# Impact of self-efficacy and sense of coherence on tobacco cessation motivation and readiness among slum dwellers in Ajmer city during COVID-19 health emergency

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#### **ABSTRACT**

Background: Tobacco cessation motivation majorly depends on self-efficacy and sense of coherence. Hence the aim and objective of the present study was to explore how self-efficacy (SE) in addition to sense of coherence (SOC) affected tobacco cessation motivation and readiness among slum dwellers during the COVID-19 health emergency. Materials and Methods: The ongoing research was a cross-sectional, descriptive questionnaire study. The research started in November and ended in December 2020. The research took place in primary health centres located in Ajmer's urban slums. In this analysis, east, west, north and south directions of Ajmer were chosen at random from each direction, and each slum had an associated primary health centre (PHC). From these 16 PHCs, people coming from slum areas were interviewed. The questionnaire consisted of demographic details, tobacco motivation and readiness, SOC and SE. Results: The majority of study participants (178, 56.7%) were not seriously considering reducing their tobacco intake. The majority of study subjects had poor sense of coherence  $\{137, (43.6\%)\}$ , self-efficacy  $\{141, (44.9\%)\}$  and tobacco cessation motivation and readiness  $\{156, (49.7\%)\}$ . Using the logistic regression model, it was discovered that study participants with high SE and a high SOC had a substantial impact on successful tobacco cessation motivation and readiness  $(P = 0.01^{\circ})$ ,  $(P = 0.00^{\circ})$ . Conclusion: It was concluded that the study participants with high self-efficacy and high sense of coherence had a significant impact on good tobacco cessation motivation and readiness.

Keywords: Motivation, self-efficacy, sense of coherence, tobacco cessation

# Introduction

Tobacco usage is a health risk that can be avoided.<sup>[1]</sup> Nicotine, found in tobacco, is a naturally occurring addictive drug.<sup>[2]</sup>

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The same addictive properties present in any other addictive substance are found in nicotine. It raises the dopamine levels in

brain's pleasure core and gives the patient a sense of well-being.

It works not only as a stimulant, but also as a depressant which usually leads to addiction. Tobacco withdrawal is difficult

and time-consuming due to nicotine's strong addictiveness.

Grumpiness, anxiety, insomnia, restlessness, inability to focus,

and a strong desire to use tobacco are all symptoms of nicotine

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withdrawal. It also influences the user's mind all the way through habituation, which can be considered as an associative mechanism of learning, in addition to direct physiological effects.<sup>[3]</sup>

Social support plays an important role in tobacco prevention and has a significant effect on the initiation, maintenance, and cessation of tobacco usage. Non-health professionals offer social help or assistance to a person in a structured environment in the framework of the treatment and support network, and in a casual setting involving some sort of co-relationship, which is referred to as social support. When it comes to how a person can cope with the need to use tobacco when they are sad, social support can be an important coping mechanism. As a result, it may be a useful indicator of tobacco cessation.<sup>[4]</sup> An imperative notion in smoking cessation, initiation, and maintenance is the motivation to quit. [5] However literature looks to be deficient regarding how such motivation can be defined and measured. [6,7] "High" motivation magnitude, deliberated through self-reported willingness to quit, has been linked to searching out and utilizing evidence-based cessation help in the general population. [8] Furthermore, among general population smokers, a number of motivational pathways include explicit self-declaration of the desiring to quit, economic and health issues and expectations, and behaviour towards smoking, encourage to make an attempt to quit. [6] Self-efficacy and sense of coherence have been identified as drivers of tobacco cessation.[4]

Self-efficacy (SE) is the individual's confidence in the their own capability to achieve a desired result or purpose. [9,10] This motto, specific to a task, an area of knowledge, as well as performance, moulds the behaviour and strategies that helps the individual pursue their goal. [11] SE is a calibration of an individual's belief in one's capability to control one's own motivation, actions, and surroundings, and it encourages the individual to advocate their own support and requirements. [12] The principle of SE has been extensively utilized for the purpose of health promotion for nearly more than three decades in a variety of settings, including modifying behaviour in relation to drug abuse, cessation of tobacco chewing habits, and prevention of forthcoming malignancies. Older reports suggest that having an increased level of SE helps people accomplish their goals and change their bad habits. [13]

