The obstacles encountered by COPD patients about quitting smoking

Cavusoglu F.[1], Beser A[2], Kılınc O.[3]

1. Ondokuz Mayıs University, Faculty of Health Science, Department of Public Health Nursing Samsun, Turkey
2. Koç University, Faculty of Nursing, Department of Public Health Nursing İstanbul, Turkey
3. Dokuz Eylul University, Faculty of Medıcıne, Internal Medicine Department of Chest Diseases İzmir, Turkey

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ABSTRACT

Purpose: To determine the obstacles encountered by chronic obstructive respiratory disease (COPD) patients when quitting smoking.
Materials and methods: Phenomenological research design was used in this study. A total of 20 smoker COPD patients chosen with purposive sampling constituted the universe of this study. Data were collected through the in-depth interview method using semi-structured interview forms. Analysis of the data was performed with inductive analysis using the content analysis method.
Results: The challenges encountered by COPD patients when quitting smoking consist of 3 main themes and sub-themes including "İndividual specific challenges, environmental and social challenges and addiction/life with cigarettes".
Conclusions: This study revealed the individual, environmental-social and physical, psychological and social challenges in relation to addiction encountered by COPD patients when quitting smoking. Patients should be informed about the relationship between COPD and smoking through trainings, behaviours of individuals about smoking cessation should be determined and accordingly necessary actions should be taken in line with the motivational interview principles and families be included in these actions.
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***Corresponding author:**
Ondokuz Mayıs University, Faculty of Health Science, Department of Public Health Nursing
55020 Atakum / Samsun, Turkey
e-mail: figencavusoglu55@hotmail.com
Tel.: +90 362 3121919-6359; Fax: +90 362 4576926

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INTRODUCTION

Chronic obstructive respiratory disease (COPD) is among the most important causes of mortality and morbidity in around the world, causing an ever-increasing economic and social burden [1]. According to WHO 2014 data, COPD ranked fourth among the causes of death with 5.1% and is expected to rank third with 8.6% by 2020, whereas in Turkey, it is reported to be ranking third [2,3].

The most important risk factor of COPD is smoking with 80-90% [1,4,5]. While almost half of smokers develop chronic bronchitis, 15-20% of these develop COPD with the interaction of genetic susceptibility and negative environmental factors [4,6-8]. In addition to active smoking, mother's smoking and passive smoking are also important risk factors [4,9-11]. Smoking cessation is an important step in COPD treatment [12-15]. Evidence-based researches supported this and showed that a treatment approach combining psychological and pharmacological interventions is the best method [16-18]. However, these studies also showed that COPD patients continued smoking and the rate of smoking was high among these patients [19-21]. Studies revealed that although aware of its harmful effects, patients continue smoking, the rate of smoking was high for these patients compared with the general population and these patients had low levels of cessation [21-26].

While some smokers quitted in their first try, successive relapses and remissions were observed in most [27]. Thus, the objective of the treatment is to support patients to quit smoking and prevent them from taking up smoking again. For this purpose, the transtheoretical model is frequently used in smoking cessation attempts. The model advocates that behavior change is a process, and to ease the change, the stage of change the individual is in should be determined and interventions should be planned accordingly [28]. The use of the transtheoretical model in this study contributed to finding out the challenges experienced by patients interviewed in terms of cessation according to their stage of change and to the better planned application of all nursing interventions. Nurses have active roles in the processes of protection from addiction, treatment and rehabilitation. It could be said that they are at an important point within the health team in finding out risky groups, maintaining continuity in care and in integrated approaches to individuals. Nurses can support patients, increase their motivation and create social awareness within the addiction process by planned interventions. A large number of studies are needed to be able to determine the content of studies to be conducted. Thus, qualitative studies are needed to find out why COPD patients continue smoking or why their smoking cessation attempts fail [29]. Thus, individuals' barriers in smoking cessation can be found and more effective and more successful initiatives can be applied in the long run with this information. However, it is remarkable that the number of studies in this field in Turkey is not sufficient. Thus, the objective of this study is to find out the challenges encountered by COPD patients when quitting smoking

