Case report

One size doesn't fit all: contouring and addressing social vitals in reversing tobacco epidemic in Punjab, India

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SUMMARY

There are many tobacco users who wish to quit. In some cases, ostracism related to religious proscriptions serves as a barrier and prevents them from revealing their addiction status. Religion as an institution has an immense influence on human behaviour. It contributes to the cultural identity of individuals, moderating uniformity in their behaviour and social life. We describe a case from a province in Punjab in North India, where tobacco use is a 'taboo' due to the widely practised faith of Sikhism. The case illustrates how a doctoral thesis student, along with the healthcare providers at a non-communicable disease clinic, overcame the concealment of tobacco use of a patient with hypertension due to fear of social exclusion. The student assisted him in quitting tobacco use through a culturally specific, patient-centric, individualised, behavioural intervention using religion as a backdrop. This case study highlights the importance of recognising and appreciating the dynamics of sociocultural factors to develop a suitable and successful deaddiction strategy. This case elaborates how a simple 'nudge' of religious tenets-based counselling helps the tobacco addict transgress or tide over such barriers.

BACKGROUND

Non-communicable diseases (NCDs) account for 41 million deaths worldwide. Fifteen million people die prematurely from NCDs (ages 30–69 years), of which 85% occur in low-income and middle-income countries (LMICs).[1] Among the known risk factors for NCDs, tobacco use is an important modifiable behaviour[2] and is also responsible for 14% of all NCD deaths.[3] In the South-East Asian region, NCDs contribute to 8.8 million deaths, with about 13% of these deaths attributable to tobacco use.[4] In India, NCDs account for almost 63% of all deaths.[5] Further, tobacco use is a risk factor for and contributes to 48% of cardiovascular diseases, 23% of chronic respiratory diseases and 10% of cancer deaths.[6]

Conforming to Article 14 of the WHO Framework Convention on Tobacco Control (WHO-FCTC) (tobacco dependence and cessation) and the 'O' component of MPOWER (O: Offering help to quit tobacco use) policy package, tobacco cessation is recommended as the 'best buy' intervention for the prevention and control of NCDs. This can be achieved through cost coverage and availability of population-wide support to all users who want to quit. WHO also estimates that if implemented at its maximum intensity, it would reduce NCD prevalence by 5.5%–11%.[7–9]

The Global Adult Tobacco Survey in India (2016) reports that 55.4% of current smokers and 49.6% of current smokeless tobacco users are planning or thinking of quitting smoking and smokeless tobacco use, respectively. The survey also reports higher prevalence of smokeless tobacco (21.4%) compared with smoked tobacco (10.7%).[10]

Support for tobacco cessation can be pharmacological, behavioural and nicotine replacement therapy (NRT).[11] Tobacco use is a learnt behaviour, and behavioural therapy holds a huge potential and is an important component of cessation services in resource-constraint settings including LMICs. In most cases, behavioural interventions (brief advice, group therapy, individual counselling, telephone support) employ various methods that encourage behaviour change, enhance user motivation to attempt to quit, and empower users to build their capacity and skills and make informed decision to quit tobacco.[12]

Tobacco addiction is a complex phenomenon. Overcoming it requires multilevel behavioural interventions that are customised to individual needs. At the same time it also calls for elucidation of facilitators and barriers, especially in regions where social disclosure of tobacco use status is affected by social desirability bias (religion, sociocultural practices).

The Indian subcontinent is known for its wide sociocultural and religious diversity across different states.[13 14] Punjab is a state in the northern part of India, and its neighbouring states of Haryana, Himachal Pradesh, Rajasthan, and Jammu and Kashmir have comparatively higher prevalence of tobacco use. Punjab, however, falls into the bracket of low tobacco use prevalence in the country.[10] While tobacco use is well accepted socioculturally in its neighbouring states,[15] in Punjab it is considered taboo under many influences, including religious ones. For instance, in Sikhism (a widely followed religion in the state), strong prohibition of tobacco use is documented.[16–19]

Prohibition of tobacco use has been a very strong element in the history of Sikhism, the most practised religion in the state of Punjab. Tobacco was outlawed on 13 April 1699 by the tenth and last Indian Sikh Shri Guru Gobind Singh, and all Sikhs were prohibited from smoking. He mentioned:

