English Edition
eISSN 2069-7619 pISSN 2069-7597 ROMANIAN ASSOCIATION OF BALNEOLOGY

Ethical aspects of smoking cessation among the population from Transylvania

Andreea Vremaroiu-Coman[1]*, Teodora Gabriela Alexescu[2]*, Vasile Negrean[2], Mircea Vasile Milaciu[2], Anca Dana Buzoianu[2], Lorena Ciumărnean[2]‡, Doina Alina Todea[2]

* authors with equal contribution

‡ Corresponding author: **Lorena Ciumărnean**, E-mail address: lorena_ciumarnean@yahoo.com

Balneo Research Journal DOI: http://dx.doi.org/10.12680/balneo.2018.191 Vol.9, No.3, September 2018 p: 254 –259

[1] Hôpital du Valais (RSV), Centre Valaisan de Pneumologie, Suisse
[2] "Iuliu Haţieganu" University of Medicine and Pharmacy, Cluj-Napoca, Romania

Abstract
Ethical aspects related to the approach of persons addicted to tobacco use are a particular concern of pneumologists. Considered for a long time "an expression of the modern way of life", smoking is viewed today as a pandemic disease, being at the same time an epidemic that can be completely prevented. We present the ethical aspects of the approach of persons addicted to tobacco use, the peculiarities of the medical approach in smoking cessation and implicitly, of the doctor-patient relationship and how to make patients responsible for their own health within this relationship. The final aim of the medical intervention was to restore patient's autonomy in making decisions regarding smoking cessation, along with a change in lifestyle. In changing the patients' attitude, the principles of autonomy and non-maleficence represented a strong motivation, the patients benefiting from the presence and implementation of a National Smoking Cessation Program.
Key words: *nicotine dependence, passive smoking, autonomy, counseling, non-smokers*

Introduction.

The ethical aspects related to the approach of persons addicted to tobacco use are the concern of medical services, mainly of pneumologists, but also of all medical staff that provides curative and preventive health care services.

Tobacco use is currently considered a wide epidemic, with a significant negative impact on the population both from a health and an economic point of view. The World Health Organization (WHO) reports about 6 million deaths due to tobacco use every year. Unfortunately, this number is continuously increasing and is estimated to reach 8 million deaths by 2030. Although in developed countries smoking has already reached a peak, in developing countries this epidemic continues to extend, and it is estimated that approximately 80% of deaths secondary to tobacco use will come from these areas [1].

Given that death from smoking is the only cause of death that can be prevented at international level and knowing that major local and international programs fighting smoking or supporting smoking cessation are or will be implemented, it can be stated that this epidemic can be completely prevented [1, 2]. Unfortunately, smoking kills not only smokers, but also persons exposed to cigarette smoke, which is known in the literature as passive smoking or second-hand smoking. There are literature studies certifying that 200,000 workers die annually because of cigarette smoke exposure at the workplace; moreover, passive smoking increases the risk of lung cancer by 30% in non-smokers [3, 4]. In this context, in 2003, the first global public health treatise - *The Framework Convention on Tobacco Control* (FCTC) - was published as an urgent response to the global epidemic of tobacco use. Starting with 2003, 40 nations from all over the world have adhered to this treatise, including Romania, which signed the initial treatise on 25th of June 2004, with a subsequent ratification on 27th of January 2006 [5]. Although this global fight against smoking is intended to protect the health of the population, no evidence of the individual's rights or of the ethical aspects to be followed in order to obtain control on tobacco use have yet been presented [6]. In the light of these data, the role of the doctor is vital in the prompt and ethically correct approach to counseling for smoking cessation, for a better compliance of the smoker, with the final goal of improving the individual's as well as the population's health.

In the context of current medicine, we comprehensively present the ethical aspects of the approach of persons addicted to tobacco use, the peculiarities of the medical approach in smoking cessation and implicitly, of the doctor-patient relationship, and we attempt to answer the question referring to the modality of making the smoking patients responsible for their own health condition within the doctor-patient relationship. The ethical approach of tobacco users requires the knowledge and observance of the four principles of bioethics in the control of tobacco use: autonomy, beneficence, non-maleficence, and justice [7, 8, 9].

