Pak. J. Chest Med. 2024;30(02)

Original Article

journal homepage: https:/www.pjcm.net/

Pakistan Journal of Chest Medicine

Official journal of Pakistan Chest Society

Assessing the Impact of Stigma on Self-Esteem among patients with Chronic Obstructive Pulmonary Disease

Abdul Wahid[1], Sassi Manzor Hassan[2] ✉, Zafar Abdul Nabi[2], Faroz Khan[2], Shabir Ahmed[2]

[1]Department of Medicine, Jhalawan Medical College, Khuzdar - Pakistan

[2]Department of Medicine, Mekran Medical College, Turbat - Pakistan

Corresponding Author:
Sassi Manzor Hassan
Department of Medicine,
Mekran Medical College,
Turbat - Pakistan
Email: sassimanzorhassan3@gmail.com

Article History:

Received:	Oct 15, 2023
Revised:	Feb 26, 2024
Accepted:	Mar 20, 2024
Available Online:	June 02, 2024

Author Contributions:
AW conceived idea, SMH drafted the study, AW ZAN collected data, FK SA did statistical analysis and interpr-etation of data, SMH ZAN critical reviewed manuscript. All approved final version to be published.

Declaration of conflicting interests
The authors declare that there is no conflict of interest.

How to cite this article:
Wahid A, Hassan SM, Nabi ZA, Khan F, Ahmed S. Assessing the Impact of Stigma on Self-Esteem among patients with Chronic Obstructive Pulmonary Disease. Pak J Chest Med. 2024;30 (02):183-189

ABSTRACT

Background: Chronic Obstructive Pulmonary Disease (COPD) is a chronic lung condition affecting the ability to breathe normally, with millions of people suffering around the globe. Alongside physical handicaps, many patients encounter stigma, which can adversely affect the self-esteem and mental wellness of the patients.

Objective: To study the relationship between stigma and self-esteem among patients with Chronic Obstructive Pulmonary Disease.

Methodology: This cross-sectional study was conducted at District Headquarter Hospital (DHQ), Turbat and DHQ Hospital Khuzdar, from January 2023 to July 2023. A total of 220 COPD patients were included in this study, focusing on the relationship of stigma with self-esteem among the patients of Chronic Obstructive Pulmonary Disease (COPD). The descriptive statistics used in this study included percentages, averages, and frequency distributions in summary for demographic and health characteristics among participants. The p-value of 0.05 is considered as a statistical significance point. SPSS version 22 was used to analyze the data.

Results: Nearly half (47.7%) of the patients sensed moderate stigma; 24.1% experienced major stigma. A majority possessed low self-esteem (30.5%), while only 19.5% reported high self-esteem. A highly negative correlation was observed between stigma and self-esteem ($r = -0.58$, $p < 0.001$), indicating that self-esteem decreases as feelings of stigma increase.

Conclusion: Stigma greatly affects self-esteem among patients with COPD. Awareness, emotional support, and reducing misconceptions would help to improve their quality of life. Further research is needed to formulate applicable strategies for stigma reduction.

Keywords: COPD; Stigma; Self-Esteem; Mental Health

Introduction

Chronic obstructive pulmonary disease (COPD) is a long-term lung disease that makes breathing difficult for people. Emphysema and chronic bronchitis are examples of COPD, which injure the lungs and deteriorate their respiratory capacity in the long term.[1] Millions of its sufferers around the world, leading to critical health conditions. Some of the common symptoms of COPD are persistent coughing, wheezing, shortness of breath, lethargy, and repeated attacks of lung infections.[2] With time, normal routine activities, such as walking, climbing stairs, and sometimes even talking, can be difficult due to this issue, and most patients require continuous health care, medications, and sometimes oxygen therapy to breathe more comfortably.[3]

People who are suffering from COPD often undergo stigma along with physical challenges.[4] Many people wrongly believe that only smokers can develop COPD. However, smoking can largely contribute to the development of COPD. Still, exposure to air pollution, inhalation of harmful gases through materials from workplaces, and genetics can also lead to COPD. Thus, most patients might feel ashamed, guilty, or embarrassed about their condition.[5] They avoid talking about their illness and will not seek any medical help because they feel judged at the end of the day. Most COPD patients also suffer from high emotional pressure and socially induced isolation, which can further affect their ability to manage the disease effectively.

