NURSING CONTRIBUTIONS TO SMOKING CESSATION

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Bachelor Degree Thesis

Nursing

2018

DEGREE THESIS	
Arcada	
Degree Programme:	Bachelor Of Science in Nursing
Identification number:	18927
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Title:	Nursing Contributions to Smoking Cessation
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Abstract:

Healthcare especially nursing contributions to smoking cessation is one of the top priorities of developing societies and the Finnish government with regards to health of the people. The aim and objectives of the study was to investigate health strategies are compliant with WHO guidelines and understand behavior modification through a nursing theory which could be used for further research. This was guided by the research questions; what are the nursing strategies in smoking cessation and how can they be incorporated in a theoretical framework plan? Finland-based English-written articles on the topic were few, however the study was graced by a rich variety of relevant articles gotten from databases like Cochrane library, Academic Search Elite EBSCO host and CINAHL. The results of literature review focused on articles which examined pharmacological interventions (Nicotine Replacement Therapy, medication and combination treatments), non-pharmacological interventions (quit-lines, behavioral support, and motivation), and nurses and other healthcare providers' intervention. Self-motivation, willingness, and empowerment from both the healthcare provider and the client could enhance implementation of interventions by using Pender's health promotion model, leading to positive behavior outcomes. Conclusion of the study reveals smoking cessation intervention strategies are effective incompliance with World Health Organization's recommendations and subsequent implementation by nurses in the Health sector. The smoke-free Finland deadline is apparent more research needs to be done, to this light a long list of references provided may offer great help.

Keywords:	Smokingcessation,barriers,quitlines,behavioralsupport, motivation, pharmacological intervention,Finland.
Number of pages:	45
Language:	English
Date of acceptance:	3.12.2018

FOREWORD

Firstly, I will like to thank God for the spiritual support and guidance throughout this experience.

More thanks to my mom, Mrs. Doh Asana for all the moral and material support through my studies, my siblings, Doh M., Doh E. Doh B., for all the assistance, not forgetting family members and friends; especially Zareb A., and Samuel M.E, who constantly stood by me.

I am grateful to my supervisor Mrs. Pamela Gray for all the guidance and advice in my studies from first year, I learnt alot from you as a person.

Lastly, I wish to thank all my teachers in Arcada UAS and internship mentors, it was a wonderful experience and a big opportunity I will cherish forever.

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ABBREVIATIONS

MPOWER	**M**onitor tobacco use and prevention policies
	Protect people from tobacco smoke
	Offer help to quit tobacco use
	Warn about the dangers of tobacco
	Enforce bans on tobacco advertising, promotion and sponsorship
	Raise taxes on tobacco
WHO	World Health Organisation
WHO FCTC	World Health Organisation Framework Convention for Tobacco Control
TCA	Tobacco Control Act
SDA	Sustainable Development Agency
EU	European Union
CDC	Centers for Disease Control
EUR	Euro
NRT	Nicotine Replacement Therapy
SC	Smoking Cessation
Valvira	National Supervisory Authority for Welfare and Health
Kela	National Social Insurance Institution
ICN	International Council of Nurses
pp	pages
WHO RGTE	WHO Report on Global Tobacco Epidermic

1 INTRODUCTION

Quality of life constitutes both the individual and the society atlarge, it is a possibility that whatever affects the individual affects the society. (Yen et al, 2011). Smoking as one of public health concerns is the leading preventable cause of death in the world today. (Pisinger et al, 2011) Worldwide smoking have increased to about a billion people daily in 2012 but age-standardized prevalence has decreased over 30years ago. (Ordóñez-Mena et al, 2016). Following strictly on how to use tobacco by manufacturers kills most of its consumers though a legal substance. According to the World Health Organization (WHO), a global report on ”trends in tobacco smoking 2000-2025”,tobacco use (smoking and smokeless) is currently blamed for about six million deaths globally, present and future generations must be urgently protected from the devastating health (social, environmental and economic) consequences of tobacco consumption and exposure to tobacco smoke (WHO, 2009).

Health disorders such as; cancer, cardiovascular (heart attack), reproductive, respiratory (COPD and bronchitis), gastrointestinal and excretory disorders results from difficulties to quit. Quitting is the best option if successfully achieved through follow up and treatment plans. Treatment plans are carefully drawn up by the state in conjunction with health institutions and other closely related disciplines with regards to requirements, to come up with the best possible strategies and interventions to help individuals and society at large. (Mishral et al, 2015)

Demographic challenge is a rising incidence for chronic diseases in developed nations and risk factors; like tobacco consumption, physical inactivity and unhealthy diets are a direct result from people living longer weighing financially more on the economy. Tobacco is also consumed as cigar, electronic cigarette, hookahs, and chewing tobacco. Walsche K. et al (2011)

Most studies in Finland have focused more on one discipline, either health, social or psychological aspects with regards to smoking cessation leaving behind aspects of integration of any of the disciples with state interventions; as a midpoint, to serve as a

stepping stone not only to test effectiveness of strategies but to also broaden spectrum of research. Motivation to the study comes from personal interest in the topic, strict notices on smoking at home, school, work, restaurants and other public places cannot be ignored. These measures are being reinforced almost on a daily basis, the outcome looks promising. Considering the fast approaching deadline of a smoke free Finland 2030, curiosity is eminent.

Results and conclusion of the study will throw more light on implementation of strategies from both the health and state ends.

2 BACKGROUND

WHO Framework Convention on Tobacco Control (FCTC) is a UN health treaty that sets range of measures nations should consider to reduce tobacco use. WHO Framework Convention on Tobacco Control (WHO FCTC), Article 14 states that "each Party shall develop and disseminate appropriate, comprehensive and integrated guidelines based on scientific evidence and best practices, considering national circumstances and priorities, effective measures to promote cessation, use and adequate treatment for tobacco dependence".(WHO, 2010) The World No Tobacco Day (WNTD) is celebrated every year on 31 May, with the year 2017, theme as "Tobacco, a threat to development." The WHO campaign goals are; controlling tobacco controls health and development that helps all countries to protect citizens from the dangers of smoking and to meet the Sustainable Development Agenda (SDA). Controlling tobacco helps achieve other global goals, governments as well as individuals can protect the health of others exposed to second-hand smoke by quitting the habit or seeking help to, by doing so money used on tobacco can be used to buy healthy food, achieve good education and healthcare. The cycle of poverty will be broken, reduction of healthcare disparities, end hunger, promote environmental and economic growth and also contribute to the fight against climate change (WHO, 2017).