Nicotine dependence can reach alarming levels both from a medical and a psychological point of view, due to the implications on the patients' health and due to the psycho-emotional lability of smokers, who need, for example, a cigarette in order to calm down, following stressful situations. In order to show the importance of smoking cessation, we will present the clinical experience data of ethical counseling and therapy for smoking cessation, based on the National Smoking Cessation Program.

Patients and methods

A retrospective, descriptive observational study, was performed between 2008-2012 on 482 patients representing all persons who voluntarily presented to the Service of Counseling for Smoking Cessation, which is based in "Leon Daniello" Clinical Hospital of Pneumophthisiology, Cluj-Napoca. These persons requested assistance from health services for smoking cessation, completely accepted to be included in the study and gave their written consent for interventional medical therapeutic support specific for smoking cessation. All patients had a smoker's observation record filled in, used within the National Smoking Cessation Program. The record represented the source of data used in research, data that were processed using statistical-mathematical methods. All patients received psychological counseling for smoking cessation and drug therapy was recommended depending on the clinical decision of the attending doctor.

Results Of all 482 subjects included in the study, 52.07% were male, and the rest of 47.93% were females. The majority of the respondents (94.81%) were aged between 20-59 years, 4.36% were aged 60 years and over and 4 subjects (0.83%) were less than 20 years old. The distribution of subjects depending on their marital status showed that 62.03% were married, 26.35% were single, 7.88% were divorced, and 3.73 were widowed. Almost two thirds of the subjects (65.56%) reported to have children, while the rest (34.44%) had no children (**Figure 1**).

The statistical analysis of data regarding the presence of other smokers in the families of the subjects included in the study shows that almost two fifths (38.80%) of the respondents reported to be the only smokers in the family. In the rest of cases (61.20%), both the partner and other members of the subjects' families were reported to be smokers. Arterial hypertension (AHT) was the most frequent pathology found in the patients included in the study, followed by digestive pathology. In the majority of the cases, patients had no history of disease or reported the presence of other diseases than those mentioned in the observation record.

Among the reasons reported by the subjects regarding smoking cessation, the concern for health was ranked first, with 40.04% of all responses, followed by financial reasons (21.37%), ranked second, the wish not to be nicotine dependent (11.20%), ranked third, and the influence of the entourage (10.17%), ranked fourth.

During counseling, all subjects were given the nicotine dependence questionnaire (Fagerström Test) and the statistical analysis of data revealed that 7.05% had mild nicotine dependence, while 46.27% and 46.68% had moderate and high nicotine dependence, respectively.

The study shows that persons found to have a moderate and high nicotine dependence using the Fagerström test quantification were also those who were more subjectively aware of the severity of their status in relation to tobacco use (**Figure 2**).

The statistical analysis of the evaluation of the results three months after the initiation of counseling reveals the fact that more than half of the subjects included in the study (54.98%) were non-smokers (**Figure 3**).

These results can suggest that the means used for smoking cessation were efficient three months after the initiation of treatment and psychotherapy, but the monitoring of the status of non-smoking person is required, with the possibility of re-counseling for the maintenance of the clean status.

Discussions In the literature, the principle of autonomy is defined as "the personal self-rule by which a person is free from any control from the part of other persons, as well as from individual limitations that interfere with significant choices" [7]. An autonomous person acts with knowledge, intention and responsibility, without being influenced by a control factor [8]. An example of preservation of the smoker's individual autonomy includes both information referring to risk behavior for health and a voluntary choice, i.e. without nicotine dependence [2]. For example, in the case of an adult that smokes in the presence of a child, the problem is posed whether he acts with intention and knowledge without being controlled, and also, it remains to be discussed whether his or her gesture is considered malicious or not in society.