Stigma can also affect the patient's self-esteem and a person's worth evaluation. An individual constantly stigmatized, blamed, or judged may believe himself to be at fault.[6] This, in turn, can lead to low confidence, depression, withdrawal from social activities, and even depression. As a result, many COPD patients become isolated, avoid social contact, and suffer emotional disturbances, which in turn reduces their ability to cope with their condition or remain compliant with their medical therapy.[7] Although the psychological effects of COPD stigma are tremendously important in determining patients' overall quality of life, they are often grossly underestimated. COPD is indeed a very serious health problem. Still, existing studies on this condition primarily focus on its physical aspect, focusing little on the psychological and social factors.[4-6] It is important to address these psychological outcomes, as this mental stress can further aggravate disease progression and impede treatment compliance. Understanding stigma affecting self-esteem might help incorporate a broader spectrum of care interventions to address the healthcare team's physical and emotional needs.

The current study aims to investigate the primary relationship that exists between stigma and self-esteem among patients suffering from chronic obstructive pulmonary disease (COPD). This would create awareness and ultimately enable COPD patients to feel confident with their status and uplift their mental well-being, thereby improving their lives. Reduction of stigma and provision of emotional support would greatly increase the capacity of the patients to cope and maintain a positive outlook towards their future.

Objective

To examine the relationship between stigma and self-esteem among patients with chronic obstructive pulmonary disease.

Methodology

A cross-sectional study was conducted in District Headquarter Hospital, Turbat and DHQ Hospital Khuzdar, to understand the association between stigma and self-esteem among patients suffering from Chronic Obstructive Pulmonary Disease (COPD). The study was conducted from January 2023 till July 2023. Data collection occurred at a single point in time to examine how stigma impacted the self-esteem of affected individuals. A total of 220 patients suffering from COPD were included in this study.

For study purposes, inclusive and exclusive criteria were followed. The inclusion criteria included patients suffering from COPD, 18 years and older, and willing to give informed consent. Certain exclusion criteria were put in place to enhance the reliability of the study. Persons with the following conditions were excluded: cognitive impairment or mental illness that would compromise the ability to understand and respond to a questionnaire; persons who were critically ill or admitted to hospital at the time of data collection; persons who refused to provide consent or withdrew from the study at any point; and persons who had a serious chronic illness that would interfere with the study findings. These criteria ensured that only those who could give a valid and truthful report of their experiences were enrolled.

Data was collected using a structured questionnaire to capture all relevant aspects of the study. The questionnaire had three major sections. The first section included basic sociodemographic and health-related characteristics such as age, gender, educational level, smoking history, COPD duration, and other associated health problems. The participants were asked in the second section about stigma: how often they had felt judged, blamed, or excluded because of their condition, which might impact their psychological well-being. Finally, self-esteem was measured in the third section with an established scale like the Rosenberg Self-Esteem Scale, which was used to measure the participants' overall confidence and self-image. The questionnaire was made available to the participants per their stated preferences to promote accessibility: they could either fill

it out themselves or have a trained researcher ask them the questions through face-to-face interviews.

Collected data was accurately entered into SPSS (version 22) for analysis. Descriptive statistics in the form of percentages, averages, and frequency distributions were used to summarize participants' demographic and health-related characteristics. A correlation test was conducted to test the association of stigma with self-esteem, particularly whether those claiming greater stigma measured lower self-esteem. More advanced statistical analysis was undertaken to study the strength of the relationship while accounting for other confounding variables like age, severity of COPD, and social support. A p-value of less than 0.05 was taken for tests of statistical significance to ensure the results were not occurring by random chance.

