org/10.3390/life12060773
- Lestari, Citra, and Riska Wani Eka Putri Perangin-angin. 2024. "Penerapan Posisi Semi-Fowler and Teknik Pursed-Lip Breathing Untuk Meningkatkan Saturasi Oksigen Pada Penyakit Paru Obstruktif Kronik (PPOK) Di Ruang Cendrawasih Rumah Sakit Vita Insani Pematangsiantar Tahun 2024." *Jurnal Akper Kesdam I Bukit Barisan : Wirasakti* 09(01):54–61. E.SSN : 2528-2042
- Lima, Claudia. 2023. "COPD: Understanding the Effects of Cold Weather on the Disease and Avoiding Exacerbations." *Carenity*. Retrieved November 5, 2024 (Available from: <https://www.carenity.us/condition-information/magazine/news/copd-understanding-the-effects-of-cold-weather-on-the-disease-and-avoiding-exacerbations-1799>).
- Miles, Matthew B., and A. Michael Huberman. 1994. *Qualitative Data Analysis: An Expanded Sourcebook*. 2nd ed. Sage Publications.
- Najihah, and Estania Megaputri Theovena. 2022. "Merokok and Prevalensi Penyakit Paru Obstruksi Kronik (PPOK)." *Window of Health : Jurnal Kesehatan* 5(4):745–51. doi: [10.33096/woh.v5i04.38](https://doi.org/10.33096/woh.v5i04.38)
- Nurmayanti, Agung Waluyo, Wati Jumaiyah, and Rohman Azzam. 2019. "Pengaruh Fisioterapi Dada, Batuk Efektif, and Nebulizer Terhadap Peningkatan Saturasi Oksigen Dalam Darah Pada Pasien PPOK." *Jurnal Keperawatan Silampari* 3(1):362–71. doi: [10.31539/jks.v3i1.836](https://doi.org/10.31539/jks.v3i1.836)
- Poedjijo, Yanuar Surya Saputra, Raveinal, and Dwitya Elvira. 2024. "Effectiveness of Drug Allergy Management : A Meta-Analysis." *Bioscientia Medicina : Journal of Biomedicine & Translational Research* 8(11):5342–56. doi: [10.37275/bsm.v8i11.1115](https://doi.org/10.37275/bsm.v8i11.1115)
- Reiszadeh, Iman, Shahla Abolhassani, Reza Masoudi, and Soleiman Kheiri. 2022. "The Effect of Self-care Program Based on the Orem Self-care Model on Fatigue and Quality of Life in Patients with COPD." *Journal of Nursing and Midwifery Sciences* 9(4):241–48. doi: [10.4103/jnms.jnms_26_20](https://doi.org/10.4103/jnms.jnms_26_20)
- Rohmah, Ulfa Nur, Muhammad Amin, and Makhfudli Makhfudli. 2020. "Evidence-Based Faktor Yang Berhubungan Dengan Kualitas Hidup Pasien PPOK Stabil: A Systematic Review." *Jurnal Penelitian Kesehatan "SUARA FORIKES" (Journal of Health Research "Forikes Voice")* 11(3):233. doi: [10.33846/sf11303](https://doi.org/10.33846/sf11303)
- Sari, Devi Permata, Hary Nugroho, and Abdillah Iskandar. 2021. "Gambaran Tingkat Kecemasan Mahasiswa Fakultas Kedokteran Universitas Mulawarman Sebelum Menghadapi OSCE." *Jurnal Sains Dan Kesehatan* 3(4):482–88. doi: [10.25026/jsk.v3i4.348](https://doi.org/10.25026/jsk.v3i4.348).
- Scoditti, Egeria, Marika Massaro, Sergio Garbarino, and Domenico Maurizio Toraldo. 2019. "Role of Diet in Chronic Obstructive Pulmonary Disease Prevention and Treatment." *Nutrients* 11(6):1–32. doi: [10.3390/nu11061357](https://doi.org/10.3390/nu11061357).