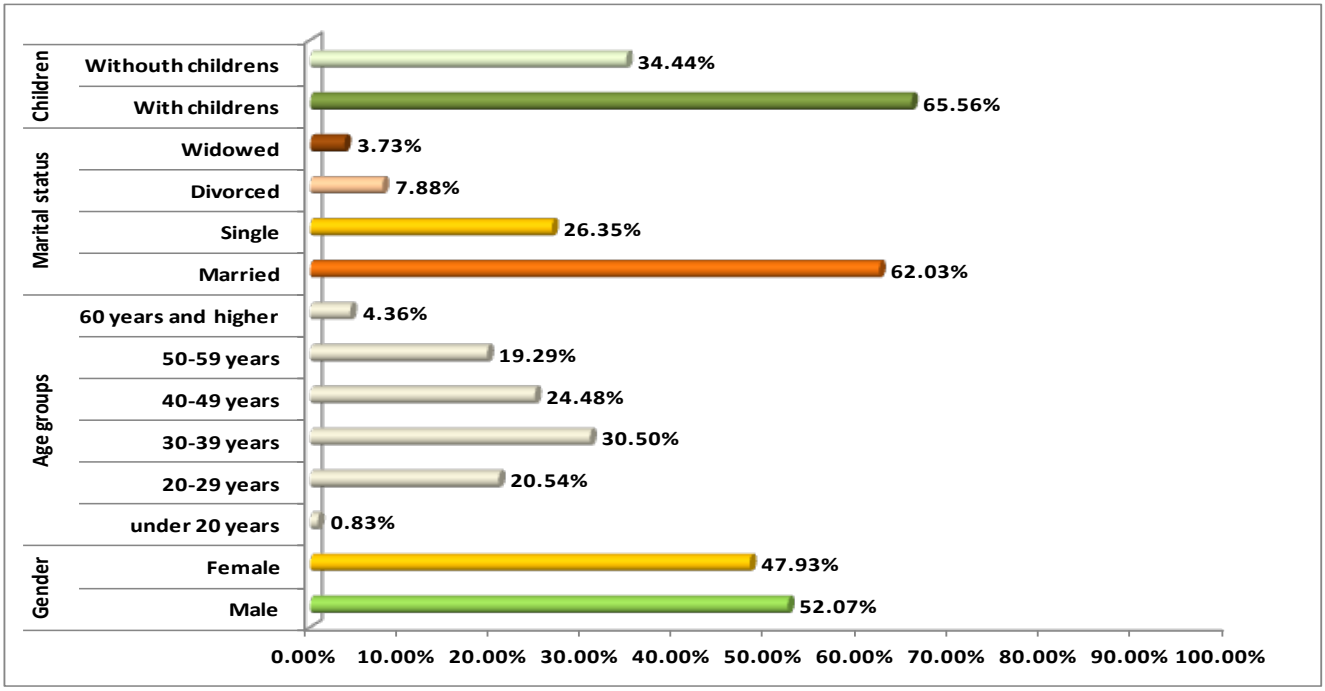

Figure 1. Proportion of smokers depending on sex, age group, marital status and parental status

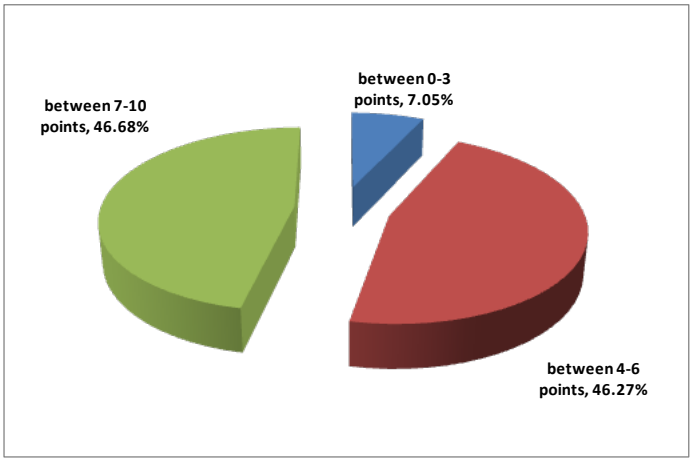

Figure 2. Distribution of nicotine dependence evaluated using the Fagestrom Test

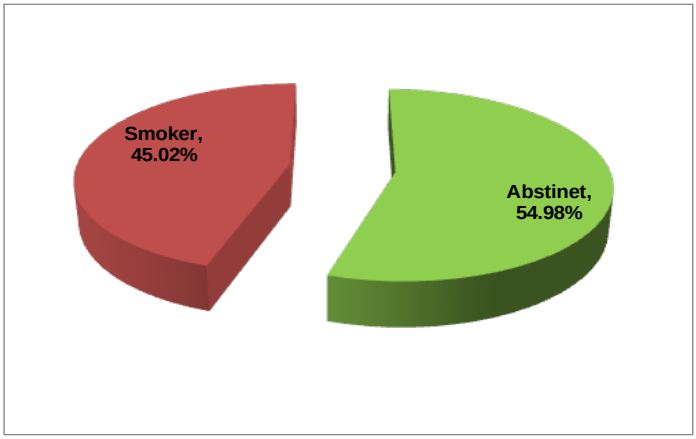

Figure 3. Final status of the patient three months after counseling for smoking cessation