'Wine is bad, Indian hemp (bhang) destroys one generation, but tobacco destroys all generations'. He also preached that each Sikh must pledge that he will not use tobacco, which is the first sacrament under the 'Amrit Ceremony', a baptism ceremony, and directs the person to refrain from tobacco use.[20] Further, the Sikh Code of Conduct, that is, the 'Rehat Maryada', was issued the 'Akal Takhat', which is the chief Sikh authority. This made the 'Amrit oath' more strict for the Sikhs. Section 4, Chapter X, Article XVI (J) of this code details the first decree issued against tobacco control which Sikhs are supposed to pursue. It also describes tobacco smoking and drug abuse as part of the four misconduct or 'kurahat'. Since then, tobacco use has been recognised a religious taboo by the Sikhs.[18]

Classical literature also quotes that, apart from Sikhism, other faiths have also sanctioned against tobacco use. For example, Hinduism is a proponent of refraining from all intoxicants[21] and regards it as a 'vyasana' (vice or inordinate addiction).[22] The Zoroastrians worship fire and their customs and beliefs prohibit smoking.[20] The principles of Islam sanction against the use of intoxicating or addictive substances. The Holy Bible states that 'Whoever perpetrates a sin is a slave of that sin', and since smoking is an addiction, an enslavement, it holds the smoker in slavery.[23]

In Punjab 57.69% of people are professing Sikh faith.[24] The Global Adult Tobacco Survey-2 (2016–2017) reports an overall prevalence of any tobacco use of 13.4%, which has slightly increased from 11.7% (2009–2010)[10 25] despite tobacco consumption being a sensitive issue in the state, along with a 66% total disease burden from NCDs.

CASE PRESENTATION

The first author is a research scholar at the Department of Community Medicine, School of Public Health, Postgraduate Institute of Medical Education and Research (India). Her thesis focuses on tobacco cessation among patients suffering from NCD attending NCD clinics in Punjab using multicomponent, culturally specific, patient-centric behavioural intervention. She regularly visits NCD clinics in selected districts to enrol patients for her thesis.

During one such visit, she came across a native patient with known hypertension whose blood pressure cannot be controlled despite being on antihypertensive medication. During personal history taking, she asked the patient about any tobacco use. The patient was quick to deny any such addiction. However, she could see the stains on his teeth acquired from oral tobacco use. Further, she could easily make out the foul smell of tobacco from his mouth.

She visited the outpatient department again for routine follow-up of her patients (during their routine hypertension consultation). The patient was persistent in his denial when asked about tobacco use. She asked about the patient's family background and discussed with him the increasing use of tobacco among the youth. To gain the confidence of the patient, she cautiously and intentionally reframed her question. She asked him whether anyone in his household used tobacco. Eventually the patient opened up and told her that he belonged to a Sikh family where tobacco use is prohibited. Tobacco use is a taboo for Sikhs, and tobacco users are not seen in good light in their community. He further said that many of his peers use zarda (a commonly used smokeless tobacco product consisting of chopped dry tobacco leaves which are chewed alone or mixed with lime or areca nut, producing yellow-coloured stains on the teeth)[26] instead of smoking since it is easy to conceal from others. The use of zarda is not associated with the typical smell and smoke of smoked tobacco products.

After three meetings, which had led to building good rapport with the patient, he eventually opened up about the fact that he has consumed zarda since he was in senior secondary school. He concealed it from his community out of fear from being ridiculed. Therefore, he made false pretences when asked about tobacco use habit. He even concealed this evil habit from his family and healthcare providers despite his strong desire to quit. He had made few unsuccessful quit attempts on his own but failed. He feared that his family and relatives might know about his tobacco use behaviour through withdrawal symptoms and thus bring bad name to his family. He mentioned that his craving to use tobacco increased after drinking alcohol and he has yielded to tobacco addiction.

The first author enrolled the case to her intervention study (Clinical Trials Registry, India, trial registration number: CTRI/2018/01/011643).