Antonovsky defined sense of coherence (SOC) as 'a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli, deriving from one's internal and external environments in the course of living are structured, predictable and explicable; (2) the resources are available to one to meet the demands posed by these stimuli; and (3) these demands are challenges, worthy of investment and engagement.' [14] These three elements reflect the comprehensibility, manageability and meaningfulness component of SOC. [14] Individuals who have a firm SOC are known to be capable of adequately mobilizing resources that are needed to meet life's expectations. People who have a good sense of

coherence are most likely to have healthy lifestyle habits, one of them being daily exercise. [15]

The public squalor community has come up as a new segment that struggling with health issues.<sup>[16]</sup> According to a study by Yadav K et al.[17] tobacco control programmes should concentrate on these public squalor communities as they are considered as high-risked communities due to high tobacco usage. There is a lack of knowledge about the negative effects of tobacco usage on well-being. The number of people who have a false sense of well-being is on the rise. Many who wish to stop tobacco consumption are unable to get the help they need. Individuals who are poor, illiterate and who reside in rural communities are at greater risk of tobacco usage. It is critical to investigate numerous factors that can aid in tobacco cessation in rural areas, especially during the COVID-19 pandemic. Tobacco usage is a significant risk factor for key non-communicable diseases (NCDs)—diseases of cardiovascular origin, malignancies, chronic respiratory diseases, and diabetes—putting people with these diseases at a comparatively greater risk of developing debilitating conditions if they are infected with SARS CoV-2. NCDs are projected to be responsible for 63% of all mortality rates in India, and this number is expected to increase.<sup>[18]</sup> As a result, the aim and objective of the current study was to explore how SE and the SOC affect tobacco cessation motivation and readiness among slum dwellers during the pandemic.

#### **Materials and Methods**

The present study was a descriptive cross-sectional questionnaire study. This research was conducted in the November and December 2020. The research took place in primary health centres in Ajmer's urban slums. Ajmer has a population of 110,675 people of which 21,066 are in slums. This represents approximately 20.41% of Ajmer's total population. <sup>[19]</sup> In this analysis, four slums from east, west, north, and south of Ajmer city were chosen at random from each direction, and each slum had an associated primary health centre (PHC). People from the slums were interviewed from among 16 PHCs.

Permission to conduct the interview was obtained from PHC's incharge. An independent ethical committee granted permission to proceed. Each participant signed a written informed consent form. Only people between the ages of 25 and 60 who were accompanying the sick person and who gave the written consent were considered in the report. A total of 314 study participants who were consuming tobacco any time in their life in any form were included in the study.

A pilot research was performed on 10% of the total study before the main study was performed to evaluate the feasibility of the current study and to verify validity and reliability of the questionnaires. Questions with a low level of validity and reliability were eliminated. Using test-retest, the kappa value was 0.97. Cronbach's Alpha was 0.95. Before the commencement of the study, the questionnaire was translated to the local language

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for easier comprehension and to improve the questionnaire's reliability and validity.

The present questionnaire consisted of 4 parts; the first part consisted of demographics of study participants such as age, gender, education, occupation and income. The second part consisted of 11 questions to determine tobacco cessation motivation and readiness. <sup>[20]</sup> The questionnaire was converted from cigarette smoking to tobacco consumption according to the aim of the present study. The third part consisted of 13 questions on SOC, called the SOC-13 questionnaire. <sup>[21]</sup> The fourth part consisted of 6 questions to determine SE of study participants, called the Smoking Abstinence Self-efficacy Questionnaire (SASEQ). <sup>[22]</sup> Tobacco cessation motivation and readiness scores range from 0 to 25. SOC scores range from 13 to 39, and that of SE range from 0 to 24.