In our study, according to the data, male gender, adult age and the status of married person with children represent the prototype of the smoking patient who wishes to receive counseling for smoking cessation. Patients of this category are possibly aware of the ethical aspects of nicotine dependence and wish (autonomously) to receive specialized counseling. Forbidding an adult to smoke in the presence of a child is against the principle of autonomy, but the effects of passive smoking on the health of the future adult can be life threatening. Starting from the idea that bioethics is difficult to define, by extrapolating, its principles remain equally difficult to delineate and it is challenging to decide what ethical means with respect to the problem discussed above. A real variant is that the adult is not aware of the negative effects of exposing another person to the cigarette smoke. This is why the information and counseling of the population regarding the negative personal and global effects is widely recommended.

Non-maleficence is the principle of doing no harm and refers to the obligation of governments to avoid any prejudice that might be caused to an individual [7]. In the light of this principle and due to the fact that cigarette smoke also affects the persons exposed (through passive smoking), many countries have restricted smoking at the workplace, through health promoting policies. Moreover, USA has adopted anti-smoking employment policies, which restrict all smokers and also all persons with positive nicotine

tests, including in this category both second-hand smokers and nicotine substitution therapy users, mainly due to the fact that companies lose money with smoker employees [10, 11]. Unfortunately, these strategies stigmatize smokers, generating many ethical debates regarding the status of smokers in the society [10, 11]. Regarding partnership in counseling for smoking cessation, the criteria of the patient's autonomy should be met. It still remains to be discussed what is "ethical": stigma and pressure on smokers at the workplace or the non-restriction of smoking at the workplace which encourages second-hand smoking. As long as the benefits of these policies compensate for abusive employment effects, their globalization can be taken into consideration. The latest literature data suggest the fact that in the fight against tobacco use, anti-smoking and anti-nicotine employment policies might have more harmful than beneficial effects [10].

Beneficence is focused on promoting wellness, in other words, it refers to the obligation of national governments and political decision makers to promote and maintain health. The members of Ethical Boards maintain the fact that it is the duty of health care services to facilitate restoring the autonomy of patients, offering them the role of control played by the doctor [9].

In our study, another characteristic of patients who wish to quit smoking is cognitive awareness of the negative effects of smoking on personal health, which lead them to voluntarily seek the help of specialized services for smoking cessation.

This study shows that persons were found to have a moderate and high nicotine dependence using the Fagerström test quantification.

The principle of justice appeals to all individuals to address all social and health disadvantages and also requires the correct and equitable distribution of social goods, and consequently, the correct and equitable distribution of social and biological tasks [7, 10]. The principle of justice guides us in the approach of all health promoting policies; justice should be the main concern of the activity of the public health area. Even if since the age of Hippocrates, medical practice has been based on ethical and moral principles, with the evolution of society and implicitly, of medicine, the fundamental principles have been adjusted to current values and norms [12]. Thus, life entails respect and freedom entails autonomy. These changes have determined various alterations of the society-healthcare system relationship or the doctor-patient relationship [13]. The latter has acquired lately a different dimension, that of a contractual relationship, i.e. with equal obligations and rights for the members of the relationship. The doctor and patient develop a partnership relation, in which the first member is the provider of health services that can be accepted or refused by the patient and the patient is the beneficiary of these services based on an informed consent [14].

Regarding partnership in counseling for smoking cessation, the following criteria of the patient's autonomy should be met. First of all, autonomy is a free action, more precisely the decision of a person to appeal to counseling services for smoking cessation [15]. It is the result of a voluntary conscious choice of the individual [15]. The finality of the partnership discussion is represented by the notion of informed consent, which means that the patient agrees to start therapy, and as a *sine qua non* condition, the doctor should inform the patient about the risks of tobacco use both for the patient's own health and for the health of the surrounding people, and also, he/she should inform the patient about the treatment to be administered. Sometimes counseling for smoking cessation is limited to psychological counseling, in which case the partnership acquires a more intimate, personal dimension.

Autonomy regarded as authenticity refers to congruency with the system of values, actions and plans of organization of an individual's lifestyle [15].

