


The experience of continued smoking after stroke in Korean males: A qualitative study

Jung Hee Youn¹ | Sujin Shin² 

¹Division of Nursing, Ewha Seoul Hospital, Seoul, Republic of Korea

²College of Nursing, Ewha Womans University, Seoul, Republic of Korea

Correspondence

Sujin Shin, College of Nursing, Ewha Womans University, 52 Ewhayodae-gil, Seodaemun-gu, Seoul 03760, Republic of Korea.

Email: ssj1119@ewha.ac.kr

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Abstract

Aim: This study aimed to identify the nature and meaning of continued smoking in male stroke patients based on a deep understanding of their lived experiences.

Design: Phenomenological qualitative methodology.

Methods: In total, 10 male stroke patients participated in this study. We used purposive sampling for recruitment. Data collection was performed through in-depth interviews and analysis through van Manen's methodology.

Results: Five essential themes were derived from the analyses and described participants' experiences with continued smoking, as follows: "Natural relapse into smoking," "Behaving like a healthy person," "Believing that smoking will not be a problem," "Finding consolation in smoking behaviour," and "Consoling oneself by the rationalization of smoking behaviour."

Conclusion: The results showcased the need for the development of a smoking cessation educational programme tailored for male stroke patients who have perceptions towards being "like healthy people" after early recovery and who think that smoking is not a problematic behaviour. Participants' reports underpinned the necessity for these programmes to have contents focused on the transformation of patients' awareness toward their own health status.

KEYWORDS

behaviour, experience, interpretative phenomenology, men's health, stroke

1 | INTRODUCTION

The number of patients who need sustainable care after a stroke diagnosis is increasing along with the increase in the survival rate of stroke patients, thereby necessitating the development of a strategic approach to prevent stroke recurrence. This is important because, compared with the prognosis of an initial stroke, stroke recurrence has a poorer prognosis (Mohan et al., 2011). Moreover, according to recent international reports, 3.1% of stroke patients experience another stroke within 1 month, 1.1 to 7.8% within 1 year,

26.4% within 5 years and 39.2% within 10 years (Allen et al., 2010; Lee et al., 2016b; Mohan et al., 2011).

Although smoking is one of the major causes of initial and recurrent cerebral accidents and is associated with higher initial and secondary stroke rates (Park et al., 2015), the proportion of people suffering from serious diseases caused by smoking remains high (de Almeida et al., 2014). Based on a follow-up investigation, 71% of the participants who had a stroke attempted to quit smoking within three years, only 30% succeeded and 10% subsequently relapsed within 1–3 years (Ives et al., 2008). These results illustrate

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a common situation experienced in clinical practice: very low success rates for patients who attempt to quit smoking after having a stroke.

In this topic, the Korean Stroke Society has been shown to provide ongoing educational guidelines on smoking cessation for stroke patients throughout all hospitalization processes, namely, during hospital admission, discharge and follow-up visits (Korean Stroke Society, 2019). Moreover, based on suggestions from the Framework Convention on Tobacco Control of the World Health Organization on how to encourage smoking cessation, the Korean government has implemented a comprehensive national project, a publicity campaign, limitations to smoking advertisements and has increased the price of tobacco products (Framework Convention on Tobacco Control, 2012). The government has also been providing financial support for health insurance programmes designed to prevent hospitalization through promoting smoking cessation camps (Korea Health Promotion Institute, 2019). However, the low success rates of smoking cessation through these programmes indicate that patients' needs are not being properly addressed and patient-centred care is not being effectively applied. Additionally, these smoking cessation programmes or therapeutic services are offered only to patients admitted to hospitals or outpatients of professional medical services, meaning that they do not reach patients without the will or existing desire to quit smoking.

Some previous studies have identified the attributes of people who continued to smoke (Hansen & Nelson, 2011) and those of heart disease patients who successfully stopped smoking (de Hoog et al., 2016; Jun & Yun, 2012; Seol et al., 2011). The major themes associated with continued smoking in people who relapsed were "ambivalent feelings" and "internal conflict over smoking versus non-smoking" (Clancy et al., 2013; Uppal et al., 2013). However, unlike heart disease patients, stroke patients often exhibit accompanying cognitive or physical disorders that affect their activities of daily living (Kwon, Hong, et al., 2016), and such contexts can cause depression; a study on depression in patients within 2 years after stroke diagnosis showed that patients' depression and tobacco consumption levels were significantly related (McCarthy et al., 2013). The factor that has been shown to influence continued smoking even after stroke diagnosis was male sex (Ives et al., 2008; Sienkiewicz-Jarosz et al., 2009). Moreover, it is reported that there are gender differences on smoking behaviour and cessation (Torchalla et al., 2011). The smoking rate of Korean men is 32%, which is the highest among OECD countries, while the smoking rate of Korean women is the lowest with 3.5% (Cho, 2019).

Thus, if stakeholders are to establish effective smoking cessation programmes, it is important that they take into account gender-specific and disease-specific approaches that may allow for the construction of a therapeutic environment in which patients can quit or prevent smoking. Moreover, developing patient-customized and nurse-led programmes may also help in these goals. To accomplish this, the personal experiences of people who had a stroke and continued smoking need to be understood.

1.1 | The clinical context or researcher's reflection

Based on the first author's clinical experiences in the intensive care unit and emergency care unit, generally, the usual physical or cognitive disorders that remain after recovery from this acute event and discharge from the ICU constitute some of the biggest burdens on both patients and families. Furthermore, patients showing good prognosis tend to express joy and be thankful for the prompt and proper treatment they received, and to immediately decide to maintain healthier behaviours after discharge.