MATERIALS AND METHODS

Sample of the research

In this phenomenological study, the criterion sampling method, a purposive sampling method, was used. Criterion sampling means to research all the situations meeting a series of criteria defined beforehand [30]. The sample of the study consists of 20 patients admitted to the Chest Diseases and Chest Surgery Hospital, chest diseases polyclinic, within the dates the study was conducted. The number of samples was not designated initially, but when the concepts that could be the answer to the research question began to be repeated (saturation point) with similar answers, the interviews were ended. The study used the individual in-depth interview method.

Inclusion criteria were;

- Voluntary participation
- To understand and speak Turkish
- To have no hearing or speaking problems
- COPD diagnosis
- Being an active smoker
- Being >40
- Living in Samsun
- To accept the interviews be recorded (with a voice recorder)

Data Collection Tools

An introductory information form and a semi-structured interview form were used in the study. The introductory information form consisted of sociodemographic characteristics of COPD patients (name, surname, communication information, age, gender, education, marital status, number of children, number of cigarettes smoked a day and total period of time spent smoking), whereas the semi-structured interview form consisted of open-ended questions to find out the challenges experienced by COPD patients in smoking cessation. The questions were edited in line with the views of three experts. During the interviews, additional questions were used to explain, enlighten and give details when necessary [30].

Data collection

The research was conducted with patients who agreed to participate, between the dates July 27, 2015 and March 10, 2016. The patients were informed that the interviews would be recorded and could be ended if requested. The interviews were conducted face-to-face with the patient in a quiet and

suitably lightened and aired polyclinic room of the hospital using a voice recorder (Philips). A pre-interview was conducted with one patient to test comprehensibility, the process of interview and whether questions were fit for the purposes of the research. The pre-interview duration was 40 minutes, and the data of the 52-year-old patient who smoked 15-24 cigarettes a day for a period of ≥30 years were not included in the analysis. The interview time was about 36.70±16.66 (min=13.42; max=84.24) minutes.

Data evaluation

The content analysis method was used for data analysis, which consists of the steps of coding data, finding themes, organizing codes and themes, defining findings and interpreting findings, respectively [30]. The data recorded were documented in writing, main and sub-themes were created, and results were discussed with 3 researchers expert on qualitative research, and a consensus was reached. The researcher received a PhD course about qualitative research methods.

Validity and reliability

Evaluation of qualitative researches requires criteria different from and more flexible than the common criteria of quantitative researches [30]. The criteria recommended by Lincoln and Guba [31] were taken for the validity and reliability of the study (Only Table 1 can be enough to write)

Table 1. Concepts of validity in qualitative studies

In qualitative studies	Internal	External
Validity	Credibility	Transferability
Reliability	Consistency	Confirmability

Source: Guba and Lincoln, 1985

Validity

Credibility; expresses to what extent findings and results reflect what the participants said [32]. For this, all interviews were recorded, observations were noted and in-depth focused data collection and expert analysis methods were used with additional questions. Interviews were ended when no new data came. During the evaluation process, 3 researchers expert on qualitative research, independent from the researcher, reached a consensus in forming all the categories and explaining the data for investigator triangulation. For data triangulation, studies conducted with different people in different places were compared with the present study [32].

Transferability is the research results creating data that can be applied to other social environments with similar characteristics. Detailed description and purposive sampling methods were recommended to be used in testing [30]. This study used the detailed description method and purposive sampling. Detailed and correct information was given about all stages.

Reliability

Consistency is behaving similarly in all stages of the study. It reveals whether the researcher was consistent in research activities from the beginning to the end [30]. To ensure consistency, same questions and the same recording device were used. Analyses were assessed by more than one researcher to increase the rate of acceptance.

Confirmability can be used instead of objectiveness [31]. All the stages of the research were assessed by the advisor faculty member and the suitability of the judgments, comments and recommendations to the raw data was confirmed. Data collection tools, raw data, codes during the analysis stage and all other materials are reserved for confirmability.