Logistic regressions results in a study to determine trends in educational differences in adolescent daily smoking across Europe, revealed the prevalence of adolescent daily smoking between 2002 and 2010 declined significantly in Germany, The Netherlands, Belgium and France, experienced an increase in Croatia and remained unchanged in Italy and Hungary. (Margaretha de Looze et al, 2013). Rapid measures to conquer smoking habits are necessary to achieve the 'endgame' objective of very low smoking prevalence (<5%) proposed in countries such as Finland, New Zealand, Scotland and Ireland (Healey B. et al., 2014).

Finland has been among the world's pioneer countries in tobacco policy since 1976, when the Tobacco Act (693/1976) introduced measures to reduce the consumption of tobacco products. This means a year before the Tobacco Act came into force in 1977.

Tobacco Act was renewed in May 2016, EU's Tobacco Products Directive imposed new measures on Parties (member states) tobacco legislation, the aim of the Tobacco Act was renewed, the new objective is to end the use of tobacco and nicotine products. The altimate aim is to reach a tobacco and nicotine free Finland by 2030 (National Institute For Health And Welfare, 2016).

2.1 WHO Recommendations And Actions To Parties On Healthcare Providers

i. Parties should provide suitable training for non-healthcare providers to support and treat SC in non-healthcare settings in places where scientific evidence suggests maybe successful this way.

ii. All healthcare workers should be trained to provide SC support interventions by asking about tobacco use, documenting, give brief advice and direct users to appropriate quarters.

iii. Quit-lines should be adequately staffed to ensure individuals receive support.

iv. Health care providers should deliver more intensive specialized support, behavioral support, medication and advice on medication provisions where appropriate.

v. Provide SC support to healthcare workers who use tobacco and encourage them to quit.

vi. Reimbursement for time incurred in cessation counseling to healthcare workers and cost of medication where appropriate.

vii. Ensure that health and service workers monitor service performance through various indicators taking into account national circumstances and priorities.

(WHO, 2010)

2.2 Health Systems

According to studies, the health system in Finland provides quality services and receives high levels of satisfaction from the public though long waiting times, personnel shortages, ageing population needing new technology; demanding more expectations, high levels of decentralization and lack of coordination between primary and secondary healthcare. The authors in the organizational chart of the statutory health system describe public funding (tax funding and health insurance fee) to three different healthcare systems (the municipal, private and occupational healthcare systems). The municipal care provides the most healthcare services. Through a set of hierarchical, contractual and regulatory relationships, funding finally reaches primary care, municipal hospitals, and specialist level hospitals. Cardiovascular diseases according to the study caused 41% of deaths in 2005 compared to 52% in 1983, has a positive outlook due to life style changes like reduced smoking rates and good nutrition (Laura et al, 2008)

2.2.1 Nurses' Responsibility To Promote Health

One of the basic rights of a human being is the right to good health, this also means the right to goods and services which improves or maintain current health status. Nurses have a responsibility to promote health of individuals, groups and communities and this is built on advocacy. Fundamental responsibilities of a nurse are to:

i. Promote health

ii. Prevent illness
iii. Restore health
iv. Alleviate suffering

This responsibility can be carried out conveniently in coordination with other healthcare providers or related discipline by applying ethics, knowledge and reasoning abilities to every action to be undertaken. The actions taken are supported by ethical principles:

i. Beneficence; the obligation to do good.
ii. Non-maleficence; the obligation to avoid harm
iii. Justice; providing equal and fair healthcare treatment to all.
iv. Autonomy; to respect individual choices as self-determined.
v. Veracity; to tell the truth.
vi. Fidelity; obligations to remain faithful to commitments.

Ethical issues arise as a result of the nursing actions but adhering to the Nursing Code of Ethics in most situations help to ease understanding and serves as a guide to which is the next possible step. (Fry, S., et al, 2009, pp 22-70)

2.3 Legislation on Strategies To Diminish Tobacco Consumption

Eradication of nicotine-containing products as set by legislation in 2016 from 2040 to 2030 is a big task that needs the help of the Tobacco Products Directives (TPD) and the WHO Framework Convention on Tobacco Control (WHO FCTC). Availability of a big market for tobacco products and e-cigarettes around the borders of Finland and the internet left no choice but to tighten the legislation from just tobacco products by 2040 to all medical nicotine-containing products by 2030. Adopting the WHO FCTC MPOWER measures introduces the Tobacco Control Act legislation which targets four major domains (Patja, K. et al, 2017, pp 24-26).

2.3.1 Tobacco Prevalence In Finland

Latest Adolescent Health and Lifestyle Survey (2015) reveal that, 12% of boys and girls aged 14 to18 years smoked daily, prevalence among youth has approximately halved in the recent years and adult daily smoking in 2014 was 17% for men and 14% for women; smoking in men has decreased since the 1980s and women's smoking behavior seems to have followed the same pattern on an average in the last few years. There are about 875000 daily or occasional smokers among 15 to 84 year-olds, (National Institute For Health and Welfare, 2016). WHO RGTC (2017), in 2016, adult (15-65years) current tobacco smoking among males was 24.8% and for females it was 18.7%, male's daily tobacco smoking was 17.2% and females 14.0%, male youth (14years) current tobacco use was 2.0% and females 3.0%. Smokeless adult (15-65) current tobacco use among males was 5.6% and 0.4% in females, male youth (13-15) current smokeless tobacco use was 12.7% and females 1.6% in 2016. Adult current and daily cigarette smoking data was not recorded in 2016. In 2015, aged 15years and more adult male current use of any tobacco form was 23.2% and 18.7% for females, males daily smoking of any tobacco form was 18.1% and 14.0% for females, cigarettes current smoking for males was 20.5% and 15.3% for females, daily cigarette smoking was 15.0% for males and 10.9 for females. Figure 1 below simplifies the information WHO RGTC (2017) by plotting prevalence % against tobacco use.