Autonomy regarded as effective deliberation involves the decisional effects of the person in cause as a result of being aware of the alternatives, depending on the decision making capacity and accountability [15]. The concept of effective deliberation and subsequent decision making actions are extremely sensitive. Miller refers to the fact that a person's action may be voluntary and intentional, but may not be the result of effective deliberation [16].

Autonomy considered from the perspective of moral reflection involves differences in morality between individuals, which are in fact a key decision making factor because decision making is influenced by an individual's set of values and life perspectives. Autonomy requires correlation with informed consent, with the modalities for evaluating the patient's quality of life, with anxiety and psychoemotional balance [15].

In 2010, Cobuz & Datcu published an article [17] referring to the concept of autonomy of the patient within the patient-doctor relationship in the context of a chronic pathology requiring chronic management, with particular emphasis on type 1 diabetes mellitus and arterial hypertension [17]. Starting from this idea and focusing on tobacco use considered as a chronic disease, it can be stated that smokers require a radical change in their lifestyle and behavior, which will keep under control the evolution of their health. Facing tobacco dependence considered as a chronic disease requires a balance between the doctor's and the patient's attitude towards this problem, regarding adequate treatment and the long term maintenance of the initial steps.

It is well known that sometimes the patient has confidence in medicine but not in the doctor, which is when another aspect that raises ethical problems occurs: the development of potential divergences between the patient's decision making autonomy and the doctor's morality to act for the benefit of the patients.

In 2009, Oprea presented the bioethical theories on the health care model focused on the patient as opposed to the paternalist and biomedical models, concluding that the doctor-patient relationship is a relationship based on co-commitment to the common objectives generated by the patient health management [18].

Taking into consideration the fact that nicotine addiction can be included in addictions to substances that are detrimental to health, the ethical approach of the nicotine dependent patient by pneumologists should include the values treated by Vicol, Bulgaru-Iliescu & Astărăstoae, in the article "Informed consent in the treatment of drug addiction" [19]. The set of values represented by confidence, loyalty, honesty and therapeutic partnership in approaching the patient addicted to substances within the doctor-patient relationship is important if an ethical approach of therapeutic intervention is intended. Confidence is part of a two-way relationship where vulnerability is invested by the one that has confidence. A recent systematic review has shown that, from healthcare workers point of view, there are many barriers that block the providing of smoking cessation interventions in a hospital setting, mainly lack of time and knowledge how to do it [20]. According to some authors, the commitment of the partners in the doctor-patient therapeutic relationship has confidence as a central element, gained by sincere communication [21]. From patients' perspective, each quality of his physician influences the therapeutic relationship, even the patients' perception of the physician wellness [22].

In our study, 54.98% of the patients were abstinent from smoking at three months after the initiation of counseling. This result is encouraging, knowing that these abstinence rates are lower in other studies, regardless the means used to help the smokers. In fact, a pragmatic study published in june 2018 in New England Journal of Medicine, conducted on 6006 smoker employees from 54 companies, sustained abstinence rates at 6 months after a conventional intervention was only 0,1%. In the group of subjects who received free e-cigarettes it was 1%, and in the group of subjects who received prize money it was 2,9%. These subjects were randomly selected, so they were not considering quitting smoking before entering the study [23]. In our study, the patients presented themselves to get help in order to quit smoking, so this could be an explanation on our high abstinence rate at 3 months after interventional counseling.

Conclusions

All the answers of the subjects placed among the three most frequent reasons for smoking cessation the concern for health, the financial aspect and the wish to no longer be dependent on nicotine. The study showed that subjects who were found to have moderate and high nicotine dependence (following the Fagerström test) were in equal proportions (46.27% and 46.68%, respectively), and the evaluation of the subjects three months after the initiation of counseling revealed a non-smoking status in the case of more than half of the studied subjects.

The aim of the medical intervention in our study was the restoration of the patient's autonomy in making decisions about smoking cessation, as well as a change in the patient's lifestyle. Even the changes implemented by patients in their lifestyle are the result of informed decisions regarding the risks of tobacco use and are completely assumed by the individual.

In the patients' change of attitude, the principles of autonomy and non-maleficence represented a strong motivation, the patients benefiting from the presence and implementation of a National Smoking Cessation Program.