However, a coordinating nurse at the stroke centre told me, "A lot of stroke patients in our hospital continue smoking." This empirical fact challenged the first author's beliefs that stroke patients would refrain from unhealthy behaviours after hospital discharge (e.g. smoking). Therefore, the questions explored in the present study are as follows: "why do male stroke patients continue smoking?" and "what are the underlying mechanisms behind male stroke patients' continued smoking behaviours?"

1.2 | Aims

This study aimed to identify the nature and meaning of continued smoking in male stroke patients based on a deep understanding of their lived experiences. The overall research question was as follows:

"what is the nature and meaning of the lived experiences regarding continued smoking in men suffering with stroke?"

2 | METHODS

2.1 | Study design

This study adopted van Manen (2017)'s phenomenological approach to understand the lived experiences of continued smoking in male stroke patients.

2.1.1 | Sample and setting

Participants in this study comprised 10 male patients in the stroke centre of E Hospital in Korea. The inclusion criteria were as follows: those who were capable of expressing themselves; had undergone over three months of follow-up after diagnosis of an ischemic cerebrovascular accident; had no cognitive disorders; and who continued to smoke. The exclusion criteria were as follows: those who did not agree with the study; and expressed their intention to reject participation during the interview.

Participants' general characteristics are shown in Table 1. Participants' average age was 57.2 years. At the time of stroke

TABLE 1 General Characteristics of Participants

	1	2	3	4	5	6	7	8	9	10	
Age (years)	54	61	66		40	61	64	72	44	60	50
Smoking amount per day (pack)											
Last month	0.004	1~1.5	0.5		1	0.05	0	0.05	0.5	0.7	0
Before admission	1.5~2	1~1.5	0.5		1	1.5	1	1	1	2	1
Age starting smoking (years)	22	20	20		30	18	20	20	18	30	20
Participation in no-smoking education (frequency)	3	0	3		0	1	1	2	0	0	0
Trial to quit smoking (frequency)	3	0	2		0	2	1	1	>3	2	1
When diagnosed with a stroke	August 2015	July 2010	November 2010	September 2010	June 2012	February 2016	February 2011	July 2014	June 2013	June 2013	June 2013
Length of stay in a hospital (days)	10	6	7		9	14	6	6	7	10	8
Years after stroke	1	7	6		4	1	6	6	3	4	4

diagnosis, their average age was 53.4 years. The average number of attempts to quit smoking was 1.5 (0–3). At the time of the first interview, eight participants' reported that they had smoked before visiting the hospital and two that they were trying to quit smoking. However, these two participants who indicated they were trying to quit smoking responded that they started smoking again at the second interview (i.e. two months after the first interview). Participants were trained and educated on how to quit smoking when they were hospitalized owing to stroke. After hospital discharge, participants engaged in smoking cessation education at public health centres from 0 to 3 times. At the time of study participation, the average amount of time that had passed since stroke diagnosis was 4.8 years.

2.2 | Data collection

Data were collected from December 2016 to October 2017 by in-depth interviews. We used purposive sampling for recruitment after explaining the purpose of this study to the head of the stroke centre. We posted a poster on recruitment of stroke centre. The first author explained the purpose of the study to the potential participants and after obtaining consent, conducted the interview.

In this study, in-depth interviews were conducted until reaching data saturation and 16 potential participants were contacted to participate in the interview. However, the first two potential participants expressed direct denial after being informed of the study aims (i.e. related to smoking experience), and one reportedly had already quit smoking for a long time, resulting in exclusion from participation. Finally, 13 participants provided informed consent to participate in this study. Among them, one cancelled the interview owing to temporary health conditions and two requested to end their participation during the interviews. Thus, our final analysed sample comprised 10 participants. To ensure participants' privacy, all interviews were held at the counselling room in the stroke centre.

Interview length ranged from 30 to 60 min. With participants' consent, the researchers used two voice recorders to record the interviews. To summarize the interviews, each interview data were reviewed with the relevant participant. To enhance clarity regarding content meaning based on participants' level of expression, additional telephone calls and interviews were conducted whenever needed. In total, 18 face-to-face and 10 telephone interviews (i.e. 1–3 interviews with each participant) were conducted. To record participants' speaking tones, facial expressions and other behavioural aspects, the interview data were supplemented by the researchers with temporary notes.

To answer the research question, the interviewer utilized the following questions during the interviews: 1) Why do you continue to smoke in your daily life? 2) What does smoking mean to you? 3) What difficulties do you experience when trying to quit smoking? 4) How does smoking affect you? And 5) How do you cope with the desire to smoke?"

2.3 | Data analysis

Phenomenological reduction and suspension of judgment (i.e. *epoche*) were used to identify the nature of participants' experiences and the orientation to the phenomenological meaning of their experiences (Adams & van Manen, 2017). To identify the nature of stroke patients' smoking experiences, we followed a constant reflective process based on van Manen (2017)'s methodology. The first author who recorded the interviews was the one who directly transcribed them. The transcriptions were conducted in a way to faithfully reflect participants' language, sentences, and diction as they occurred, and temporary notes—which included information on participants' attitudes, facial expressions and silences—were used to supplement the transcripts.

For the analysis, the researchers repeatedly read interview transcripts and derived the themes through phenomenological reflection and analysis in reading.