Ethical approval from the Mekran Medical College Ethical Committee was obtained for the study. Written informed consent was obtained from all participants after they had been well-informed about the purpose of the study. Names and personal details of the participants were removed from the data to protect their privacy and confidentiality. Participation was voluntary, and involved participants could leave the study at any time without implications.

Results

This study included 220 COPD patients**.** Majority of the cases 60.0% were male (Figure 1).

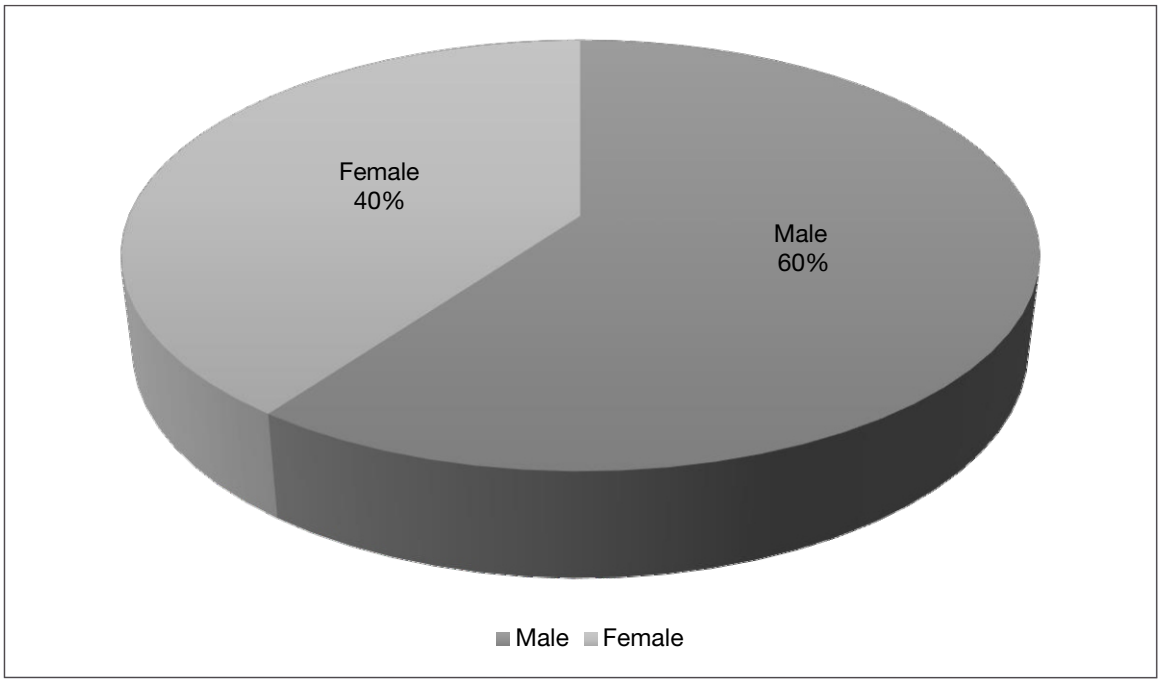

Figure 1. Gender distribution of study cases

Most participants (45.5%) were between 41 - 60 years old, followed by those over 60 years (40%) and a smaller group (14.5%) aged 18 - 40 years**.** Among study cases, 72.3% were married. Illness duration of study cases was also different and most of the study cases (47.3%) were duration of 5 to 10 years. Smokers were 34.5% and 46.7% had no education (Table 1).

When examining stigma levels among COPD patients, we found that 28.2% experienced low stigma, 47.7% reported moderate stigma, and 24.1% faced high stigma. This indicates that nearly half of the participants felt a moderate level of stigma, which could have significant effects on their mental health and social well-being (Table 2).