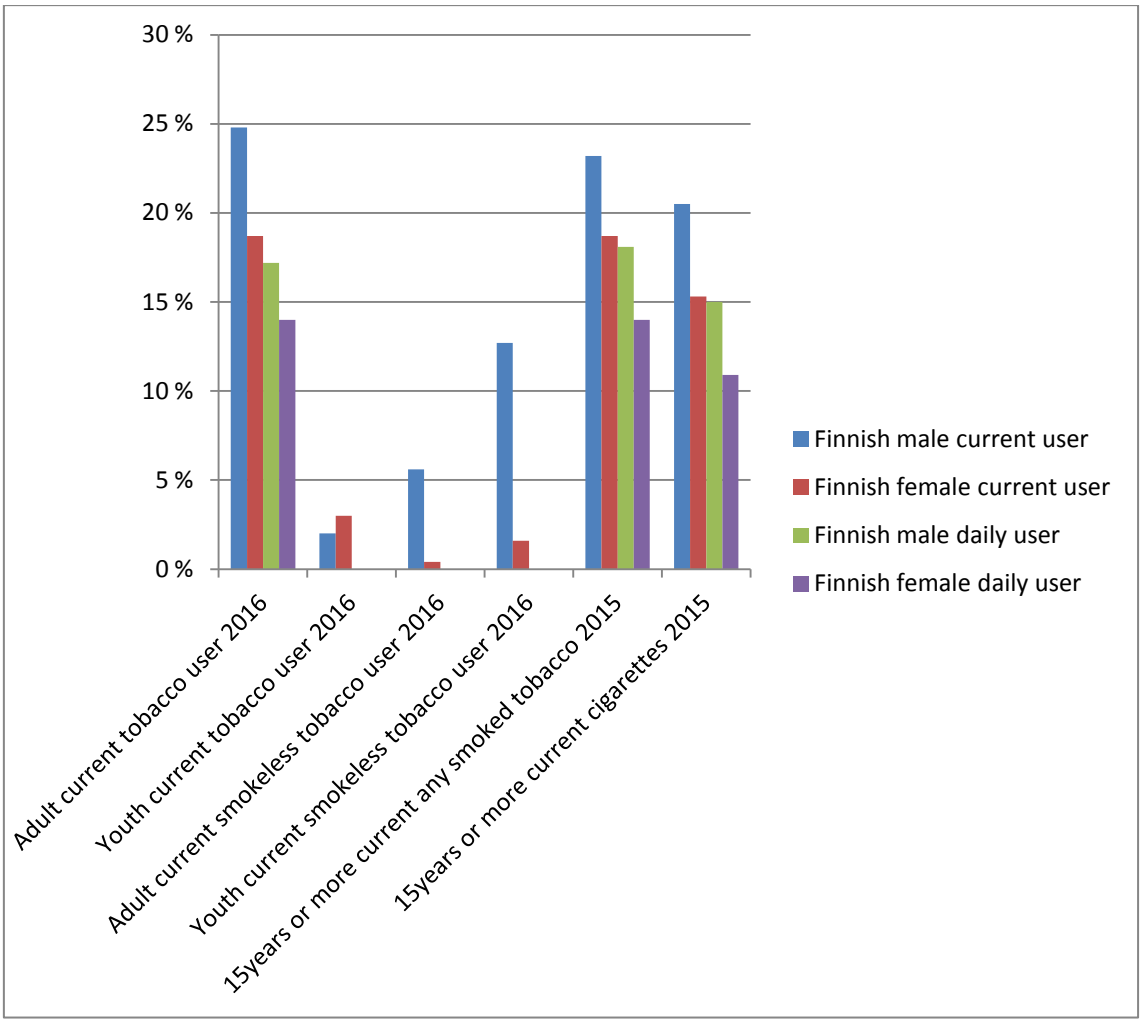

Figure 1. Prevalence of Tobacco use in Finland: WHO RGTE, 2017

2.3.2 Prevention Of Tobacco Initiation Use

The WHO FCTC recommends the implementation of Article 20 which requires surveillance at national, regional and international levels on tobacco use and second hand smoke, integrating the data at all levels could lead to comparisons and analysis at all levels. Chapter 11 Section 83 of the New Tobacco Act (NTA) of August 2016 spells out the national supervision program by Valvira, the program will be revised and further provisions on content supervision will be passed by a government decree. Section 84 also spell out municipal plans to supervise local needs and regional state administrative

plans to evaluate, supervise and implement these plans in their respective domains. WHO RGTE (2017), warnings on cigarette packages in words and pictures cover 65% of both the rear and front package in both cigarettes and other smoked tobacco, though this does not apply to neither import nor duty-free sale, 15 specific health warnings are approved by the law. This could be successful through education and campaigns on health issues, peer-sensitive (gender, age, class etc) programs to prevent smoking, prevention in healthcare related settings and implementation of the TCA policies at all levels (Patja, K et al (2017, pp 24).

2.3.3 Supporting To Quit Tobacco Use

Article 14 of the WHO FCTC provides guidelines to help tobacco consumers quit successfully through different treatment schemes and support programmes. The WHO (2017) describes quitting tobacco as a cluster of behavior, cognitive and physiologic occurrences, and most of its users are victims of tobacco epidemic. Section 5 subsection 5 of the TCA makes provisions for surveillance on compliance with smoke-related activities at workplaces laid down in the Occupational Safety Act and Health Enforcement and Cooperation of Health and Safety at Workplaces (44/2006). This makes possible for employers to get compensation if they quit tobacco use. Chapter 2, Sections 4,5,6,7,8,9 highlights tasks for the different authorities to carry out with the highest authority being the Ministry of Social Affairs and Health inorder to guide and direct effectiveness of the Act and its provisions. According to a RGTE (WHO, 2009), the population of Finland has access to quit lines for telephone counseling and nicotine replacement therapy readily available in the general store, bupropion and varenicline are available in the pharmacy with treatment, smoking cessation support is available in most primary care facilities and hospitals, support could also be sort in some offices of health professionals and some communities. Compensation for healthcare and medication by Kela (The Social Insurance Institution, Finland). Section 53(1,2) prohibits the sale of nicotine-containing liquids, e-cigarettes tobacco substitutes and accessories to under 18years of age. This is strictly followed by sales agents in Finland as they ask for a picture identity to prove eligibility to buy tobacco products. Useful information is also available official sites on the internet to help tobacco users quit.