A quit plan (5As of cessation: Ask, Advice, Assess, Assist, Arrange)[27] was written out for the patient. He was taken into confidence by telling him that she totally understood his predicament, that is, he felt stuck between continuing or quitting tobacco use. She explained to him that in such a situation, on one hand, continuous use was associated with guilt, shame and fear of physical illness, and on the other hand the thought of quitting this habit brought fear of withdrawal. She told him that this fear was the biggest hurdle in taking a leap towards a healthy life. As a public health professional, she assured him that she will help him in this endeavour by discussing and devising a quit plan for him. She explained to the patient that 'nicotine' was an active substance in tobacco that has an effect on the brain and has a very high addictive potential, and that after a few episodes of tobacco intake the brain and the body become hooked on the nicotine. To reinforce this fact, the patient was shown a video on a mobile phone.

The first author had identified Sikhism (in this case) as a 'barrier' to the disclosure of the patient's addiction. She used the same religion-related backdrop to influence his choice and decision to quit tobacco. She wanted him to make the decision to change his habit and not coerce him towards cessation. Therefore, she used this reason itself as an element to facilitate the desired behaviour change. As mentioned earlier, the patient belonged to a Sikh family where tobacco use is considered 'taboo'. She told him that if he was fearful of seeking help due to this reason, he could still decide, make a choice and go back to the roots of Sikhism, which urged its followers to abstain from tobacco.

Thereafter, the patient was told that the plan devised for him to quit tobacco would primarily focus on disease-specific cessation counselling sessions during his routine follow-up visits. At the same time, during periods of significant craving or withdrawal symptoms, an option to take NRT (nicotine gums or patches) would be at bay, which he could easily avail free of cost at a tobacco cessation centre (TCC) run by the government at the same hospital, without giving into tobacco use again.

It was explained to the patient that NRT would be the last option. He was also informed that he would face withdrawal symptoms such as irritability, depressed mood, change in appetite, restlessness and so on, which would spike during the initial days, but would eventually wean off in the subsequent weeks.[28] Thereafter, his sessions were scheduled with a trained counsellor.

The patient was given disease-specific pamphlets, and SMS (short text messages) in vernacular language were sent to him containing simple tips to overcome his cravings for tobacco

(such as not purchasing tobacco pouches on his own, not asking anyone to purchase for him, and implementing the four Ds[29]: Delay as urge will pass within a few minutes, Drink water slowly to keep hands and mouth occupied, Deep breaths for a few minutes, and Distract himself with other activities such as praying, talking to a non-user friend and so on, especially during cravings for tobacco use). Reminders for medication and routine follow-ups were also sent in vernacular language. It was also explained to the patient how tobacco use had affected his hypertension and his body organs, and how quitting could give him better health, social and economic perks.

The patient was continuously monitored and was provided support using motivational interviewing techniques during counselling sessions to prevent him from getting into a relapse phase. This individualised, patient-centric intervention kept him motivated. After several visits, he eventually progressed through the different stages of the transtheoretical model of behaviour change.[30] This led to understanding and acceptance of behaviour change with respect to his tobacco use. The patient was aware of his habit and perceived it as a problem, and wanted to quit (*contemplation stage*). To increase awareness about his tobacco use behaviour, he was given counselling session and was shown videos on how his tobacco use has affected his disease and how he is at an increased risk for complications. He began taking steps, such as avoiding alcohol and meeting with his peers who used tobacco (*preparation stage*). Subsequent sessions and text messages allowed sharing of difficulties and concerns on the user's side and brought in a window of oppurtunity to provide simple solutions to him from his own experiences and inputs. This also led to persistent sharing of feedback from the patient. Ultimately, he stopped purchasing zarda (smokeless tobacco product) and started using cardamom and cloves whenever the urge to use tobacco arose (*action stage*).

The patient was asked whether he felt any urge to use tobacco or nicotine gums. He said that he had periods when he felt the urge. However, he really wanted to give his best effort to give up this addiction without any medication, so whenever he felt the urge to use tobacco he used the techniques shared with him and broke the treatment into phases by taking one step at a time He was told to use methods that have been successful in past to fight the urge for the following days and so on.

It has been 6 months following the intervention and since he used tobacco (*maintenance*). He is being regularly followed up and his blood pressure is also controlled. His confidence level has increased and he has even started counselling his peers to give up tobacco use.