Research ethics

Approval was taken from the University's of Clinic Researches Ethical Board (26.06.2015, B.30.2.ODM.0.20.08/1808 number). Patients were informed about the objective of the study, and verbal consents were taken.

RESULTS

Patients' average age was 59.15±11.95 (min= 40; max=84), and 60% were male. 70% were primary school graduates, 70% were married, 90% had children, and 70% had 1-3 children. 40% smoked <15 cigarettes a day, whereas 35% smoked 15-24 cigarettes a day. 75% had been smoking for ≥30 years.

The average interview time was 36.70±16.66 minutes.

According to the stages of the transtheoretical model, 85% were in the contemplation stage, 10% in the pre-contemplation stage and 2% in the preparation stage.

While writing down patients' expressions, descriptive information was given at the end of the sentence in parentheses about the number, gender, age, number of cigarettes smoked in a day and the duration of smoking in order to indicate which patient the information belonged to.

The challenges encountered by COPD patients when quitting smoking

The challenges encountered by patients were grouped under four main themes and sub-themes (Only Figure 1 can be enough to write).

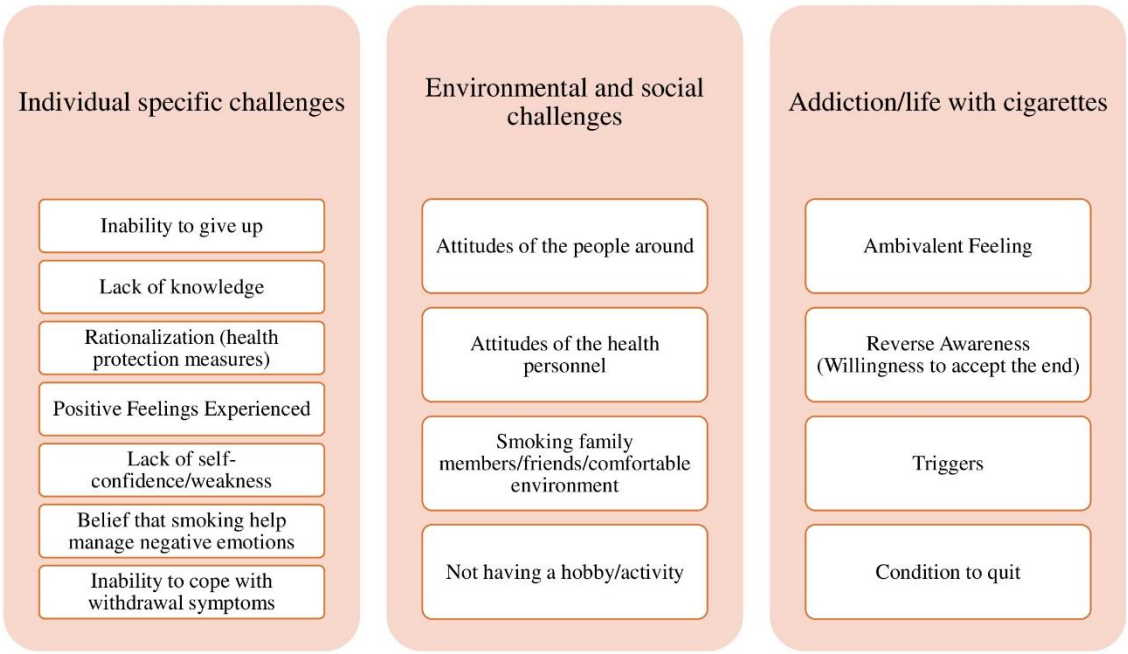

Figure 1. Main and sub-themes related to the obstacles encountered by COPD patients about quitting smoking

Individual specific challenges

Seven sub-themes were found under this theme: *"inability to give up, lack of knowledge, rationalization/health protection measures, positive feelings experienced, lack of self-confidence/ weakness, belief that smoking helps manage negative emotions and inability to cope with withdrawal symptoms"*

Inability to give up

The interviews revealed that while some of the patients never attempted to give up smoking, some never thought about giving up and some restarted after a short cessation. They stated they restarted smoking due to reasons such as not being able to say "no" to friends, the encouraging effects of friends, a significant stress they experienced, work load and the inability to cope with symptoms of deprivation.