2.3.4 Protection Of Population From Tobacco Smoke

Recommendations of Article 14 of the WHO FCTC protects people from tobacco smoke. Chapter 10 to the TCA spells out smoking bans, Section 73 gives a clear definition of a smoke free space, Section 74 general smoking bans prohibits smoking in indoor areas, public places or vehicles, public events, private vehicles with under 15 years old children, smokeless tobacco is prohibited in daycare centers, primary, basic, vocational and upper secondary schools. Section 74 spells out some general smoking bans while Section 76 makes provisions to protect the smoking area. Smoking in restaurants have been long banned in Finland, Section 77 makes provisions necessary for the smoking area in the restaurant to be sufficiently large, no consumption of food or drinks and monitoring plans should be drawn up by operator to smoking area functionality. Section 81 and 82 enforces the smoking bans and notification of authorities (municipalities, police, labor and licensing authorities) about violations to each other respectively. WHO RGTE (2017), tobacco has a complete ban in educational facilities except for universities with a high compliance score of 10, fines are levied either on the establishment and/or smoker and a compliant system to investigate after complaint has been made in Finland. It is important to keep out of reach, visibility and appeal of minors. No labels but numbers represent the different brands at sales points, no discounts on tobacco products, age limits on e-cigarette is same as regular cigarettes, certain flavors appealing to minors are not allowed (Patja, K. et al(2017, pp 25).

More surveillance and direction is needed to ensure effectiveness of the Tobacco Act and chapter 11 gives possible ways to achieve positive results. This also paves a way for more research to amendments in old strategies and to welcome new dimensions possible. (WHO, 2009)

2.3.5 Legislation Of Tobacco Products In Finland

2.3.5.1 Mass media and Advertising bans

Most prominent way in which tobacco gains popularity is through media especially during adverting and sponsoring in public events where millions of people are watching. Most of these adverts have been banned in some countries. In Finland, first tobacco advert bans, strong alcohol and smoking restrictions were in 1976, tobacco sale to under 18years old is still prohibited. (WHO RGTE, 2017)

2.3.5.2 Tobacco Act

The Tobacco Act, 2016, spells out measures to protect the population from tobacco consumption. Chapter 16, Section 120 auctions the New Act into force to repeal the old Act of 1976 on the 15 of August 2016. (WHO, 2016)

According to a press release; New Stricter Tobacco Act of August 2016, scented flavored cigarettes (with exception of menthol flavored cigarettes), roll-your-own tobacco and smoking in the car with under 15years old is prohibited. Candy in shapes of liquorices pipes are not to be sold to under 18years old. Menthol-flavored cigarettes are permitted during the transition period till 20 May 2020. E-cigarettes follow the same regulations with restrictions on their emissions (10mg of tar, 1mg of nicotine, 10mg of carbon monoxide). Bans on import of smokeless (snus, chewing and nasal) tobacco products for private use or otherwise through remote means like online sales. Exemptions on being at least 24hours outside Finland allows smokeless tobacco imports for private use on certain conditions like a maximum weight of 1kg smokeless tobacco and 200 cigarettes per person for legal tobacco products. Municipalities have the responsibility to check smoking on balconies especially from one balcony to another, outdoor areas of dwelling, enforce sales and marketing provisions of the tobacco Act and ultimately review the application to encourage inhabitants stop smoking (Ministry of Social Affairs Finland, 2016).

2.3.6 Taxation And Affordability Of Tobacco Products

The WHO (2017) claims 75% and more of retail price of tobacco is tax and increasing the taxes on tobacco reduces consumption especially among the poor and youths. According to the WHO RGTE 2013, in Finland, the total excise of annual tax revenue collected from all tobacco products was in 2011, 10,943,280,000,00 euro (EUR), in 2012 it was 7,325,500,00 EUR. In 2012, Marlboro (packet of 20 cigarettes) cost 5,40 EUR and other more affordable types of the same size cost 4.20 EUR . According to the WHO RGTE 2015, in 2013, total excise tax was 847,761,074,61 EUR. In 2014, lowest cost brand sold for 4.60 while Marlboro sold for 6.00 EUR. According to the WHO RGTE 2017, in 2015, total excise tax was 881 000 000.00 EUR, lowest cost brands sold for 5.40EUR (West/Chesterfield) and premium brands sold for 6.30EUR in 2016, cigarettes are less affordable and trend has not changed since 2008. The annual fee for nicotine products in stores experienced a steep rise (about 500 EUR/year plus the annual licensing fee to sell to the general public). Retailers question if cigarette selling is still profitable (Patja, K. et al, 2017). A summary can be found on figure 2.

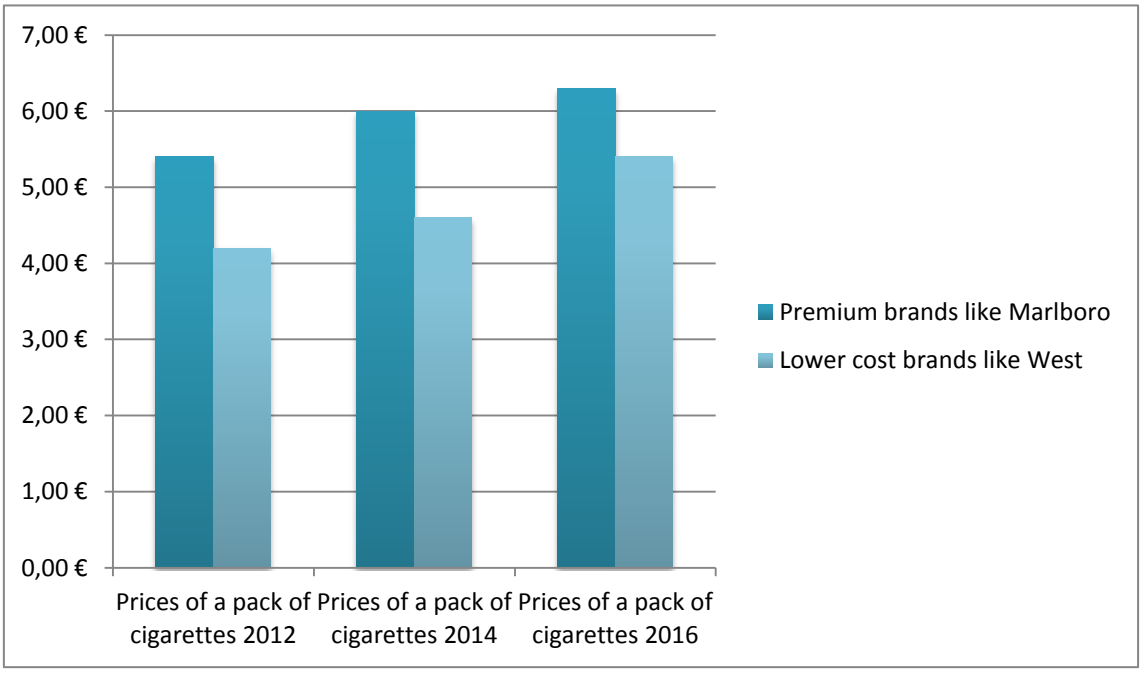

Figure 2. Prices of a packet of 20 cigarettes; WHO RGTE (2013, 2015, 2017)

3 THEORITICAL FRAMEWORK

Most of the articles found have somehow based their findings this health promotion theory.