Based on van Manen's methodology, we employed holistic, selective and detailed reading approaches to examine the thematic aspects of phenomena as recorded in the transcriptions; these examinations were conducted based on text analyses, phenomenological reduction, identification of the nature of experience, and by analysing the meaning and repetition of keywords of a given theme. Through holistic reading, themes (i.e. the structure of the experience) were detected by integrating the meaning, structure and process of individual experiences. Through detailed reading, keywords that rendered holistic meaning to the text were identified, and by searching for the meanings of these keywords through detailed reading, the nature of individual experiences was explored. Through selective reading, the meaning, structure and process of individual experiences were analysed by integrating expressed sentences describing the process of continued smoking.

Through these procedures, the interviews with participants, experiences of the researcher and origins of words present in the literature or in works of art (i.e. poetry, essays, autographs, photographs and paintings) were reviewed; specifically, this was done by employing phenomenological reduction and *epoche*, which allowed for the researchers to focus on participants' daily lived experiences—and the substantial concepts that arose from them. Moreover, by searching for meaning in participants' lived experiences and determining and interpreting the arisen themes—which described the nature of the experiences—we were able to capture and refer to participants' original experiences through the words they enunciated. Additionally, the themes were derived by comparing the experiences of the researcher, in the literature, and in works of art with those in participants' sayings that associated with stroke and their smoking experience. Finally, by following the procedures described by van Manen regarding the "reflections of a substantive being," phenomenological writing was performed based on experienced body, time, space, human relations and things.

The researchers tried to secure rigor based on the three philosophical perspectives set forth by Creswell and Poth (2017). Participants confirmed the meaning of their experienced with

continued smoking through in-depth interviews. Additionally, the research results were shared with participants to confirm whether the subject or category concurred with their meaning.

2.4 | Ethical considerations

The present study was approved by the institutional review board (2016-10-026-002) of the institution to which the authors are affiliated. All participants were informed that participation was voluntary that they could withdraw their participation at any time and that such withdrawal would not incur in any negative consequences. All potential participants who signed the written informed consent were allowed to participate. The interview was conducted by the first author who had no conflict of interest in the participants' care.

3 | RESULTS

The results of this study are as follows: five essential themes were derived from the analyses.

3.1 | Natural relapse to smoking

Participants reportedly decided to quit smoking for life upon stroke symptoms onset and stroke diagnosis. Since the ICU was equipped with monitors and had a nursing staff, participants reported that they were limited in their individual behaviours. Moreover, participants reported that both themselves and their families regarded the transfer from the ICU to the general ward as the end of the urgency situation and the beginning of feelings of relief. Participants reported that hospital discharge was deemed as a transfer to a space wherein patients could live their lives as they did before the stroke diagnosis. Generally, participants reported that the return to a space associated with ordinary life regenerated their feelings of relief; then, this led participants to become receptive to the temptations of smoking, thereby leading them to start smoking again. The following excerpt from a participant showcases these topics:

I might have quit smoking while I was staying there [in the hospital]. However, I started to smoke upon discharge from the hospital. I might have felt relieved from leaving [the hospital].

(Participant 3)

In his stroke memoirs, he would smoke in the smoking lounge while he was an inpatient, namely the time points at which patients restart smoking after the initial stroke diagnosis vary by individual attributes.

Participants in this study reported that they resumed smoking in spaces where they felt free from the pressure of prohibition/inhibition. Additionally, once their symptoms disappeared, participants reportedly reverted to the behaviours they performed before the

diagnosis. The impetus to quit smoking owing to the stroke diagnosis was gradually forgotten as patients' physical functions reverted to their normal state. Thus, although smoking cessation—which lasted for a while—made participants healthier, it may also have increased their desire to smoke. The following excerpt illustrates these reports:

The resolution loosened along with the gradual good turning of the disease because I found myself smoking again.

(Participant 4)

3.2 | Behaving like a healthy person

Upon their return to their ordinary daily lives after hospital discharge, participants felt that their peers regarded them as normal people, not stroke patients. Participants also did not deliberately tell other people that they had been diagnosed with a stroke, and they perceived that a stroke patient was characterized exclusively by the presence of abnormal bodily functions. The following excerpt from a participant showcases these topics:

People around me do not regard me as a patient. Besides, there is no need to tell them that I am a patient.

(Participant 4)

Moreover, although participants felt guilt towards smoking behaviour and were ashamed that they continued smoking despite the stroke diagnosis, they still perceived themselves and presented themselves to others as healthy people. Moreover, despite the fact that they acknowledged the need to be actively willing to quit smoking, participants reported that they could not reject offers to smoke from their smoking peers because they felt anxious about losing these relationships if they made such refusals; they reportedly felt ashamed for trying to maintain healthy habits in front of their smoking peers who often suggested that they should smoke. The following excerpt illustrates these reports:

It was so natural the smoking behavior that I began smoking when meeting with friends of mine. Of course, I tried to refuse smoking. However, my friends usually told me, "Hey, how many years do you think still have left? It may just be 10 years or less."

(Participant 1)

3.3 | Believing that smoking will not be a problem

Averagely, 4.8 years had passed since participants' initial stroke diagnosis at the time of interview. Moreover, not all participants experienced stroke recurrence, and the memories of these participants about the stroke experience slowly waned. As shown in the last

excerpt, participants reported that the possibility of going back to ordinary daily lives, similar to those of healthy people, allowed them to completely forget that, at least during hospitalization and recovery, they perceived themselves as stroke patients.

I know that smoking does more harm than good... however, the recurrence of cerebral apoplexy seems distant and it is not observable in the present.