"I never attempted to give up because I don't want to. I never thought of quitting despite risks of miscarriage and excessive bleeding during pregnancy. My doctor was begging and telling me to cut down on to five or six at least thinking of the baby. Despite this, I was smoking one or one and a half packet. (2nd Patient, Female, A46, ≥25, ≥30).

Lack of knowledge

Some of the patients did not know and were not aware and some had recently learned about the association between smoking and COPD.

"I never think about the association between smoking and COPD. I don't know where I got this disease from. I didn't see smoking worsen my disease either…(20th Patient, Male, A66, <15, ≥30).

Rationalization (Health Protection Measures)

Patients were trying to preserve their health status by trying to eat healthily, smoking cigarettes with less nicotine and not inhaling the smoke completely.

"…I don't inhale deeply, I don't smoke when I am standing or when I'm hungry. Maybe these have caused me to live so far. Maybe we are saving the lungs this way." (19th Patient, Male, A73, 15-24, ≥30).

Positive feelings experienced

Patients expressed that they loved smoking; smoking pleased them, took away their sadness, helped them relax and was their friend.

"…I feel happy at night that in the morning I will have breakfast and then smoke. I can't sleep without smoking. In short, I love smoking." (5th Patient, Female, A53, 15-24, ≥30).

Lack of self-confidence/weakness

Patients did not feel self-confident about smoking cessation and stated they had a weak willpower.

"…I can't be at peace about smoking, smoking always outweighs." (10th Patient, Male, A64, <15, ≥30).

Belief that smoking helps manage negative emotions

Patients were found to use smoking in managing negative emotions. It was found they believed smoking decreased, relieved and remediated stress.

"…smoking makes me relax…it makes me feel good when I am sad." (7th Patient, Male, A64, <15, ≥30).

Inability to cope with withdrawal symptoms,

Patients could not cope with symptoms of deprivation during the period of cessation and restarted smoking.

"…I feel very bad when I quit, I can't sleep. I feel very uncomfortable, I toss and turn in bed…that bad smoking smell is so good to me… I couldn't cope with these, I went to the park and lit a cigarette. Aaaaaaaahhhhh." (17th Patient, Female, A64, <15, ≥30).

Environmental and social challenges

Four sub-themes were found under this theme: *"attitudes of the people around, attitudes of the health personnel, smoking family members/friends/comfortable environment, not having a hobby/activity".*

Attitudes of the people around,

Patients complained about insufficient social support and stated that people close to them did not want them to smoke, reproached them for smoking and thought they were reluctant to give up.

"…we have little social support, not much interest. All my children keep to themselves, my wife is dead. No one cares about me." (14th Patient, Male, A68, ≥25, ≥30).

Attitudes of the health personnel

Patients' rejection to give up smoking despite health personnel's warnings caused the doctor to reject to treat the patient. This showed an adverse effect and caused patients to continue smoking and even some to increase the number of cigarettes.

"…my doctor said he would never examine me again if I continued smoking. He said "you can never come and see me". Of course, he is doing his job; it is up to the patient to take his advice. I am still smoking" (6th Patient, Female, A48, ≥25, ≥30).

Smoking family members/friends/comfortable environment

Most of the patients had family members and friends who were smoking, which influenced the process negatively.

"… Friends around you smoke. During a period I had quitted, when I was with friends, they said 'come on, light one', I couldn't resist and smoked one. Then I continued…" (19th Patient, Male, A73, 15-24, ≥30).

One of the patients stated she can smoke more at home and she could even easily smoke anywhere in the house.