3.1 Pender's Health Promotion Model

Pender’s Health Promotion Model focuses on personal characteristics and experiences, behavior specific cognitions and effect which could be modified through nursing interventions to get a desired behavioral outcome.
Health promotion has been defined by the World Health Organization's 2005 Bangkok Charter for Health Promotion in a Globalized World as "the process of enabling people to increase control over their health and its determinants, and thereby improve their health." Health promotion has never been more important than it is in the present day. Nurses in education, practice, and research settings can participate in the advancement of health promotion not only to the mainstream but to the forefront of nursing practice (Gerty, C.,2011).

The Longman Dictionary of contemporary English defines smoking as an activity of breathing in tobacco smoke from a cigarette.This definition acts as a logical base for Pender’s definition on health promotion as activities geared towards the provision of resources to mentain an individual’s well-being. King states that operational systems (personal systems), interpersonal systems and social systems have a relationship. Ten out of fifteen concepts selected from nursing literature (self, communication, growth, personal space, stress, role, perception, time, transaction) helps the nurse and patient in a transaction process to attain their goal. Pender argues that individual characteristics and experiences, behavior specific cognitions and affect, and behavioral outcomes should result in improved health, enhance functionality, and better the quality of life at all developmental stages. The behavioral demand is influenced by immediate competing

demand and preferences which could deflect intended outcome. (Barbara Kozier et al 2012)

3.2 Definition of Components of Pender's Model

3.2.1 Individual Characteristics and Experience

It refers to frequency of prior health related behaviors and individual characteristics that influence health behaviors such as race, age, personality, ethnicity, socioeconomic status, structure.

3.2.2 Behavior-Specific Cognitions and Affect

Perceived benefits and barriers to action, perceived self-efficacy, activity-related affect, interpersonal and situational influences, commitment to a plan of action hoping for success and immediate competing demands and preferences.

3.2.3 Behavioral Outcome- Health Promoting Behavior

The expected behavioral outcome of health decision-making and preparation for action.

3.3 Nursing Concepts Based On Model

Person: A biopsychosocial organism that has a reciprocal relationship with the environment. (Pender, 2011)

Environment: All aspects of social, cultural, physical context that can be manipulated to enhance health.

Nursing: The focus on individuals, families, and communities to attain the best quality of life from birth to death.

Health: It refers to all endeavors to assist in the provision of optimal primary, secondary, tertiary as well as public health care.

Illnesses: Abnormal conditions either external or internal dysfunctions affecting an organism. (Pender, 2014)

4 AIMS AND RESEARCH QUESTIONS

This study seeks to investigate the guidelines formulated by WHO and the Health sector with regards to SC are compliant, to also use the nursing theory in understanding behavior modification patterns. To use this study for more related research since studies are ongoing to achieve a tobacco free Finland come 2030.

The research questions to achieve the aims are:

i. What are the nursing strategies/interventions in smoking cessation.
ii. How can the nursing strategies be incorporated into a theoretical framework to come up with a smoking cessation plan?

5 METHODOLOGY

Primary studies are summaries of research papers in a review and a secondary study is the review itself. Evidence can be accumulated through secondary studies which may offer new accurate and deep understanding or identify problem areas which could be solved by more primary studies. Evaluation and interpretation of all available studies or research leading to a specific topic, question to be answered or phenomenon of interest is a means to systematically review literature. (Pearl et al, 2006).

Research was deductive in nature which means moving from general to a specific point of view, the advantages this type of research offers is the possibility to find a relationship between certain variables and concepts, measure them qualitatively and generalize the findings to a certain extend. (Dudovskiy, 2017).

The data collected gives an understanding of SC interventions; both pharmacological and non-pharmacological interventions, throws more light on the role of healthcare providers and clients on SC which will seek to address the research question, provides some insight to the different interventions available so that individuals can make a choice.

5.1 Data Collection

The method used to collect data involved gathering relevant articles from selected subject matter, thoroughly reading through and extracting the most important information with regards to the subject matter. Data collection was done between July and August 2017.

SC strategies as guidelines set by WHO was considered with respect to healthcare providers especially the nurses. Information was collected from the WHO official websites and seven strategies to SC were selected. The search terms were used to come up with ten articles which explained critically the seven strategies. Relevant information was extracted to be analyzed against a theoretical framework.

The following search engines were used for review; Arcada University of Applied Sciences>Libguides>Nursing>Articles and Data bases. The databases will include; Academic Search Elite (EBSCO host)/ Cinahl (EBSCO)/ PubMed/ Cochrane Library. Search engines, terms and hits used could be found on Table 1.

Table 1: Search engine and search terms

Search Engine	Search term(s)
CINAHL	Smoking Cessation AND Finland.
Cochcrane Library	Smoking Cessation and other keywords like pharmacological intervention, barriers, general practioners, quit lines, behavioral support, motivation.
Academic Search Elite (EBSCO host)	Smoking cessation AND barriers AND general practioners.

5.2 Inclusion and exclusion criteria

Inclusion criteria involved only publications from 2007-2017, only articles in English were considered for review and articles were free of charge. Full text, scholarly peer reviewed. Exclusion criteria involved publications before 2007, articles written in other languages from English, articles that were not free of charge, neither full text nor

scholarly peer reviewed. A summary of inclusion and exclusion criteria can be found on Table 2.

