RESEARCH
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SELF-MANAGEMENT REQUIREMENTS OF COPD PATIENTS ATTENDING PULMONARY OUTPATIENT CLINICS

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Abstract
Introduction: Chronic obstructive pulmonary disease (COPD) is acknowledged worldwide as a major non-communicable disease (NCD) that leads to a gradual deterioration in health. It represents a substantial burden on healthcare systems worldwide, including in India. Methodology: A descriptive research study was carried out to evaluate the self-care needs of COPD patients attending the pulmonary OPD at Himalayan Hospital in Dehradun district, Uttarakhand. The study involved 100 participants, selected through purposive sampling, with data gathered using a self-structured questionnaire checklist. Result: The Study findings shows that all the study participants maintaining oral hygiene and adequate nutrition. The majority of study participants reported symptoms: 73% had a cough, 66% had mucus sputum, 56% experienced chest congestion, and 63% reported fatigue. Majority study participants were not able to do self-care like bathing regularly, light exercises, rest, diaphragmatic breathing, expulsion of sputum. Conclusion: The study was concluded that majority study participants were not able to do self-care like bathing, exercise, rest and expulsion of sputum etc. So, during the patients visit in OPD, nurses can teach about importance of hygienic care, light exercises, diaphragmatic breathing and techniques of sputum expulsion easily to all.
Keywords- Self-care needs, COPD, Nutrition, Regular Bath.

INTRODUCTION

Globally Chronic Obstructive Pulmonary Disease (COPD had been identified to be one of the major causes for having an increase in the rate of mortality as well as morbidity. It has also been approximated to be the sixth leading reason of mortality in the year 2019.[1] Approximately 3.23 million people have died from COPD, with nearly 90% of these deaths in individuals under the age of 70 occurring in low- and middle-income countries.[2]

The 2030 Agenda for Sustainable Development and the WHO Global Action Plan for the Prevention and Control of Noncommunicable Diseases (NCDs) both address COPD. To improve NCD management in primary healthcare settings, WHO developed the Package of Essential Noncommunicable Disease Interventions (PEN). This package includes modules on healthy lifestyle counseling, such as smoking cessation and self-care, as well as guidelines for the evaluation, diagnosis, and treatment of chronic respiratory diseases, including asthma and COPD.[2.]

In India, COPD is currently the second leading cause of death, with non-communicable diseases accounting for three of the top five causes of death as of 2016. The prevalence of COPD ranged from 2% to 22% in men and from 1.2% to 19% in women. In the Empowered Action Group (EAG) States, which include Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh, Odisha, Rajasthan, Uttar Pradesh, and Uttarakhand, COPD is the fourth most common cause of years lost to premature death.[3]

In India, an extended population study conducted at sixteen different centres reported an average COPD prevalence of 3.5 percent. Tobacco smoking was identified as the leading cause of COPD.[4] Chronic respiratory diseases accounted for 7% of deaths and 3% of disabilities in Uttarakhand. Estimated incidence rates ranged from 2 to 22 percent for men and from 1.2 to 19 percent for women. The prevalence of COPD increased to 6.8% in 2016.[5]

To highlight the growing burden of chronic obstructive pulmonary disease (COPD), the global initiative to combat obstructive lung disorders, led by the National Heart, Lung, and Blood Institute, aims to reduce morbidity and mortality rates.[6]

Selfcare is occurring as a complicated scenario in the world in consideration to both households and selves which is influenced by various common subjective characteristics and its financial responsibility was one of the main determiners considering the same.[7]

Self-management is the ability of individuals to manage symptoms, treatments, physical and psychosocial consequences, and lifestyle changes associated with living with a chronic condition (Lorig & Holman, 2003).[8]. For COPD patients, self-management is pivotal in optimizing health outcomes, reducing exacerbations, hospitalizations, and

improving overall quality of life (Effing et al., 2016). Pulmonary outpatient clinics serve as essential settings where COPD patients receive ongoing care and support, making it crucial to understand their self-management needs in this context.[9]

As a researcher the need of self-care need assessment that is from where the need for self- management among the COPD patient was raised and several studies came up with the conclusion that self -management needs to be encouraged by especially focusing on the breathing techniques for reducing the dyspnoea during respiratory disease. Some deep breathing exercises can also be effective for reducing the same. That is why, this study also focuses on assessing the need for self-care of COPD patients and to find the related associations with demographic variables.

METHODOLOGY

A descriptive research study was undertaken to assess the self-care needs of COPD patients attending the pulmonary OPD at Himalayan Hospital in Dehradun district, Uttarakhand. The study included 100 participants selected through purposive sampling. Data were collected using a self-structured questionnaire checklist designed to evaluate the self-care needs of COPD patients.

After obtaining the permission from the Institutional Ethical Committee and Chief Medical superintendent of hospital and informed consent was obtained from all study subjects, data were collected by using the self-structured questionnaire checklist.