When measuring self-esteem in COPD patients, we found that 30.5% had low self-esteem, 50% had moderate self-esteem, and only 19.5% reported high self-esteem. This indicates that around 80% of patients struggled with self-esteem issues, which may be influenced by their illness and the stigma they experience (Table 3).

Results showed a clear link between stigma and self-esteem in COPD patients. Among those who experienced high stigma, 68.2% had low self-esteem, whereas with low stigma level, 12.5% reported low self-esteem and 30.4% reported high self-esteem. Statistical analysis revealed a negative correlation between stigma and self-esteem ($r = -0.58$, $p < 0.001$), indicating that as stigma increases, self-esteem tends to decrease (Table 4).

When analyzing education level, the results showed that Patients with no formal education had the highest stigma

Table 1. Baseline characteristics of study Participants

Characteristic	Category	Percentage %	Frequency (n)
Age Group (Years)	18-40	14.5%	32
	41-60	45.5%	100
	>60	40.0%	88
Marital status	Married	72.3%	159
	Unmarried	27.7%	61
Duration of illness	<5 years	33.2%	73
	5–10 years	47.3%	104
	>10 years	19.5%	43
Smoking history	Non-Smoker	65.5%	144
	Smoker	34.5%	76
Employment status	Employed	41.8%	92
	Unemployed	58.2%	128
Education Level	Primary	30.0%	66
	Secondary	12.4%	27
	Higher	10.9%	24
	None	46.7%	103

levels (62.5% reporting moderate or high stigma). Higher education was associated with lower stigma and higher self-esteem, with only 9.1% of higher-educated patients experiencing high stigma and 35.6% reporting high self-esteem (Table 5). ANOVA revealed a significant difference in stigma levels across education categories ($F = 10.89$, $p < 0.001$). Tukey's post hoc test confirmed that individuals with no education had significantly higher stigma than those with secondary or higher education ($p < 0.01$).

A multiple linear regression model was performed to assess the predictors of self-esteem. Stigma level was the strongest predictor ($\beta = -0.52$, $p < 0.001$), confirming that higher stigma leads to lower self-esteem. Education level was also a significant predictor ($\beta = 0.26$, $p = 0.004$), indicating that higher education is associated with better self-esteem. Duration of illness showed a minor impact on self-esteem ($\beta = -0.18$, $p = 0.02$), with longer illness duration slightly reducing self-esteem. Smoking history was not a significant predictor ($p = 0.08$), further suggesting that self-esteem issues are more linked to stigma than smoking status. The model explained 38.2% of the variance in self-esteem ($R^2 = 0.382$).

One-way ANOVA comparing self-esteem across stigma levels showed a significant difference ($F = 14.62$, $p < 0.001$), confirming that higher stigma is associated with lower self-esteem. Independent t-test comparing self-esteem levels between employed and unemployed patients found a statistically significant difference ($p = 0.027$), with unemployed patients reporting lower self-esteem. Education vs. Stigma (Chi-square test) showed a significant association ($\chi^2 = 18.42$, $p < 0.001$), confirming that education level plays a key role in reducing stigma.

Discussion

Stigma is an important factor in human life in many cases. During different diseases, stigma also plays a main role, and with the presence or absence of stigma, disease may

Table 2. Stigma Levels Among COPD Patients

Level of Stigma	Frequency (n)	Percentage
Low	62	28.2
Moderate	105	47.7
High	53	24.1

increase or decrease. Like other diseases, COPD patients also face severe stigma due to their disease.[8] Different studies have been conducted on this important topic in different parts of the world.[9-11] In the present study area, there were also patients with COPD who faced severe stigma, depression, and other different psychiatric issues. So, this study was conducted to determine the relationship between stigma and self-esteem in patients with COPD, assessing the extent to which perceived stigma impacts their psychological well-being and quality of life.