Bibliography

1. World Health Organization. (2012). 10 Facts on the Global Tobacco Epidemic. Retrieved November 22, 2017, from http://www.who.int/features/factfiles/tobacco_epidemic/en/.
2. Novotny TE, Carlin D. Ethical and Legal Aspects of Global Tobacco Control. Tobacco Control. 2005;14(2):26-30.
3. Food and Agriculture Organization of the United Nations. (2004). Higher World Tobacco Use Expected by 2010-Growth Rate Slowing Down: Number of Smokers Growing-Production Shifting to Developing Countries. Retrieved November 22, 2017, from http://www.fao.org/english/newsroom/news/2003/26919-en.html.
4. Smoking and health: Physician responsibility. A statement of the Joint Committee on Smoking and Health. American College of Chest Physicians. American Thoracic Society. Asia Pacific Society of Respirology. Canadian Thoracic Society. European Respiratory Society, and International Union Against Tuberculosis and Lung Disease. Respirology. 1996;1(1):73-77.
5. World Health Organization. (2008). Updated Status of the WHO Framework Convention on Tobacco Control. Retrieved April 6, 2013, from http://www.who.int/tobacco/fctc/signing_ceremony/countrylist/en.
6. World Health Organization. (2003). Final version, WHO Framework Convention on Tobacco Control. Retrieved November 22, 2017, from http://www.who.int/tobacco/fctc/text/en/fctc_en.pdf.
7. Beauchamp TL, Childress JF. Principles of Biomedical Ethics. 4th ed., 1994, New York, NY: Oxford Press.
8. Jarvie JA, Malone RE. Children's Secondhand Smoke Exposure in Private Homes and Cars: An Ethical Analysis American Journal of Public Health. 2008;98(12):2140-2145.
9. Freeman B, Chapman S, Storey P. Banning Smoking in Cars Carrying Children: an Analytical History of a Public Health Advocacy Campaign. Aust N Z J Public Health. 2008;32:60-65.
10. Voigt K, Phil D. Nonsmoker and "Non-nicotine" Hiring Policies: The Implications of Employment Restrictions for Tobacco. Am J Public Health. 2012;102:2013-2018.
11. Berman M, Crane R, Seiber E, Munur M. Estimating the cost of a smoking employee. Tob Control. 2014;23:428-433.
12. Buta GM, Buta L. Bioetica în Pediatrie (pp. 93-104). Ed Eikon, 2008, Cluj Napoca.
13. Hoerni B, Benezech M. L'information en Medecine: Evolution Sociale, Juridique, Etique (pp. 72-80). Ed Masson, Colection Abreges, 1994.
14. Mason J, McCall Smith R. Law and Medical Ethics (pp. 280). 5th ed. 1999, London, Butterworth.
15. Sandu A. Etică și Deontologie Medicală. Editura Lumen, 2012, Iași.
16. Miller BL. Autonomy & the Refusal of Lifesaving Treatment Source. The Hastings Center Report. 1981;11(4):22-28.
17. Cobuz C, Datcu G. Pacientul cu Diabet Zaharat tip I și Hipertensiune Arterială: Provocări de Abordare. Revista Română de Bioetică. 2010;8(3):66-72.
18. Oprea L. Un Studiu Analitic Asupra Relației Medic-Pacient (Partea a II-a). Revista Română de Bioetică. 2009;7(3):57-70.
19. Vicol MC, Bulgaru-Iliescu D, Astărăstoae V. Informed consent in the treatment of drug addiction. Rev Rom Bioet. 2009;7(3):78-86+165-173.
20. Sharpe T, Alsahlanee A, Ward KD, Doyle F. Systematic review of clinician-reported barriers to provision of smoking cessation interventions in hospital inpatient settings. J Smoking Cessation. 2018;pp1-11; DOI: 10.1017/jsc.2017.25.
21. Riedl D, Schüßler G. The influence of doctor-patient communication on health outcomes: a systematic review. Z Psychosom Med Psychoter. 2017;63:131-150.
22. Lemaire JB, Ewashina D, Polachek AJ, Dixit J, Yiu V. Understanding how patients perceive physician wellness and its link to patient care: a qualitative study. PLoS ONE. 2018;13(5):e0196888.
23. Halpern SD, Harhay MO, Salusgiver K, Brophy C, Troxel AB, Volpp KG. A pragmatic trial of e-cigarettes, incentives, and drugs for smoking cessation. New Eng J Med. 2018;378(24):2302-2310.