RESULT

SECTION I: Distribution of Socio-Demographic Profile Distribution: Frequency(f) and Percentage (%)

Table 1: Distribution of Socio-Demographic Profile Distribution: Frequency(f) and Percentage (%) (N=100)

Variable	Category	Frequency (f)	Percentage (%)
Age	40-60 year	84	84.00
	60-80 Year	16	16.00
Marital status	Married	100	100.00
Residence area	Urban	35	35.00
	Semi-urban	26	26.00
	Rural	39	39.00
Occupation	Private Job	36	36.00
	Government Job	20	20.00
	Farmer	36	36.00
	Homemaker	8	8.00
Family type	Nuclear family	14	14.00
	Joint family	65	65.00
	Extended family	21	21.00
Income	15000-25000	28	28.00
	26000-40000	42	42.00
	41000-60000	19	19.00
	>60000	11	11.00
Diet	Vegetarian (Veg)	8	8.00
	Non- Vegetarian (Non- Veg)	86	86.00
	Eggetarian	6	6.00
Religion	Hindus	81	81.00
	Muslims	12	12.00
	Sikhs	7	7.00
Ventilation	Door to door ventilation	32	32.00
	Door to Window Ventilation	68	68.00
Kitchen area	Separate kitchen	88	88.00
	Within living room	12	12.00
Fuel	Wood	39	39.00
	Gas	61	61.00

Table 1 illustrates the demographics and characteristics of the participants. The majority, 84 participants (84%), were aged between 40-60 years, while 16 participants (16%) were aged 60-80 years. In terms of residence, 39 participants (39%) were from rural areas, 35 (35%) were from urban areas, and 26 (26%) were from semi-urban areas. Employment status revealed that 36 participants (36%) had private jobs or were farmers, 20 (20%) had government jobs, and 8 (8%) were homemakers. Family structure showed that 65 participants (65%) lived in joint families, 21 (21%) in extended families, and 14 (14%) in nuclear families.

Regarding income, 42 participants (42%) had an income between 26,000-40,000 INR, 28 participants (28%) had an income between 15,000-25,000 INR, 19 participants (19%) earned between 41,000-60,000 INR, and 11 participants (11%) had an income above 60,000 INR. Dietary habits showed that 86 participants (86%) were non-vegetarians, 8 (8%) were vegetarians, and 6 (6%) were eggetarians. Religious affiliation revealed that 81 participants (81%) were Hindus, 12 (12%) were Muslims, and 7 (7%) were Sikhs.

Regarding ventilation, 68 participants (68%) had door-to-window ventilation, while 32 (32%) had door-to-door ventilation. Kitchen arrangements showed that 88 participants (88%) had separate kitchens, and 12 (12%) had kitchens in their living rooms. Fuel usage indicated that 61 participants (61%) used gas, while 39 (39%) used wood.

SECTION II: Assessment of self-care need of patients with COPD.

This Fig 1 indicates the self-care challenges faced by patients: 79% were unable to bathe regularly, 71% could not perform light exercise or rest adequately, 55% struggled with diaphragmatic breathing, and 75% were unable to perform chest physiotherapy for sputum expulsion.

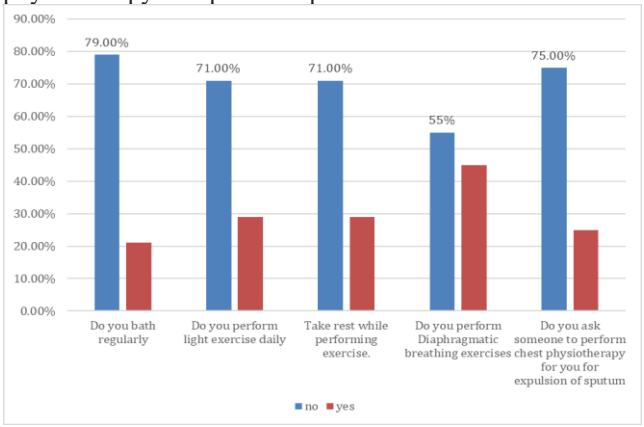

Fig. 1 self-care needs of patients

DISCUSSION

In summary, the study revealed that all patients maintained oral hygiene practices such as brushing their teeth and gargling, and all patients received sufficient nutrition. These findings are supported by Riley M et al. (2021), who also reported that all patients maintained satisfactory oral health with no complaints[10]. In a separate study conducted by Nguyen et al. (2020), it was reported that 74.4% of participants were diagnosed as malnourished, with 81.5% experiencing unintentional weight loss attributed to COPD.[11] The findings underscore the complex and multifaceted nature of self-management requirements among COPD patients attending pulmonary outpatient clinics. Tailored education programs that address individual patient needs and preferences are essential for enhancing self-efficacy and improving health outcomes (Zwerink et al., 2014)[12]. Integrated care models that facilitate collaborative decision-making and ongoing support from healthcare providers are critical in empowering patients to manage their condition effectively (Bourbeau et al., 2017)[13]. Furthermore, addressing psychosocial aspects of COPD through counseling and peer support programs can alleviate emotional distress and enhance coping mechanisms (Nguyen et al., 2017)[11].

CONCLUSION

The study was concluded that all the study participants maintaining oral hygiene and adequate nutrition. The majority of study participants experienced the following symptoms: 73% had a cough, 66% had mucus sputum, 56% had chest congestion, and 63% experienced fatigue. Majority study participants were not able to do self-care like bathing, exercise, rest and expulsion of sputum etc. So, during the patients visit in OPD, nurses can teach about impotence of hygienic care, light exercises**,** diaphragmatic breathing and techniques of sputum expulsion easily to all.

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