The present study's findings revealed that nearly half of the participants (47.7%) experienced moderate stigma, while 24.1% reported high-level stigma. Moreover, low self-esteem was present in 30.5% of patients, while only 19.5% of patients reported high self-esteem. The

Table 3. Self-Esteem Levels among COPD Patients

Self-esteem Level	Frequency (n)	Percentage (%)
Low	67	30.5
Moderate	110	50.0
High	43	19.5

relationship between stigma and self-esteem was negative and significant ($r = -0.58$, $P<0.001$), meaning self-esteem decreased as stigma increased. The findings suggest that stigma is often seen among patients with COPD and might affect their psychological welfare.

The study findings align with prior works investigating the stigma associated with chronic illnesses. Different studies conducted by Halding et al. 2011 and Berger et al. (2011) reported that 50% of COPD patients felt stigmatized due to their symptoms and oxygen dependence, which is slightly higher than our study's moderate stigma group.[12,13] Johnson et al. (2007) similarly reported that 26% of COPD patients felt high levels of stigma, which corresponds closely with our 24.1% high-stigma category.[14] The self-esteem levels identified in this study are also in accordance with previously reported ones. Williams et al. (2019) found that 33% of COPD patients suffered from low self-esteem, which is comparable to our figure of 30.5%.[15] In addition, Halding et al. (2011) also found that among those COPD patients who felt socially excluded, 70% had low self-esteem. Likewise, our findings indicate that 68.2% of those patients who felt a high level of stigma also had low self-esteem.[16] Furthermore, Brown et al. (2015) noted that COPD patients who are more likely to perceive stigma are likely to exhibit higher levels of depression and anxiety

Table 4. Association between Stigma and Self esteem

Stigma Level	Low Self-Esteem (%)	Moderate Self-Esteem (%)	High Self-Esteem (%)
Low	12.5%	57.1%	30.4%
Moderate	28.3%	51.7%	20.0%
High	68.2%	24.1%	7.7%

Table 5. Effect of Education Level on Stigma and Self-Esteem

Education Level	High Stigma (%)	Low Self-Esteem (%)	High Self-Esteem (%)
None	62.5%	49.8%	10.2%
Primary	48.3%	38.5%	15.4%
Secondary	31.4%	22.7%	24.5%
Higher Education	9.1%	12.3%	35.6%

symptoms, thus reinforcing the psychological consequences of such stigma.[17] In further evidence, a study by Ahmad et al. (2020) found that social support plays an essential role in lessening the stigma's adverse effects on self-esteem, emphasizing community and healthcare interventions.

These findings bear significant implications for health professionals and public health policymakers. Stigma is, therefore, a major public health issue requiring urgent intervention, given that this study finds almost 72 percent of COPD patients present with moderate-to-high stigma. Healthcare professionals need to address stigma by providing some psychological support to their patients through counseling or possibly cognitive-behavioral therapy to enhance their capacity to bear the emotional burden of their condition. On the other hand, public awareness campaigns aimed at dispelling myths about COPD and fostering inclusive attitudes toward people with the disease should be mounted. By reducing stigma, we can help patients feel better about themselves, make them more willing to seek medical help without fear of judgment, and improve their overall health.

Thus, even if the research study provides important insights and lessons that will be significant in future findings, it still has some important limitations. The statistical analysis sample was adequate, although it could be less representative of a wider demographic of COPD patients concerning geographic or socioeconomic groups associated with them. Self-reported; e.g., someone could add causes of the personal social and other motivations for the bias of data input because of patient pressure in self-reporting. Future researchers should enlist and increase their samples in future work and use qualitative methods, such as interviews, to gain a deeper understanding of patient experiences with stigma and self-esteem.

Thus, recommendations are made. The first is to integrate mental health care with COPD management. The next is to have public health education that will reduce stigma among the people and health care providers. Further research is needed on how stigma evolves for COPD patients and the means of its reduction. Thus, a change in stigma always involves boosting self-esteem since mental health will also improve overall well-being.