"since I can't smoke comfortably at work, I compensate at home. For example, if I smoke 15 cigarettes at work, I smoke 1,5-2 packets at home. I smoke in every room. I don't go out the balcony especially to smoke." (2nd Patient, Female, A46, ≥25, ≥30).

Not having a hobby/activity,

Patients stated being retired and not having a hobby caused them to feel empty and smoke.

"…. I need to get back work. I feel empty. Consequently, I smoke more." (16th Patient, Male, A60, ≥25, ≥30).

Addiction/life with cigarettes

Four sub-themes were found under this theme: *"ambivalent feeling, reverse awareness (willingness in accepting the end), triggers and condition to quit".*

Ambivalent feeling

The study revealed that patients had ambivalent feelings; while they hated smoking on the one hand, they stated they took pleasure in smoking and it was good for their stress.

"…in fact, I do want to give up but then I think about how I can handle the stress at home and I smoke in the balcony even in winters getting cold, then I say to myself that I won't change for the better" (9th Patient, Male, A63, ≥25, ≥30).

Reverse awareness (willingness to accept the end)

Although patients knew the negative effects of smoking on their health and were afraid of being diagnosed with cancer, they continued smoking.

"I have early phase COPD, and I am moving forward. Although I know this, unfortunately I continue smoking" (15th Patient, Female, A42, 15-24, 15-29).

Triggers

Factors such as being obstinate, drinking coffee, eating and prohibitions were found to be triggers for smoking.

"…Cigarette comes to my mind as soon as I start drinking. Similarly, smoking comes to my mind also when I drink coffee. I always smoke with coffee" (8th Patient, Male, A66, 15-24, ≥30).

Condition to quit

When patients were asked about the most important reasons that would cause them to give up, they stated reasons such as their dead spouse coming and asking them to stop smoking, having grandchildren, giving up alcohol or having a stroke.

"…for example, if my dead wife rose from dead, I would give up …" (3rd Patient, Male, A84, <15, 15-29).

DISCUSSION

The results of this study presented the challenges experienced by COPD patients in smoking cessation. Similar results can be observed when previous qualitative studies with COPD patients and other individuals are examined.

Individual specific factors

In the sub-theme "inability to give up" it was found that some patients did not consider smoking cessation, while some failed to give up. Valera et al. [33] and Eerd et al. [22] presented how difficult it was to give up and the lack of faith. Reasons why patients restarted were also similar with the literature. A stressful or saddening event or friends' influence caused patients to restart [29]. Most of the individuals in this sub-theme were in the contemplation stage according to the transtheoretical model. Individuals in this stage generally don't want to think about the advantages of giving up smoking. The thought "I can never give up" or the recurrent state of restarting can be caused by knowing the difficulty of the process or by environmental experiences.

Another sub-theme was the "lack of knowledge" and patients did not have sufficient knowledge about COPD, effects of smoking and prognosis of the disease. The reason behind this can be the fact that since patients were younger compared to other patients, they hadn't experienced the negative effects of smoking on COPD seriously yet. Similarly, the study by Bethea et al. [34] revealed that patients had limited knowledge about COPD and the patient population consisted mostly of individuals aged 50 or above. In the same study, it was found that patients thought they were old, they would die anyway and it was not important to give up smoking in the long run. These results were supported by the results of the study by Lundh et al. [35]. Such statements of patients showed that they were in the precontemplation stage. In parallel, patients may have had developed a defense mechanism in relation to the continuation of smoking and an attitude as to not care about the disease. In the study by Schofield et al., a patient explained the reasons for continuing smoking as the lack of smoking history in the asthma patients within the family [36]. This may be caused by the persons' efforts to find a reason for their harmful behavior and relieve themselves. Nevertheless, in this study, patients stated that although they continued to smoke, they showed healthy behaviors to protect themselves from the negative effects of smoking. This can be explained by rationalization, one of the defense mechanisms. Acting such, patients believe they protect their health and try to make others believe in this as well.