- Shirvani, Nayereh Jafari, Fatemeh Ghaffari, Zahra Fotokian, and Mahmoud Monadi. 2020. "Association Between Perceived Family Social Support and Self-Care Behaviors in Elders with Chronic Obstructive Pulmonary Disease (COPD): A Medical Center-Based Study from Iran." *The Open Nursing Journal* 14:1–7. doi: 10.2174/1874434602014010001.
- Sumner, Jennifer, Anjali Bundele, Ravi Shankar, Lin Siew Chong, Yanika Kowitlawakul, and Amartya Mukhopadhyay. 2023. "Living with COPD: Understanding Patient Experiences through the Lens of Photovoice." *BMC Pulmonary Medicine* 23:433. doi: 10.1186/s12890-023-02738-4
- Sutrisno, and Rondhianto. 2024. "Stress Coping Framework as an Effort to Improve Quality of Life in Patients with Chronic Obstructive Pulmonary Disease: A Literature Review." *MAHESA: Malahayati Health Student Journal* 4(8):3297–3311. doi: [10.33024/mahesa.v4i8.15169](https://doi.org/10.33024/mahesa.v4i8.15169)
- Terry, Paul D., and Rajiv Dhand. 2020. "Maintenance Therapy with Nebulizers in Patients with Stable COPD: Need for Reevaluation." *University of Tennessee Medical Center* 6(2):177–92. doi: [10.1007/s41030-020-00120-x](https://doi.org/10.1007/s41030-020-00120-x).
- Widiawati, Sayu, Ida Ayu Agung Dewi Sawitiri, and I. Wayan Aditya Nugraha. 2024. "Pemberdayaan Keluarga Pasien Dalam Perawatan Penyakit Paru Obstruktif Kronik (PPOK) Di Rumah." *Marwadewa Minesterium Medical Journal* 3(1):45–49. doi: [10.22225/wmmj.3.1.2024.45-49](https://doi.org/10.22225/wmmj.3.1.2024.45-49)
- Yulanda, Nita Arisanti, and Mita. 2019. "Pengaruh Modul Supportive Educative Terhadap Perawatan Diri Pasien Penyakit Paru Obstruktif Kronik." *Journals of Ners Community* 10(02):157–68. doi: [10.32831/jik.v8i2.251](https://doi.org/10.32831/jik.v8i2.251)
- Zeb, Hussan, Ahtisham Younas, Israr Ahmed, and Anwar Ali. 2021. "Self-Care Experiences of Pakistani Patients with COPD and the Role of Family in Self-Care: A Phenomenological Inquiry." *Health and Social Care in the Community* 29(5):e174–83. doi: [10.1111/hsc.13264](https://doi.org/10.1111/hsc.13264)
- Zohal, Mohammad Ali, Sima Rafiei, Nafise Rastgoo, and Sanaz Jamshidi. 2020. "Exposure to Stressful Life Events among Patients with Chronic Obstructive Pulmonary Disease : A Prospective Study." 377–82. doi: [10.5603/ARM.a2020.0122](https://doi.org/10.5603/ARM.a2020.0122)

BIOGRAPHIES OF AUTHORS



M. Ikhsan Ghifari is a student of S1 Nursing Study Program at Tanjungpura University, Pontianak, Indonesia. His ongoing research focuses on the respiratory system, specifically the experiences of patients with Chronic Obstructive Pulmonary Disease (COPD) in performing self-care. She has a special interest in improving patients' quality of life through education and community support approaches. The author is also active in student organization activities and community service programs in the health sector.

✉: i1031211004@student.untan.ac.id

🆔: <https://orcid.org/0009-0002-9950-8340>



R.A. Gabby Novikadarti Rahmah Currently, serves as a lecturer in the Nursing Department at Tanjungpura University, she actively teaches various courses, including Adult Nursing, Emergency Nursing, Critical Care Nursing, Oncology Nursing, and Complementary Therapies. His commitment to implementing the Tri Dharma of Higher Education is reflected in his dedication to providing quality education. She is also involved in various research that focuses on Medical Surgical Nursing, with expertise in the areas of Diabetes Mellitus, Chronic Kidney Disease and HIV nursing care. She has published several articles in national journals and international proceedings. A part from that, She is active in community service and is often invited as a speaker at seminars. Through his work, she hopes to provide benefits to nursing students and lecturers, as well as contribute to the development of the nursing profession in Indonesia.

✉: vARloFYAAAAJ&hl

🆔: <https://orcid.org/0000-0001-6351-0487>

✉: ra.gabbyn@ners.untan.ac.id



Ervina Lili Neri is a lecturer at Tanjungpura University Nursing Department, Department of Medical-Surgical Nursing. As a form of implementing the TriDharma of Higher Education in the field of education, the author actively teaches in Adult Nursing, Emergency Nursing, Critical Nursing, and Nursing Pharmacology courses. In the field of research, the author has been involved in various studies that focus on Medical Surgical Nursing with expertise in Cardiovascular System and Chronic Renal Failure. The author has also published several articles in national journals. The author also actively performs community service and becomes a speaker in the field of Medical-Surgical Nursing.

: [KZ2qOLAAAAAJ&hl](https://scholar.google.com/citations?hl=id&user=KZ2qOLAAAAAJ&hl=id)

: <https://orcid.org/000-0002-1149-2691>


: [GSN-5155-2022](https://www.researchgate.net/profile/GSN-5155-2022)

: ervinalilineri@ners.untan.ac.id



Nita Arisanti Yulanda is a lecturer at the Tanjungpura University Nursing Department, especially the Department of Medical-Surgical Nursing and is currently pursuing a doctoral degree at Airlangga University. Her scientific focus is on Adult Nursing, Emergency Nursing, Critical Nursing, especially those related to the respiratory system. As an educator who has the task of carrying out teaching, research and community service. Some research has been carried out that focuses on Medical-Surgical Nursing, especially on tuberculosis nursing, neurological nursing, and palliative nursing. The results of the research have been published in scopus indexed national and international journals as well as published as textbooks. In addition, she was also invited as a training speaker for hospital nurses and involved as a presenter as a promotive and preventive effort from tuberculosis. through this role, she is expected to be able to provide benefits for students, colleagues and the community in general to improve health in Indonesia.

: [OLOR-ZkAAAAJ&hl](https://scholar.google.com/citations?hl=id&user=OLOR-ZkAAAAJ&hl=id)

: <https://orcid.org/0000-0002-6789-231X>

: nita.arisantiyulanda@ners.untan.ac.id