GLOBAL HEALTH PROBLEM LIST
Impact of continued tobacco use
This case report illustrates the social barriers that prevent many tobacco users from using tobacco cessation services offered by government agencies. Overcoming these barriers is important to the success of any such service. As has been established, tobacco use is a major preventable and modifiable risk factor for NCDs. It is vital to counsel patients about not only the risk of development of NCDs but also the complications which may arise due to current NCDs, if tobacco use, in any form (smoked/smokeless), is not given up.

Influence of social desirability bias element
Sikhism is the widely practised faith in Punjab and prohibits tobacco use. So any Sikh who uses tobacco tends to give answers that are socially acceptable and that exhibit prosocial behaviour.

Even if a Sikh wants support in order to quit, he would not open up due to embarrassment attached to admission of addiction.

Role of national health programmes
In 2007–2008 the Government of India initiated the National Tobacco Control Programme. One of its thrust areas is to set up and strengthen the TCCs at the district level in each state to provide free-of-cost behavioural and pharmacological therapy to tobacco users.[31] In addition, the Government of India has also developed the National Tobacco Quit Line Services and mobile technology-based mCessation services to provide assistance to users who are willing to quit.[32] Punjab has also been a fore-runner in tobacco control initiatives, such as the establishment of TCCs in all 22 districts of the state, provision of bupropion, nicotine gums and patches free of cost, and has also placed ban on 'Hookah bars', chewable tobacco products and electronic cigarettes.[33] Further, in 2010 the Government of India launched the National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Disease and Stroke (NPCDCS), which aims to prevent and control NCDs through behaviour change using health promotion and risk factor monitoring. NCD clinics established under this programme provide comprehensive screening, health promotion, diagnosis and management of common NCDs.[34]

Integration with other initiatives for wider outreach of cessation services
For seamless outreach of cessation services, initiatives for integration with other national health programmes could be taken up, for example, in NCD clinics under the NPCDCS, dental units under the National Oral Health Programme, health and wellness centres under the Ayushman Bharat Scheme, DOTS (directly observed treatment, short-course) centre under the Revised National Tuberculosis Control Programme, and AYUSH (*Ayurveda*, *Yoga*, *Unani*, *Siddha* and *Homeopathy*) centres, where documentation of tobacco use history of all patients is ensured, advice on tobacco cessation and lifestyle modification by counsellors is offered, and active referral mechanism to TCC is established. Also, large gatherings/events could be used for opportunistic screening of population and active referral. This could pave the way for long-term sustainability and viability of efforts to decrease prevalence of tobacco use.[35]

GLOBAL HEALTH PROBLEM ANALYSIS
Tobacco use was once considered a status symbol in many communities. It was also used for ceremonial purposes[36] among indigenous populations. Even few curative properties were ascribed to it.[37] In some religions, however, its use is a 'taboo'.[22 23 37] The state of Punjab, which at one point in time was considered immune to tobacco use due to its own demographic features, with Sikhism as the dominant religion, is no longer spared from this addictive substance. Many Sikhs, mostly clean-shaven/shorn hair ones, are known to use tobacco, usually the chewable form. The 'taboo' against tobacco use in Sikhs is favourable to the success of any tobacco cessation programme. However, Sikh tobacco users neither reveal their tobacco use status nor accept it publicly. This non-disclosure comes in the way of tobacco cessation efforts of the government and non-government organisations.

The highly addictive nature of nicotine (the addictive substance in tobacco) makes it difficult for users to quit. The higher the nicotine dependence of an individual, the greater the difficulty in quitting.[38] Many tobacco users wish to quit, and it takes many

unsuccessful attempts before they can finally quit.[39–42] However, the process of seeking help and offering support for tobacco cessation can only be initiated when a tobacco user reports about his/her use.