(Participant 4)

One participant also said, "...and the smoking was indispensable to help me forget the stroke, [to help me understand] that it was irrelevant to me, and that I was [once] a patient suffering with the disease." These reports show that participants attempted to ignore the known problems of smoking and that they were not able to find reasons to avoid this behaviour. Moreover, it seemed that participants followed the recommendations of medical staff owing to the anxiety caused by the stroke diagnosis, which thereby led them to try and quit smoking; nonetheless, they gradually began to smoke again. Furthermore, it seemed that they felt no imminent threat toward the changes that a resumption of smoking could bring, or that they did not perceive the relief that smoking cessation could provide. Additionally, participants reportedly perceived that the stroke had been just a past event that they had experienced, and they also thought that they were fine because smoking did not cause stroke symptoms. Particularly, participants avoided speaking with anyone about smoking and ignored any comments on the habit.

I see patients suffering from hemiplegia or paralysis, but I do not care about these symptoms because I did not suffer from the diseases that evoked them...

(Participant 5)

The excerpt above shows that, although participants were followed up regularly, they ignored the fact that other stroke patients suffered from hemiplegia; this did not seem relevant to them. Participants thought that stroke and smoking were irrelevant to each other and stated that their smoking experiences during their ordinary lives had caused no immediate health problems. The following phrase illustrates such a statement:

I think that it [the stroke] was not because of smoking, but the stroke would be attributed to what it is... there are many sick people who do not smoke ...

(Participant 9)

Participants stated that they did not want to hear advice about smoking from other people and that they would stop smoking on their own. Generally, participants reported that the constant educational contents they received through lectures about smoking cessation and the whole environment that surrounded these educational sessions – which were built to encourage them to quit smoking – they tried to ignore the education and this environment. As time passed, other stroke

patients that were around them also eventually became less interested to quit smoking.

After I meet the doctor, I forget it [to stop smoking]. I can't remember it [to stop smoking]. Then, I come to the hospital once every three months, so I only remember [that I need to stop smoking] in that moment [when I come to the hospital]. When the teacher [in the hospital] says "stop smoking," I say "yes," [but] when I go outside of the hospital, I forget it [that I need to stop smoking].

(Participant 10)

I heard it all about how to quit smoking. They tell me to quit everything. But I hate that...the...I like to do it on my own... I hate people nagging me to stop smoking. Nagging does not mean that it [the education] will work.

(Participant 2)

3.4 | Finding consolation in smoking behaviour

For many participants, the act of smoking accompanied their joyful and sad moments for more than 50 years. This reportedly led participants to think about cigarettes/smoking in their daily lives as a means to provide them with an energy boost and to help them regain their composure.

Smoking grants me emotional relaxation and composure; thereby, it helps me to understand things and with problem solving.

(Participant 4)

The effect that they experienced when they smoked even one cigarette seemed precious and irreplaceable; they felt as if they were living a plain life. AS highlighted by the phrases above and below, participants explained that smoking provided them with not only emotional relaxation but also physical rest; it was deemed as irreplaceable, unable to be renounced and a good companion.

Um... that's why I am feeling lonely, and it [the cigarette] feels like a friend; [in] the way I see things, the tobacco is a friend of mine... because I live a lonely life.

(Participant 7)

3.5 | Consoling oneself by the rationalization of smoking behaviour

As can be seen in the previous reports, participants did not stop craving for a smoke after they experienced the stroke; smoking

cessation was very difficult; and the fact that smoking cessation was very difficult continually stressed those affected. The participants who were smoking posited that they wanted to and would stop smoking sometime in the future, but they also remarked that it was too difficult at the current moment. Accordingly, they reported some efforts to quit smoking, but failure reports were equally common. This phrasing demonstrates these remarks:

I thought that I would rather smoke than be stressed. Well, actually, I smoke for no special reason other than to get out of this sensation of tightness.

(Participant 6)

Thus, participants employed methods of their own to quit smoking and consoled themselves by lauding their restraint from chain-smoking, even though they recognized that this behaviour did not mean complete smoking cessation. The following excerpt illustrates this topic:

My smoking frequency has decreased since I received the stroke diagnosis. Although I was not able to quit smoking completely, the frequency was reduced to almost one-third [of what the participant used to smoke]... at first, I used to smoke two packs of cigarettes per day... but now I smoke 10 cigarettes or a bit more... as a result of my efforts [to diminish smoking frequency].

(Participant 5)

Participants also reportedly tried many methods to improve their health, including regular exercise or medication, but they did not try to completely quit smoking. The participants who kept on smoking tended to express negative reactions against smoking cessation policies implemented by the government and appraised the education provided by medical staff as ineffective because of its repetitive characteristics.

To be frank with you, the contents of smoking cessation education do not touch me; yes, at that time [when the participant received the education], it did not touch me... maybe other people were touched by the content, but that was not the case for me... upon hospital discharge, I refrained from smoking because I had to, not because of the education program provided by the hospital. I think it's useless.

(Participant 9)

3.6 | Phenomenological writing

Participants who smoked after a stroke diagnosis started feeling gradual relief owing to being able to survive the stroke; although the stroke and its accompanying acute event was an unusual and frightening experience, as participants recovered, this experience gradually diminished in its mental effects. Moreover, after they quit

smoking and began to recover from the stroke in the hospital, participants reportedly felt that the temptation to smoke gradually became stronger; then, as they went back to familiar spaces and their ordinary daily lives, the smoking behaviour resumed naturally. They started socializing with peers they had known before the stroke diagnosis once more, which helped to decrease the stress they had experienced owing to the stroke. Additionally, participants eventually went back to being in the company of smoking peers, and they felt that smoking was a necessary condition to maintain these relationships. Participants also felt reluctant to refuse offers to smoke because they were worried about what others would think of them.