The greatest challenge in smoking cessation is the positive feelings experienced. These are the pleasure-inducing effect, decreasing anxiety and providing companion and are in parallel with the literature [22,29,37,38]. Stress management is observed in various studies as another individual barrier [39,40-45]. In low socio-economic level societies, smoking rates are higher [46] and these groups prefer smoking in managing stress. Patients described in this study smoking as a way to control anger and giving a break to life.

In the "lack of self-confidence/weakness" sub-theme, patients emphasized that their self-confidence was low, their will was weak and stated that one needed first to give up smoking mentally. Other studies also supported this result [29,35,37]. Feeling of self-confidence is a motivating factor in smoking cessation treatment approach [47]. However, the worry to be unable to cope with symptoms of deprivation and strong nicotine addiction can endanger the treatment. It should be emphasized that this situation is related to the physiological dimension of addiction and that symptoms of deprivation should be assessed independently from willpower. Individuals' feelings of "incompetency" should be decreased. It should be stated that supporting symptoms of withdrawal with suitable pharmacotherapy approaches increased the success of cessation [48].

Environmental and social elements

One of the most important challenges is the presence of smokers around the individual and their attitudes. Family's advice and prohibitions can cause greater obstinacy and may lead to the temptation of prohibitions. Other qualitative studies also showed that having friends who smoke is a barrier to smoking cessation [37,49]. The presence of a smoker close to the patient can make it more difficult for the patient to struggle with the decision and can be a trigger factor. Buczkowski et al. [50] stated this was a reason for relapse, and the study by Ögel revealed

that individuals preferred to become friends with smokers and even refused to be friends with people who did not allow them to smoke in their houses [51]. Persistent behaviors of friends during the process of cessation, a higher acceptance level of smoking compared to other substances and attitudes of people supporting the perception "no harm in only one cigarette, and both smokers and non-smokers die" can be considered as barriers to cessation. According to the transtheoretical model, these barriers can be valid for individuals in both the pre-contemplation and contemplation stages.

Addiction

Another challenge is strong nicotine addiction. The ambivalent feeling, which is one of the sub-themes of the addiction theme, is the inability to give up smoking despite wishing to do so. This describes the individuals in the contemplation period. In fact, ambivalent feeling is a condition aimed to be manifested in patients in order to realize behavioral changes according to the model [52]. Most of the patients interviewed were found to have this feeling. The reasons behind this may stem from the lack of sufficient faith and motivation to quit smoking despite knowing the process caused by the present illness. Although some of the patients had advanced COPD and were aware of what would happen and had lost relatives due to lung cancer, they continued to smoke. Wilson et al. [52] found that although patients were aware of everything, they considered quitting wasn't worth it since their illness was at an advanced stage. In the study by Eerd et al., although patients had been diagnosed with and treated for cancer, they restarted smoking [22]. A patient's continuation to smoke despite knowing its dangers can be explained with the concept of addiction. We can understand from studies that cigarette addiction is a strong one and the process of cessation is much more difficult than it is considered to be.

CONCLUSIONS

The smokers and especially for individuals in the pre-contemplation stage, basic trainings can be organized about what COPD is, its reasons, process of treatment, consequences of treatment, association between the disease and smoking and expected recovery when patient gives up smoking and educational booklets enriched with visual expressions or videos can be prepared to make up for patients' lack of information. Trainings given at the right time with repetitions, follow ups with home visits and nursing interventions based on the transtheoretical model and formed according to the individual's change stages can increase the efficiency of smoking cessation. Increasing patients' self-confidence can be targeted by using the motivational interview technique. Including relatives in the cessation intervention and getting good results can be considered as the secondary gain of the interventions. Relapses that may occur during the process of cessation should not be assessed as failure, the process of change should be restarted, reasons should be investigated, interventions should be re-planned and change in behaviors should be ensured.

This qualitative study can be conducted with COPD patients living in different regions to find out similarities and differences between barriers, and cultural factors can be studied for future research.

Conflicts of interest

There is no conflict of interest between any of the authors.

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