Conclusion

This study clearly shows that stigma fundamentally impacts the self-esteem and overall well-being of people with COPD. Many feel judged, blamed, or misunderstood, which diminishes confidence and makes it harder for them to seek help. This requires education, awareness, and compassionate care. Health professionals need to provide these patients with emotional support. Society needs to engage in eradicating all associated myths and misconceptions about COPD. With a more empathetic and supportive atmosphere, we will better help COPD patients feel valued, empowered, and able to manage their condition with dignity and confidence.

References

1. Prasad B. Chronic obstructive pulmonary disease (COPD). Int J Pharm Res Tech. 2020;10(1):67-71.
2. Mahmud T. Chronic obstructive pulmonary disease: a common disease with vague concept among medicine trainees. Pak J Chest Med. 2012;18(3).
3. Miravitlles M, Ribera A. Understanding the impact of symptoms on the burden of COPD. Respir Res. 2017;18(1):67.
4. Woo S, Zhou W, Larson JL. Stigma experiences in people with chronic obstructive pulmonary disease: an integrative review. Int J Chron Obstruct Pulmo Dis. 2021;16:1647-59.
5. Jerpseth H, Knutsen IR, Jensen KT, Halvorsen K. Mirror of shame: patients' experiences of late-stage COPD. A qualitative study. J Clin Nurs. 2021;30(19-20):2854-62.
6. Koh WM, Abu Bakar AI, Hussein N, Pinnock H, Liew SM, Hanafi NS, et al. Sociocultural influences on asthma self-management in a multicultural society: a qualitative study amongst Malaysian adults. Health Expec. 2021;24(6):2078-86.

7. Mathioudakis AG, Ananth S, Vestbo J. Stigma: an unmet public health priority in COPD. Lancet Respir Med. 2021;9(9):955-6.
8. Johnson JL, Campbell AC, Bowers M, Nichol AM. Understanding the social consequences of chronic obstructive pulmonary disease: the effects of stigma and gender. Proc Amer Thoracic Soc. 2007;4(8):680-2.
9. Rose S, Paul C, Boyes A, Kelly B, Roach D. Stigma-related experiences in non-communicable respiratory diseases: a systematic review. CRD. 2017;14(3): 199-216.
10. Brighton LJ, Chilcot J, Maddocks M. Social dimensions of chronic respiratory disease: stigma, isolation, and loneliness. Curr Opin Support Palliat Care. 2022;16(4):195-202.
11. Woo S, Zhou W, Larson JL. Stigma experiences in people with chronic obstructive pulmonary disease: an integrative review. Int J Chronic Obstr Pulm Dis. 2021:1647-59.
12. Berger BE, Kapella MC, Larson JL. The experience of stigma in chronic obstructive pulmonary disease. West J Nurs Res. 2011;33(7):916-32.
13. Johnson JL, Campbell AC, Bowers M, Nichol AM. Understanding the social consequences of chronic obstructive pulmonary disease: the effects of stigma and gender. Proc Amer Thoracic Soc. 2007;4(8):680-2.
14. Ninot G, Moullec G, Desplan J, Prefaut C, Varray A. Daily functioning of dyspnea, self-esteem and physical self in patients with moderate COPD before, during and after a first inpatient rehabilitation program. Disabil Rehabil. 2007;29(22):1671-8.
15. Brown RL. Perceived stigma among people with chronic health conditions: the influence of age, stressor exposure, and psychosocial resources. Res Aging. 2015;37(4):335-60.
16. Halding AG, Heggdal K, Wahl A. Experiences of self-blame and stigmatisation for self-infliction among individuals living with COPD. Scand J Caring Sci. 2011;25(1):100-7.
17. Ahmad S, Ismail AI, Zim MA, Ismail NE. Assessment of self-stigma, self-esteem, and asthma control: a preliminary cross-sectional study among adult asthmatic patients in Selangor, Malaysia. Front Public Health. 2020;7:420.