Conversely, participants ignored advices toward stop smoking, denied the fear of becoming a burden for family members and denied the shame they reportedly felt owing to continuing their smoking behaviour despite having experienced a stroke. Such ambivalent emotions about smoking may have contributed to their tendency to view cigarettes as companions because they can be counted as reliable friends that provide stress relief. Owing to reasons that revolve around these positive feelings brought by smoking, participants reportedly continued to smoke, causing them to lose the initial motivation they had (i.e. after the stroke diagnosis) to quit smoking. Moreover participants who were able to go back to their normal daily lives (i.e. as they were before the stroke) owing to a fast recovery also tended to regard themselves as healthy people and as unable to be affected by the negative consequences of smoking. Still, some participants remained aware of the threat of a future stroke and made efforts to quit smoking (i.e. in hopes of being able to be cease this behaviour one day), and they also rationalized and consoled themselves when they were able to diminish the amount of smoking and unable to quit the behaviour.

4 | DISCUSSION

This study highlighted the meaning of the lived experiences regarding continued smoking of men suffering from stroke by applying the phenomenological approach introduced by van Manen. This study is significant because we were able to thoroughly identify such meanings, thereby providing useful data for the future development of programmes aimed at encouraging stroke patients to quit smoking.

In this study, participants had little or no physical disabilities (e.g. paralysis) after the stroke diagnosis and were admitted to the hospital via the emergency department, and the average length of hospital stay was 8.4 days (i.e. most experienced early recovery). Moreover, as the stroke symptoms were mitigated by treatment, the anxiety and fear participants experienced regarding the prognosis of stroke turned into feelings of relief. On the topic, a study showed that patients diagnosed with life-threatening diseases (e.g. cardiac arrest) tend to use the experience of the disease itself as the strongest motivation for rehabilitation (Nadarajah, 2012). Based on this citation, it is possible to denote that people who feel the threat of death tend to immediately stop smoking, mainly because they feel that smoking poses a great threat to their health. Still, the reality

is that there are higher rates of failure for smoking cessation in patients with serious symptoms when they stay longer in the hospital (Lee, Park, et al., 2016) and that a proportion of the patients suffering from cardiac arrest neglect their disease by continuing their smoking behaviours (Yi et al., 2015); thus, it is clear that active interventions should be implemented for patients with a long history of smoking and a short hospital stay. Particularly, our results showed that men suffering from stroke but little or no physical disabilities are ideal subjects for smoking cessation education.

Furthermore, hospital discharge was a spatial change that reportedly hindered smoking cessation for most participants because experienced much more freedom; they were able to behave according to their own desires. A previous study identified the influencing factors of smoking among stroke patients after discharge based on hospital trends, showing that one of the influencing factors was exposure to tobacco at home (Hornnes et al., 2014); therefore, it is important to distract patients from situations that encourage smoking. One study reported that only 40% of the stroke patients remembered the smoking cessation education they received in the hospital and that only 8% were able to reduce their smoking behaviours (Gall et al., 2009). Thus, stakeholders should endeavour to develop a concrete strategy to recognize stroke and to maintain smoking cessation, and this strategy should preferably be based on the reasons why stroke patients continue to smoke.

Specifically, we believe that the basis for this strategy can be found in the second essential theme we found; participants in this study behaved as if they were healthy people and worried that could be perceived by others as stroke patients. While smoking is not viewed as being healthy in other countries, the fact that men in Korea smoke in order to behave like healthy people is a very unique result. Moreover, they did not express their thoughts regarding the desire and need to quit smoking to their smoking peers because they did not want to be judged. By doing so, participants rationalized that they needed to continue to smoke because they feared/felt anxious about their peers' reactions. A study showed that when people attempt to quit smoking, they experience shame, perplexity, desperation, guilt, frustration (Shake, 2016), and are affected by the attitudes or behaviours of smoking peers or family members (Ganley & Rosario, 2013; Kim & Jang, 2015). This showcases that stroke patients need help from their smoking peers, family members and medical staff to maintain smoking cessation. Thus, to improve stroke patients' ability to cope with smoking problems and their successful smoking cessation, stakeholders in the improvement of smoking cessation among stroke patients should devise educational programmes that focus on the recognition of community-dwelling people that can participate in the smoking cessation programmes together with the stroke patients (e.g. their smoking peers and family members) and on ways to improve patients' self-confidence after the stroke diagnosis.

Participants in this study also thought of themselves as "having no problems with smoking" because they experienced a diminishment in stroke symptoms, and intentionally ignored advices towards smoking cessation, even if they recognized that they were stroke patients. A relatively younger age group included a large number

of participants, so the participants had mild symptoms, and a research finding that good physical condition and young age are factors that influence the behaviour of continuing smoking even after a stroke diagnosis is also relevant. The mean age of the participants was 57.2 years in this study, and generally, patients experienced no functional impairment in their daily life, except for two participants who reported that they felt a slight uncomfortableness in their right limb. A relatively younger age group included of participants, so the participants had mild symptoms, and a research finding that good physical condition and younger age are factors that influence the behaviour of continuing smoking even after a stroke diagnosis is also relevant (Park et al., 2015).