Table 2: Inclusion and exclusion criteria

Inclusion	Exclusion
Articles published from 2007-2017	Publications before or after 2007-2017
Articles written in English	Articles not written in English
Articles were free of charge	Articles that charge a fee
Full text articles	Articles which were not full text
Scholarly peer reviewed	Not scholarly peer reviewed

5.3 List of chosen articles

1 Kurko, T, Linden, K, Kolstela, M, Pietilä, K, & Airaksinen, M 2015, 'Is nicotine replacement therapy overvalued in smoking cessation? Analysis of smokers' and

quitters' communication in social media', Health Expectations, 18, 6, pp. 2962-2977, CINAHL, EBSCOhost, viewed 4 August 2017

2 Cahill K, Stevens S, Perera R, Lancaster T. Pharmacological interventions for smoking cessation: an overview and network meta-analysis. Cochrane Database of Systematic Reviews 2013, Issue 5. Art. No.: CD009329. DOI: 10.1002/14651858.CD009329.pub2

3 Stead LF, Hartmann-Boyce J, Perera R, Lancaster T. Telephone counseling for smoking cessation. Cochrane Database of Systematic Reviews 2013, Issue 8. Art. No.: CD002850. DOI: 10.1002/14651858.CD002850.pub3.

4 Stead LF, Koilpillai P, Lancaster T. Additional behavioural support as an adjunct to pharmacotherapy for smoking cessation. Cochrane Database of Systematic Reviews 2015, Issue 10. Art. No.: CD009670. DOI: 10.1002/14651858.CD009670.pub3.

5 Lancaster T, Stead LF. Individual behavioural counseling for smoking cessation. Cochrane Database of Systematic Reviews 2017, Issue 3. Art. No.: CD001292. DOI: 10.1002/14651858.CD001292.pub3.

6 Stead LF, Carroll AJ, Lancaster T. Group behaviour therapy programmes for smoking cessation. Cochrane Database of Systematic Reviews 2017, Issue 3. Art. No.: CD001007. DOI: 10.1002/14651858.CD001007.pub3.

7 Cahill K, Hartmann-Boyce J, Perera R. Incentives for smoking cessation. Cochrane Database of Systematic Reviews 2015, Issue 5. Art. No.: CD004307. DOI: 10.1002/14651858.CD004307.pub5.

8 Lindson-Hawley N, Thompson TP, Begh R., 2015, Motivational interviewing for smoking cessation. Cochrane Database of Systematic Reviews, Issue 3. Art. No.: CD006936. DOI: 10.1002/14651858.CD006936.pub3.

9 Rice VH, Heath L, Livingstone-Banks J, Hartmann-Boyce J., 2017, Nursing interventions for smoking cessation. Cochrane Database of Systematic Reviews, Issue 12. Art. No.: CD001188. DOI: 10.1002/14651858.CD001188.pub5.

10 Bell, K, Bowers, M, McCullough, L, & Bell, J 2012, 'Physician advice for smoking cessation in primary care: time for a paradigm shift?', *Critical Public Health*, 22, 1, pp. 9-24, Academic Search Elite, EBSCO*host*, viewed 7 August 2017.

5.4 Content Analysis

The author used qualitative content analysis (QCA). Qualitative in nature meaning collect, organize, synthesize and provide structure to data. This also means research involved a deductive approach. QCA is a research method which gives understanding and knowledge to the subject matter by interpreting text data contents (Hsiu-fang et al, 2005). The main keyword used to search data was ‘‘smoking cessation” other words used in the search either came from the name of the categories or subcategories. A total of ten articles were selected for study, each of them was thoroughly analyzed against the theoretical framework and relevant information to answer research questions was extracted. Categories were separated into pharmacological, non-pharmacological interventions and nurses/other healthcare providers interventions, subcategories were NRT, medications, combination treatments, telephone quit-lines, behavioral support and motivation.

5.5 Research ethics

Ethics are standards that govern conduct or behavior, examines moral life and justifies decisions and actions of people. (Fry, S., et al, 2009, pp 15&16). Research ethics involves prevention of misconduct, encouragement of integrity in studies and publications. (Marusic, A., et at, 2016). This study has also observed the principles of ethics in different ways. This thesis will be susceptible to a plagiarism test (Urkund) to reveal its authenticity. Articles found from reliable and verifiable sites from 2007-2017. These articles, books, guidelines, official web pages and journals are all in English and context is well understood by the author. The thesis is objective in nature and is equipped with basic language to guide the understanding of the reader. Part of the process of authenticity is taking a maturity test which will be organized by the board of supervisors to prove the author actually did the research.

6 FINDINGS

The author will present the findings from 10 articles which gear towards answering the research questions. The results will be divided into categories and subcategories to ease understanding. The main categories are pharmacological, non pharmacological interventions and nurses/other healthcare providers' intervention. Subcategories under pharmacological intervention will be NRT, medication and combination treatment, non-pharmacological subcategories will be telephone quit-lines, behavioral support and motivation. An incorporation of the interventions in a Pender's health promotion model to come up with a plan, a summary found on a table in the appendix.

6.1 Pharmacological Intervention

Findings from article 1, 2 reveal nicotine replacement therapy (NRT), medication use (Bupropion and Varenicline) and combination treatments as one of the most effective ways of smoking cessation.

6.1.1 NRT

In Finland, NRTs were sold in the 1980s as prescription drugs from the Finnish pharmacies, in 2006, they could be sold without prescription from grocery stores, kiosks and gas stations.(1). Research carried out on how smokers and quitters value NRT in smoking cessation and how the participants on the Finnish National Internet Discussion Forum (STUMPPI) share their experiences concluded that most participants had a low or balanced expectation towards the use of NRT in smoking cessation, quitting involves psychological empowerment, self determination and motivation.(1,4,5)

6.1.2 Medication

Bupropion is a tricyclic antidepressant drug which helps to reduce cravings and nicotine withdrawal symptoms. This is a 150mg/tablet prescription drug which is taken once or twice a day for 7-12 weeks. Varenicline is a selective nicotinic partial antagonist drug used to reduce withdrawal symptoms and satisfaction from smoking. The dosage is 1mg once or twice a day for 12weeks. Nortriptiline and cystisine are also available. Other medications involve antidepressants, clonidine, anxiolytics, lobeline, mecamyline. In Finland, bupropion and varenicline are largely used and are available in the pharmacy together with treatment.(2,3)

6.1.3 Combination Treatment

This kind of intervention tries to combine one or more forms of intervention to give a better outcome. The efficacy in NRT, bupropion and varenicline compared with placebo and each other in achieving long term abstinence revealed NRT, bupropion, varenicline, cystisine and a combination of NRT and varenicline improve chances of quitting.(2)

In delivering group behavioral interventions to determine if there was an effect in achieving long term SC, smokers received behavioral intervention in the form of advice, information, encouragement or cognitive behavioral therapy during scheduled meetings delivered over at least two sessions. Comparisons from group against self help programs (manuals, self help), group against less intensive interventions (physicians, nurses, pharmacists), group + pharmacotherapy against pharmacotherapy alone, group against no intervention and comparisons between groups programmes (training, skills, mood management, manipulation of group dynamics, miscellaneous). There is some evidence that advice from a healthcare provider is best but groups offer better interventions than self help, though if self motivation is evident, client could join available groups to increases chances of quitting (6,3).