The religious teachings in Sikhism advise and guide followers on acceptable behaviours and prohibitions with respect to cleanliness, diet, exercise, alcohol, drug or tobacco use. These religious beliefs influence their health behaviours and the development of personal identity. Sikh religious bodies advocate desirable social behaviours and sanction against use of addictive substances.[43] 'Rehat Maryada', which is the Sikh Code of Conduct, was drafted describing certain personal and communal responsibilities for Sikhs. This code strictly prohibits Sikhs from tobacco use. Further, Sikhs who have been initiated through the 'Amrit Ceremony', the term used to refer to the Sikh baptism, maintain the five Ks, which are the five articles of faith and which symbolise a devotee's commitment to Sikhism: Kesh (uncut hair symbolising strength and holiness, and with a turban worn on the neatly tied hair), Kanga (a wooden comb for the hair symbolising the need to have a clean mind and body), Kara (iron bracelet reminding Sikhs to do right), Kachhehra (prescribed tieable shorts to preserve modesty) and Kirpan (a ceremonial sword symbolising defending good and struggle against injustice). Tobacco use is a major infringement of the Sikh baptism and therefore a tabooed practice.[18]

In case some Sikhs succumb to tobacco addiction, they conceal this vice from the public gaze due to the fear of the existing mechanisms of social control in the community. Basically, they are afraid of being ostracised. Thus, their religion-related code of conduct prevents disclosure or open acceptance of their addiction. This precludes the initial dialogue between any counsellor/interventionist working on tobacco cessation. However, the same religion-related backdrop can be used to create an opportunity window for entry of tobacco cessation programme and of course in the larger ambit of tobacco control. Instillation of strong messages against tobacco use starting from childhood, by involving schools, educational institutions, faith-based institutions (Gurudwaras) and religious street processions (Nagar Kirtan), could prove to be very useful. These can be tapped in for cessation programmes as well, where users could be counselled to go back to the teachings of Sikhism.

Understanding this behaviour is complex in the context of Punjab and in similar regions across the globe where widely practised faith sanctions against tobacco use. The spectrum of not revealing tobacco use behaviour may range from blissful ignorance to conscious concealment of the fact. In sociology, this complex behaviour can be understood by the 'Social Desirability Bias'. This response occurs when the respondent purposefully gives an answer that is more socially approved/acceptable in order to present a favourable image of oneself corresponding to social norms and thereby misrepresenting one's true behaviour.[38 44–47] This prosocial response bias is normally exhibited by the respondent when questions are socially sensitive,[48] or questions are phrased in an intimidating way that one feels uncomfortable, embarrassed, uneasy to share his/her true behaviour,[44 49] or feel their activities or reactions are being observed and noted.[47] This also highlights the influence of social norms on an individual's behaviour, describing a conduct that is acceptable to the society in a given context.

This points out the need to recognise the 'nudge' factor for behaviour change in people who are willing to quit. Such a gentle 'push' influences an individual's choice and decisions. Identification of this factor is necessary as it will act as an excuse/ beginning to create long-term change. This can be understood on the premise of the 'nudge theory', which states that humans need a stimulus (something with whom they can identify with; nudge) to push themselves and carry out what is best for them. This nudge or stimulus encourages people to seek certain steps or make decisions, rather than be forced or coerced or restricted from certain behaviours.[50]

The concept of nudge in behavioural science puts forward ways to alter the behaviour in a foreseen way and the decision making of individuals through positive reinforcement. A nudge does not instruct or forbid the options. It revamps the environment by making small, easy and inexpensive changes by prompting psychological mechanism to favour the desired outcome. It is well documented that habitual behaviour is resistant to any modification. Therefore, the nudging method employs judgemental heuristics (methods using practical techniques for making decisions) where the nudge is very sensitive to ambient influences.

In India, 'nudge' has been successfully implemented from theory to practice in 'Swachh Bharat Mission' (Clean and Tidy India, launched in 2014), 'Beti Bachao Beti Padhao' (Save the daughter, educate the daughter, launched in 2015), 'Selfie with Daughter' (launched in 2017), and 'Give it up' for liquefied petroleum gas (LPG) subsidy nationwide campaigns which nudged on social proof heuristics. This refers to the tendency of human psyche where people nudge towards positive change by identifying themselves with role models.