Namely, while they reportedly felt ashamed for not trying to quit smoking, they also exhibited behaviours that conflicted with the advice for smoking cessation. In a previous study conducted among patients with heart diseases, patients reportedly perceived their disease with a lack of seriousness (Yi et al., 2015); generally, our results corroborate this citation because our participants thought that their smoking was not related to the stroke they experienced. Specifically, participants did not accept that they were experiencing a serious disease, and because they were not experiencing any immediately tangible stroke symptoms, they kept on smoking. Nonetheless, another study conducted in middle-aged people who were disordered owing to cerebral apoplexy showed that they exhibited fears of recurrence (Kim et al., 2013); contrastingly, participants in the present study tended to ignore the fact that other patients experienced hemiplegia owing to stroke, mainly because they viewed those patients as different from themselves (i.e. most patients in our study did not experience disorders owing to the stroke); this led them to deny the fear of recurrence. Thus, since our study participants who continued to smoke after the stroke diagnosis denied the fear of recurrence, stakeholders in their rehabilitation (e.g. medical staff and family members) should endeavour to provide these patients with precise, accurate and accessible information on their condition, and also with rehabilitation education programmes focused on changing how patients assess their own health, doing so may encourage healthy behaviours in this population.

Although study participants returned to their normal lives after hospital discharge, they still experienced anxiety owing to their health status; consequently, participants turned to a known comfort to relieve this anxiety by regaining physical and psychological composure: the cigarette. On the topic, a study showed that continued smoking is closely associated with psychological factors such as depression (McCarthy et al., 2013); another that smokers exhibit higher sensitivity to depression and stress recognition than nonsmokers (Kwon et al., 2016); and another that smokers tend to escape from negative emotions through smoking (Lee & Lee, 2015). Thus, stakeholders in the appropriate and effective care delivery for stroke patients should endeavour to assess and treat both psychological and physical factors, and the same can be said for other types of patients who experience the onset of serious diseases.

Finally, study participants rationalized and consoled themselves when they continued smoking by praising their successes

in diminishing their smoking behaviour. Moreover, although they were conscious about the need to quit smoking, they were not able to do so; this led them to focus on the process of smoking cessation as a harmful and stressful one. These results generally corroborate those in a previous study, which provided the following report from one of the participants, "I was sick when I quit smoking, but I felt better while smoking, with the convenience of breathing that brought about a clear mind" (Mohammadnezhad et al., 2015), meaning that the patient was able to breathe together with the smoking behaviour in a way that brought about a sensation of relief. Moreover, participants in both our study and in the last citation also tended to believe that they would be able to quit smoking in the future. Thus, finding methods to induce smoking peers and family members to provide stroke patients with support for smoking cessation may be important to help them quit smoking.

A study showed that people's receptivity toward smoking cessation messages differ by individuals' attitude towards smoking (Kang & Han, 2015). In the present study, participants regarded smoking cessation education as ceremonial and ritualized, which thereby led them to disregard the increased prices and warning messages on cigarette packs. These results corroborate those of two previous studies: the researchers found that, although nonsmokers were affected by the warning pictures on cigarette packs irrespective of their fear of smoking (Park et al., 2016), 61.6% of the smokers were unaffected by similar warning messages (Seo et al., 2008). This underpins the need for improvements in the governmental policies regarding smoking cessation; specifically, since February 2015, the Korea's National Health Insurance agency has been providing support for the treatment of smoking behaviours and for smoking cessation initiatives. However, to improve the quality of the smoking cessation education provided by the target population (i.e. smokers), the methods used for subject selection may need to be revised, and more prudent alternative strategies should be implemented. Particularly, the government should develop smoking cessation programmes that provide smokers with social and institutional support; namely, they should include active interventions that are promoted by family members and medical staff from the start of the programme. Specifically, to help patients maintain smoking cessation behaviours, each patient's reason for smoking must be taken into account, and this is even more important for patients with serious diseases (e.g. stroke).

4.1 | Strength and limitations

Regardless of the discussion and contributions above, this study also has some limitations. First, participants comprised only men and were all recruited from one general hospital; thus, our study results may not be applicable to women or other populations and regions. Second, since this was a qualitative study, we were not able to clearly investigate the influencing factors of smoking cessation.

Despite these limitations, this study also had some strengths. First, this study demonstrated the need for the development of a smoking cessation educational programme for stroke patients that addresses some of the erroneous perceptions our participants described, such as perceiving themselves as “healthy people” after early recovery and thinking that smoking behaviours are not problematic for them. Specifically, future smoking cessation programmes should comprise contents that focus on transforming patients’ awareness towards their own health status. Second, to confirm accuracy and validity of the collected data, all data were shown to a stroke coordinator who knew participants’ treatment process and background.

5 | CONCLUSIONS

This study examined the lived experiences of men who continued to smoke after having a stroke. Study participants had little or no physical disabilities after diagnosis, were able to easily return to their normal lives (i.e. as they were prior to the diagnosis) and maintain social relationships with their smoking peers. These circumstances hindered patients from undergoing smoking cessation because they were not sufficiently aware of the relevance of smoking to the recurrence of stroke and had insufficient social support. Thus, men who experience little or no physical disabilities after a stroke diagnosis are potential participants for clinical programmes aimed at facilitating smoking cessation in the outpatient setting.

Thus, based on the interviews we conducted in male patients who continued smoking continuous follow-up regarding their health behaviours and experiences of male patients who continued smoking, an intensive programme for smoking cessation in the outpatient department, to be led by nurses and taking into account the individual situations of patients, was prepared to prevent the recurrence of stroke. However, this study has limitation with exclusion of women. We underpin the need for future studies aimed at describing the experience of women suffering with stroke and verifying the effects of nurse-led smoking cessation interventions, and for the development of national policies aimed at enabling the provision of counselling and education on smoking cessation by clinical specialists for stroke patients.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

The data presented in this study are available on request from the corresponding author. The data are not publicly available due to legal and privacy issues.