6.2 Non-Pharmacological Intervention

6.2.1 Telephone Quit-lines

Two approaches; proactive approach where the counselor initiates quit attempts or avoids relapse and the reactive approach where the client, client's family or friends initiate the contact for help, though the applicability, completeness and quality of reactive approach was difficult to determine, proactive approach was successful in aiding smokers quit by providing support for clients on pharmacotherapy.(3)

6.2.2 Behavioral Support

An evaluation of the effect of increasing behavioral support for people SC medications to assess different effects if any with regards to the type of pharmacotherapy or amount of support in each condition, the study used intensity of behavioral support intervention and control to group categories under amount of contact time and number of person to person sessions, showed an increase in the proportion of quit attempts for smokers on behavioral support and medication.(4)

Individual behavioral counseling help people to quit compared to less intensive support. Counseling against minimal contact shows quitting at long term with no pharmacotherapy while more intensive against less intensive shows slight benefit in more intensive counseling with pharmacotherapy (5).

Counseling is an important tool in quitting smoking and there is an increase chance of 10-20% if behavioral support is increased. Discussion forums like STUMPPI should be used to assess behaviors of smokers especially with respect to medications. (1,4,5)

6.2.3 Motivation To Quit

The STUMPPI forum throws more light on smokers' point of view as self motivation, psychological empowerment, willingness and decision to embrace a new lifestyle. The cold turkey quitting is also mentioned as an easier way of quitting without the use of NRT, reasons for no withdrawal symptoms indicating low nicotine levels and total freedom from nicotine (1).

(4) affirms claims from (1) by citing GPs' views on smoking cessation as the client ultimately makes the decision as their responsibility to quit though education and information will be delivered.

Incentives in either material or financial rewards can also motivate individuals to quit. A study on incentives and contingency management to determine higher long term quit rates in mixed populations and pregnancy interventions boosted cessation rates in both but could not determine cessation in the long term for mixed populations while pregnancy intervention cessation could go beyond childbirth (postpartum) if contingencies are kept in place. (7).

Motivational interviewing used formally to treat alcohol abuse can be applied as a patient-centered approach of counseling to bring about a behavior change. Motivation is conceptualized to fluctuate over time from different situations to a particular direction which could be the desired behavior change. Interventions include all underlying motivational principles (empathizing, discrepancy development, rolling with resistance and supporting self-efficacy) in different stages. This type of intervention shows modest success in promoting SC (8).

6.3 Nurses/Other Healthcare Providers' Interventions

Nurses and other healthcare providers act as a turning point or rather mediators between the pharmacological and non-pharmacological interventions. The role of the healthcare provider is very delicate as well as crucial to behavior related interventions like

smoking. Nursing intervention is the giving of advice, counseling, and or strategies that can help smokers quit. The review determined how effective nurses deliver interventions on smoking behavior in adults. Advice was focused on quitting. Intervention was described as either low or high intensity. Low intensity meaning advice in a 10 minute consultation and one follow up visit, high intensity is advice in a more than 10 minute initial consultation, additional materials like manuals, strategies and more than one follow up visit. A positive effect is evident in effective nursing intervention on a six months and longer period than usual care (Article 9).

Smoking Cessation support is available in most primary care facilities, hospitals in Finland and offices of health professionals. The fact that pharmacists in Finland were able to provide education through counseling, guidance and support for NRT users as laid down in the Finnish Smoking Cessation Guideline of 2002, the healthcare providers or professionals could use the STUMPPI to speak with quitters and also monitor the discussion forum. (1)

Health centered and patient driven saw smokers' expectations from GPs as an initiator to smoke cessation conversations when they meet for health consultations. The manner of approach to education, information and action of how advice should be delivered in terms of good communication skills could be an exemplified approach. Smokers also saw time, training and remuneration as a setback to GPs in primary care settings. GPs saw client-initiated discussions legitimate and linked to personal history which otherwise will be initiated by the GP if it was linked to a health problem. GPs thought their role is of patient education, quitting is the ultimate responsibility of the patient. Also, process of discussion, making appointments, searching for other resources and follow up is time-consuming which has not been covered by the government as remuneration or extra fees. The study reveals advice from GPs as an effective and easy way to smoking intervention though the population-level approach concerns both smokers and GPs alike (10).

6.4 Incorporation of SC Interventions to Theoretical Framework

A person's traits, psychological status, socioeconomic status and ethnicity could be modified through education, counseling, stress coping mechanism, active participation in productive health programs abstinence from trigger factors and self motivation to have a positive behavior outcome.(1,3,5,6,10)

Environment presented peer pressure, societal expectations, culture, beliefs and traditions as some individual characteristics and experiences which could be modified through support groups, empowerment, more knowledge acquisition, parental guidance, counseling, advice, community development and skill sharing to get a positive outcome.(1,3,4,6,10)

Nursing involves all healthcare providers as well as related disciplines that could provide empowerment, education, counseling, advice on pharmacotherapy, motivation, research, follow up, surveillance and implementation of the law and legislation to modify behavior in individuals, families and communities in a positive way.(1,2,3,4,5,6,77,8,9,10)

Health considers all healthcare providers and other related disciplines, organizations like WHO, ministries, state laws and legislation(Finland), through empowerment, education, counseling, advice on pharmacotherapy, motivation, research, treatment, follow up, surveillance, implementation and enactment of the law and legislation to bring about a positive behavioral outcome in Finland and the world at large.(1,2,3,4,5,6,7,8,9,10)

Finally, illnesses recorded withdrawal symptoms, pregnancy smoke-related concerns as characteristics and experiences which could be modified through pharmacological treatments, behavioral support and incentives to achieve a positive behavior outcome especially when incentives are maintained.(1,2,5,7)

See appendix for summary.