As practised in social engineering, nudging can be applied in health-related interventions to improve health outcomes. Individuals can be encouraged to pursue a particular choice, and healthcare professionals can make more deliberate decisions in a variety of areas. Conventionally, health-related behaviour change interventions focus on giving new information and bank on impacting the way a person consciously thinks about one's behaviour. Moreover, these interventions are built on the assumption that people alter behaviour when intentions are changed. But human behaviour is actually led by the brain and influenced greatly by the ambient environment within which many decisions are taken. To determine opportunities to influence choices, a comprehensive understanding of human behaviour in question and the facilitators and roadblocks of the desired behaviour is required. The factors which people stumble upon can also be used to help them make better choices (choice architecture). Nudging would enhance the often-neglected influences which have a significant impact on behaviour.[51]

Theorists have also tried to explain this behaviour using the 'Identity Motive Theory', which suggests that individuals are motivated to achieve and keep a positive view or identity (self-esteem) about themselves. This motive impacts the creation and establishment of identity at different levels of self-representation, resulting in different outcomes across various cultures.[52] Also, people identify themselves with valued majority groups. They separate themselves from derogated minority groups by embracing and endorsing the social beliefs and outlooks of majority groups in order to attain a favourable self-identity and enhance self-confidence.[53] To boost self-image, the individual enhances the stature of the group to which they belong. This is accomplished by differentiating oneself from the other sect or group to which one does not belong, and constantly categorise, evaluate and compare the two groups.[54]

Addiction to tobacco as a variable can also be understood and interpreted from a family perspective, that is, how it affects the family of the user, leading to socioeconomic consequences. It also influences the social determinants of health of the user as well the immediate family. It is well established that social determinants

substantially impact the health of a population and health-related outcomes, including quality of life.[55]

Any effort to organise a tobacco cessation programme calls for understanding, recognising and appreciating these social vitals. Given the resource constraints in LMICs and rise in morbidity and mortality due to NCDs and related risk factors, there is a need for an active exploration and integration of these social tools approach with clinical diagnostics. This could be done by developing customised intervention strategies which are culturally specific and patient-centric at the preventive as well as curative level, thereby resulting in better health outcomes.[56] This could also result in probing the social undermining factors, understanding their mechanism and nullifying their effect to deliver holistic health.

This case also highlights the importance of establishing 'Social Diagnosis' in healthcare settings to ascertain and understand the associated interaction between social dynamics and NCDs.[57] Also, interventions with active involvement of faith-based institutions, which stand to be vital, and significant social structures could play a vital role in educating masses about opening up to seek help for tobacco cessation. In addition, the focal point of such interventions could integrate the components of 'spiritual and emotional determinants' of health to combat high-risk behaviours in the population in order to develop effective health promotion tool.[58–60]

Religion has been an instrument in influencing the behaviour of an individual, with a larger aim of promoting their well-being.

Religion regulates boundaries and guides day-to-day life through practices and values. It is a medium that binds people together and exerts social control, thereby strengthening social integration.[61 62] Hence, incorporation of religious teachings-related concepts in deaddiction approaches could mitigate the rising dual epidemic of tobacco use as well as NCDs (with tobacco use being an important modifiable risk factor). Development and use of individualised, tailor-made, culturally specific interventions that emphasise and incorporate social vitals could help us move a step closer to the achievement of the sustainable development goals, strengthening the implementation of the WHO-FCTC and reducing premature mortality due to NCDs by a third.[63]

Patient's perspective

Whenever doctor asked me about addiction, I always mentioned about alcohol but never about *zarda* (smokeless tobacco product) as I felt embarrassed of telling about it.

I belong to *Sardar* (Sikh) family and I tie a turban. My religion prohibits tobacco use…and since I use *zarda,* I have brought defame to the family. It's used by people of backward and lower socioeconomic class. I was aware about it since childhood…But I started using it during adolescence.

I wanted to quit and made many attempts for this…But its urge would increase when I had alcohol and I ended up using it. Your counselling gave me the confidence to admit my habit publically and seek help to quit.

Learning points

► Tobacco use is a learnt behaviour, and sociocultural and religious norms act as vital social forces in defining behaviours that are acceptable in a given context and among the people of India.

► Any tobacco cessation programme must be tailored to be culturally specific and patient-centric.

► A social diagnosis should also be established along with clinical diagnosis. We need to support tobacco users locally, and therefore behavioural intervention strategies for cessation should be individualised, taking into consideration users' cultural upbringing and religious and social values in order to neutralise social desirability factors that hinder the acceptance of tobacco use status.

► Tobacco use is strictly prohibited in Sikhism and is considered a taboo in this religion, which leads users to deny and conceal their tobacco use status; in such cases, any intervention for cessation should harp on the tenets of Sikhism to reinforce an effort.

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