ORCID

Sujin Shin  <https://orcid.org/0000-0001-7981-2893>

REFERENCES

- Adams, C., & van Manen, M. A. (2017). Teaching phenomenological research and writing. *Qualitative Health Research*, 27(6), 780–791. <https://doi.org/10.1177/1049732317698960>
- Allen, N. B., Holford, T. R., Bracken, M. B., Goldstein, L. B., Howard, G., Wang, Y., & Lichtman, J. H. (2010). Trends in one-year recurrent ischemic stroke among the elderly in the USA: 1994–2002. *Cerebrovascular Diseases*, 30(5), 525–532. <https://doi.org/10.1159/000319028>
- Cho, B. H. (2019). *Korean Social Trends 2019: Health -Smoking and Drinking-*. Statistics Korea. http://kostat.go.kr/sri/srikor/srikor_pbl/3/index.board
- Clancy, N., Zwar, N., & Richmond, R. (2013). Depression, smoking and smoking cessation: A qualitative study. *Family Practice*, 30, 587–592. <https://doi.org/10.1093/fampra/cmt032>
- Creswell, J. M., & Poth, C. N. (2017). *Qualitative inquiry & research design: Choosing among five approaches*, 4th ed. Sage publication.
- de Almeida, A. A., Bandeira, C. M., Gonçalves, A. J., & Araújo, A. J. (2014). Nicotine dependence and smoking habits in patients with head and neck cancer. *Journal of Brasileiro de Pneumologia*, 40(3), 286–293. <https://doi.org/10.1590/S1806-37132014000300012>
- de Hoog, N., Bolman, C., Berndt, N., Kers, E., Mudde, A., de Vries, H., & Lechne, L. (2016). Smoking cessation in cardiac patients: The influence of action plans, coping plans and self-efficacy on quitting smoking. *Health Education Research*, 31(3), 350–362. <https://doi.org/10.1093/her/cyv100>
- Framework Convention on Tobacco Control. (2012). MPOWER in action: Defeating the global tobacco epidemic. World Health Organization. https://www.who.int/tobacco/mpower/publications/mpower_2013.pdf?ua=1. Updated December 03, 2012. Accessed April 25, 2019
- Gall, S. L., Dewey, H. M., & Thrift, A. G. (2009). Smoking cessation at 5 years after stroke in the North East Melbourne Stroke Incidence study. *Neuro Epidemiology*, 32, 196–200. <https://doi.org/10.1159/000195689>
- Ganley, B. J., & Rosario, D. I. (2013). The smoking attitudes, knowledge, intent, and behaviors of adolescents and young adults: Implications for nursing practice. *Journal of Nursing Education and Practice*, 13(1), 40–50. <https://doi.org/10.5430/jnep.v3n1p40>
- Hansen, E. C., & Nelson, M. R. (2011). How cardiac patients describe the role of their doctors in smoking cessation: A qualitative study. *Austrian Journal of Primary Health*, 17(3), 268–273. <https://doi.org/10.1071/PY10082>
- Hornnes, N., Larsen, K., Brink-Kjær, T., & Boysen, G. (2014). Specific anti-smoking advice after stroke. *Danish Medical Journal*, 61(4), 1–5.
- Ives, S. P., Heuschmann, P. U., Wolfe, C. D. A., & Redfern, J. (2008). Patterns of smoking cessation in the first 3 years after stroke: The South London Stroke Register. *European Journal of Cardiovascular Prevention and Rehabilitation*, 15, 329–335. <https://doi.org/10.1097/HJR.0b013e3282f37a58>
- Jun, W. H., & Yun, H. S. (2012). Effects of smoking cessation education for patients with percutaneous coronary intervention. *Korean Journal of Adult Nursing*, 24(3), 274–283. <https://doi.org/10.7475/kjan.2012.24.2.274>
- Kang, D. H., & Han, E. K. (2015). The attitudes and intentions to stop smoking by the messages types toward the smoking behaviors. *Advertising Research*, 105, 224–249. <https://doi.org/10.16914/ar.2015.105.224>
- Kim, M. O., Choi, J. M., & Kang, S. W. (2013). A phenomenological study on the lived experiences of middle-aged people with disabilities after a stroke. *Korean Journal of Social Welfare*, 65(1), 33–58. <https://doi.org/10.20970/kasw.2013.65.1.002>