7 DISCUSSION

From the literature review, SC is seen as one of the major public health concerns of Finland and the contemporary world at large.

Nicotine replacement therapy is a short term or temporal replacement of much nicotine from tobacco itself so that the motivation to consume tobacco is lessened thereby making withdrawal symptoms to be easily manageable. It is available as gum, transdermal patch, nasal spray, inhaler and sublingual tablets (lozenges), even faster ways of delivering nicotine (electronic cigarettes, high-dose patches and rapid release gums). True pulmonary inhalers and vaccine formulations are ongoing. NRT is being used for several weeks before quitting known as precessation, preloading or prequitting (Wadgave et al, 2016). Pharmacological interventions capitalizes on the client for effectiveness like the use of NRT was questioned by most of its users if it was really a means of quitting in the long term, there were obvious concerns of addiction to NRT rather than quitting because of the presence of nicotine though in small amounts, expectations could be low to medium due to gradual decrease and a long process which involves a lot of self motivation willingness to go through the process, STUMPPI could reinforce hope to the empowered.(1). Medications are an easier, faster and convenient way of SC and when combination of NRT and some medications are used could yield better results (2).

Non-pharmacological interventions on the other hand capitalizes on the nurse or healthcare provider as the main source for effectiveness, the healthcare provider helps to bring about a major change in behavior through advice, phone calls, education, counseling, provision of treatment, dispensing medication and uplifting the general motivation of the client whether through brief or intense intervention lasting for shorter to a longer period of time. Assessment of the general client outcome solely depends on the healthcare provider and the client which relies on effective communication and decision making to booster this change (3,4,5,6,7,8,9,10).

Categorizing the nurse and other healthcare providers was tricky because in both interventions, they play a major role of implementation of the strategy. The studies found that a combination of both pharmacological and non-pharmacological or within the different interventions is the most effective way of quitting. Suggestions like NRT and behavioral therapy, NRT and varenicline, quit-lines and pharmacotherapy have shown to increase quitting rates. (2,4,5).

The SC interventions in this study are incorporated in to the Pender's Health promotion model. The model uses three important components (individual characteristics, behavior specific cognitions and behavioral outcome), and five concepts (person, environment, nursing, health and illness) to bring about a positive behavior outcome in SC plans. Nursing and health were two very related concepts and covers the entire scope of the study, illness did not record any specific diseases as such but concerns like withdrawal symptoms and smoke-related pregnancy issues were mentioned.(1,2,3,4,5,6,7,8,9,10)

In a study carried out in the Nordic countries to identify general practitioners' (GP) perceived barriers to SC, prominent of questions aroused were if it was part of the GP's job to discuss smoking habits of a client and if they were well equipped as experts to handle this role. Most of the barriers identified indicated availability of experts in most clinics and telephone quit-lines or a combination of both (Helgason et al, 2002) 60% of national toll-free quit-lines are operated by high income countries. Quit lines provide cessation services through telephones by offering evidence-based services and information, acts as a portal for treatment services, can potentially reach 4-6% of users per annum, serves to counsel professionals, easy and convenient to get help, confidential, readily available and reduces relapse. Both quit lines and health systems could have a mutually beneficial relationship and can complement each other (WHO, 2011).

Overall, study reveals motivation, empowerment, willingness from both client and healthcare providers acts as a spring board for successful implementation of interventions and positive behavioral outcomes as shown by the nursing theory in SC interventions (1,8).

8 CONCLUSION AND RECCOMMENDATION

Health/state strategies and contributions towards achieving smoking cessation are actively and effectively being implemented in Finland. Healthcare provisions to this effect are overseen by Valvira and the Ministry of Social Affairs and Health. The studies present pharmacological and non-pharmacological interventions as effective contributions to smoking cessation. However, healthcare providers as well as clients have a big role to play in effecting a well structured plan for quitting.

Integration of more than one discipline at a time in a research might open new dimensions to broaden the spectrum and create more options and opportunities to explore smoking cessation strategies. Several limitations were recorded in this study. Firstly, Finland-based English written articles on the topic were few, some subjects under investigation like smokers were not representative of the decisions made by the entire population concerned. Most of the articles considered adults (18 and above) who could make their own decisions on whether to quit or not, studies dealing with minors were not included. Only English articles were used for the review, studies considered were only those free of charge (no fees).

Language might create a barrier to expression of personal feelings, more forums with translations in other languages where users, ex-users, other individuals can share their thoughts and experiences freely in a secured and convenient manner on smoking as a whole, should be created, this will not only help current users but also individuals who feel confused and lack help. Pender's HPM can be used to improve healthy lifestyle among different age groups, financial, social and educational status, researchers can design this model and incorporate in smoking cessation intervention for long term goals like to end smoking by 2030 in Finland.

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Appendix : Incorporation of SC interventions in theoretical framework.

	Individual Characteristics and Experience	Behavior-Specific Cognitions and Affect	Behavioral Outcome- Health Promoting Behavior
Person	Personality traits, psychological status, socioeconomic status, ethnicity**.**	Education, counseling, stress coping mechanisms, engage in productive health programs, abstinence from trigger factors, motivation.(1,3,5,6,10)	Positive behavior outcome.

Environment	Peer pressure, societal expectations, culture, beliefs, traditions.	Support groups, empowerment, knowledge, parental guidance, counseling, advice, community development, skill sharing. (1,3,4,6,10)	Positive behavior outcome.
Nursing	All healthcare providers as well as related disciplines.	Empowerment, education, counseling, advice on pharmacotherapy, motivation, research, treatment, follow up, surveillance, implementation of the law and legislation. (1,2,3,4,5,6,7,8,9,10)	Positive behavior outcome in individuals, family and communities atlarge.
Health	All healthcare providers and other related disciplines, organizations like WHO, Ministries, state laws and legislation(Finland)	Empowerment, education, counseling, advice on pharmacotherapy, motivation, research, treatment, follow up, surveillance, implementation and enactment of the law and legislation. (1,2,3,4,5,6,7,8,9,10)	Positive behavioral outcome in the whole world.

Illness	Withdrawal symptoms, pregnancy smoke-related concerns.	Pharmacological treatment, behavioral support, incentives. (1,2,5,7)	Positive behavior outcome especially when incentives are maintained.