- Kim, Y., & Jang, Y. (2015). An analysis of influencing factors on smoking as a risk taking behavior: With a focus on sensation seeking, social smoking conformity and perceived benefit/barriers. *Journal of Public Relations*, 19(2), 22–50. <https://doi.org/10.15814/jpr.2015.19.2.22>
- Korea Health Promotion Institute. (2019). *Smoking Cessation Guidelines: Domestic Smoking Cessation Policy in Korea*. : The Institute. <https://nosmk.khealth.or.kr/nsk/user/extra/ntcc/67/services/nosmokeCam/p/jsp/LayOutPage.do>. Updated 2019. Accessed April 25, 2019.
- Korean Stroke Society. (2019). *What is a stroke?* : The Association; c2011-2019 [cited 2019 Apr 25]. <http://www.stroke.or.kr/stroke/index.html>
- Kwon, H. J., Kim, Y. J., & Kim, H. S. (2016). The association between smoking amount and mental health. *Journal of the Korean Society for Wellness*, 11(3), 297–305. <https://doi.org/10.21097/ksw.2016.08.11.3.297>
- Kwon, S. Y., Hong, S. E., Kim, E. J., Kim, C. H., Joa, K. R., & Jung, H. Y. (2016). Monitoring of functioning status in subjects with chronic stroke in South Korea using WHODAS II. *Annual Rehabilitation of Medicine*, 40(1), 111–119. <https://doi.org/10.5535/arm.2016.40.1.111>
- Lee, M. A., & Lee, J. H. (2015). The effect of smoker's affect intensity on attentional bias and craving for smoking after experiencing negative emotion. *Journal of the Korean Data Analysis Society*, 17(1), 381–393.
- Lee, M. J., Park, E., Kim, H. C., Lee, H. S., Cha, M. J., Kim, Y. D., Heo, J. H., & Nam, H. S. (2016). Timely interventions can increase smoking cessation rate in men with ischemic stroke. *Journal of Korean Academic Nurses*, 46(4), 610–617. <https://doi.org/10.4040/jkan.2016.46.4.610>
- Lee, M., Wu, Y., & Ovbiagele, B. (2016). Trends in incident and recurrent rates of first-ever ischemic stroke in Taiwan between 2000 and 2011. *Journal of Stroke*, 18(1), 60–65. <https://doi.org/10.5853/jos.2015.01326>
- McCarthy, M. J., Huguette, N., Newsom, J. T., Kaplan, M. S., & McFarland, B. H. (2013). Predictors of smoking patterns after first stroke. *Social Work Health Care*, 52(5), 467–482. <https://doi.org/10.1080/00981389.2012.745460>
- Mohammadnezhad, M., Tsourtos, G., Wilson, C., Ratcliffe, J., & Ward, P. (2015). "I have never experienced any problem with my health. So far, it hasn't been harmful": Older Greek-Australian smokers' views on smoking: A qualitative study. *BMC Public Health*, 15(304), <https://doi.org/10.1186/s12889-015-1677-6>
- Mohan, K. M., Wolfe, C. D., Rudd, A. G., Heuschmann, P. U., Kolominisky-Rabas, P. L., & Grieve, A. P. (2011). Risk and cumulative risk of stroke recurrence: A systematic review and meta-analysis. *Stroke*, 42(5), 1489–1494. <https://doi.org/10.1161/STROKEAHA.110.602615>
- Nadarajah, S. R. (2012). A phenomenological study on lived experiences of psycho- socio-spiritual healing in cardiac rehabilitation patients. Doctor of Philosophy University of Maryland, School of Nursing.
- Park, J. W., Kwon, K., Kim, D., & Chun, S. (2016). Emotional and cognitive responses to graphic pictorial health warnings on tobacco packaging: A comparison of smokers and nonsmokers. *The Korean Journal of Advertising*, 27(7), 7–30. <https://doi.org/10.14377/KJA.2016.10.15.7>
- Park, T. H., Ko, Y., Lee, S. J., Lee, K. B., Lee, J., Han, M.-K., Park, J.-M., Cho, Y.-J., Hong, K.-S., Kim, D.-H., Cha, J.-K., Oh, M.-S., Yu, K.-H., Lee, B.-C., Yoon, B.-W., Lee, J. S., Lee, J., & Bae, H.-J. (2015). Identifying target risk factors using population attributable risks of ischemic stroke by age and sex. *Journal of Stroke*, 17(3), 302–311. <https://doi.org/10.5853/jos.2015.17.3.302>
- Seo, H., Cheng, Y., Myung, S., Kim, Y., Lee, W., & Fong, G. T. (2008). Smoking-related Characteristics in Korean adult smokers: Findings from the 2005 international tobacco control policy evaluation survey-Korea. *Korean Journal of Family Medicine*, 29(11), 844–853.
- Seol, S. Y., Lee, S. J., Jeong, M. H., RLee, J. A., Choi, J. S., Hwang, S. H., Ko, J. S., Shin, D. S., Park, K.-H., Yoon, N. S., Yoon, H. J., Kim, K. H., Hong, Y. J., Kim, J. H., Ahn, Y., Cho, J. G., Park, J. C., & Kang, J. C. (2011). Clinical outcomes of persistent smoking in patients with acute myocardial infarction who underwent percutaneous coronary intervention. *The Korean Journal of Medicine*, 80(5), 562–570.
- Shake, L. M. (2016). *Exploring the emotions of smokers during the contemplation stage of smoking cessation: A multiple-case study [dissertation]*. Northcentral University.
- Sienkiewicz-Jarosz, H., Zatorski, P., Baranowska, A., Ryglewicz, D., & Bienkowski, P. (2009). Predictors of smoking abstinence after first-ever ischemic stroke: A 3-month follow-up. *Stroke*, 40, 2592–2593. <https://doi.org/10.1161/STROKEAHA.108.542191>
- Torchalla, I., Okoli, C. T. C., Hemsing, N., & Greaves, L. (2011). Gender difference in smoking behaviour and cessation. *Journal of Smoking Cessation*, 6(1), 9–16. <https://doi.org/10.1375/jsc.6.1.9>
- Uppal, N., Shahab, L., Britton, J., & Ratschen, E. (2013). The forgotten smoker: A qualitative study of attitudes towards smoking, quitting, and tobacco control policies among continuing smokers. *BMC Public Health*, 13, 432. <https://doi.org/10.1186/1471-2458-13-432>
- van Manen, M. (2017). Phenomenology in its original sense. *Qualitative Health Research*, 27(6), 810–825. <https://doi.org/10.1177/1049732317699381>
- Yi, M., Kim, K., & Cha, J. (2015). Phenomenological study on illness experience of men with myocardial infarction in Korea. *Journal of Korean Clinical Nursing Research*, 21(3), 389–400.

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