# Statistical analysis

Descriptive statistics were used to determine self-efficacy, sense of coherence, and tobacco cessation motivation and readiness. Regression analysis was used to determine the impact of SE and SOC on the tobacco cessation motivation and readiness. Data was entered into Microsoft Excel 2013 and evaluated with SPSS version 20. The level of significance was set at 5%.

#### Results

The response rate was 98%. Table 1 shows that majority of study participants {154 (49%)} belonged to age group of 25–36 years. Male study participants {289 (92%)} were in majority. Most of the study participants {109 (34.7%)} were illiterate. The majority of study participants belonged to lower-middle class socio-economic status.

With regard to tobacco cessation motivation and readiness, the majority of study participants {178 (56.7%)} were not serious on giving a thought of cutting down the amount of tobacco consumption. Among those who desire to cut down on the amount of cigarettes they smoke, 139 (44.3 percent) were unsure if they will be able to do so. Majority of study participants {(240 (76.4%)} were not thinking seriously about quitting tobacco. 282 (89.8%) of study participants were not planning to quit tobacco [Table 2].

According to Table 3, most of the study participants {143 (45.5%)} sometimes cared about the activities going on around them. Most of them, {139 (44.3%)} were amazed by the behaviour of people who they know really well. Sometimes, study participants {128 (40.8%)} had the feeling that they were treated unfairly. Too often, most of the study participants had faced the situation of unfamiliarity {155 (51.3%)}. Majority of study participants {(158 (50.3%)} had mixed-up feelings and ideas. The majority of study participants {171 (54.5 percent)} had the impression that they were unsure of being in control.

Table 4 shows that majority of study participants were certainly not confident of not consuming tobacco during the following situations: when they are agitated or tense {104 (33.1%)},

Table 1: Demographic details of study participants (*n*=314)

| Demographic details                      | n (%)      |
|--|------------|
| Age in years                             |            |
| 25-36 years                              | 154 (49.0) |
| 36-47 years                              | 98 (31.2)  |
| 48-60 years                              | 62 (19.8)  |
| Total                                    | 314 (100)  |
| Gender                                   |            |
| Male                                     | 289 (92)   |
| Female                                   | 25 (8)     |
| Total                                    | 314 (100)  |
| Education                                |            |
| Professional degree                      | 1 (0.3)    |
| Graduate or postgraduate                 | 4 (1.3)    |
| Intermediate or post high school diploma | 13 (4.1)   |
| High school certificate                  | 42 (13.4)  |
| Middle school certificate                | 61 (19.4)  |
| Primary school certificate               | 84 (26.8)  |
| Illiterate                               | 109 (34.7) |
| Total                                    | 314 (100)  |
| Occupation                               | ,          |
| Professional (white collar)              | 0 (0.0)    |
| Semi-professional                        | 11 (3.5)   |
| Clerical, shop-owner/farm                | 113 (36.0) |
| Skilled worker                           | 51 (16.2)  |
| Semi-skilled worker                      | 35 (11.1)  |
| Unskilled worker                         | 57 (18.2)  |
| Unemployed                               | 47 (15.0)  |
| Total                                    | 314 (100)  |
| Monthly Income of family                 | ,          |
| ≥52,734                                  | 3 (0.1)    |
| 26,355-52,733                            | 29 (9.2)   |
| 19,759-26,354                            | 38 (12.1)  |
| 13,161-19,758                            | 91 (29.0)  |
| 7,887-13,160                             | 65 (20.7)  |
| 2,641-7,886                              | 54 (17.2)  |
| ≤ 2,640                                  | 34 (11.7)  |
| Total                                    | 314 (100)  |
| Socio-economic status                    | 311(100)   |
| Upper (26-29)                            | 4 (1.3)    |
| Upper middle (16-25)                     | 23 (7.3)   |
| Lower middle (11-15)                     | 145 (46.1) |
| Upper lower (5-10)                       | 67 (21.3)  |
| Lower (01-04)                            | 75 (23.9)  |
| Total                                    | 314 (100)  |

sad  $\{98 (31.2\%)\}$ , and when someone offers them the tobacco of their own brand  $\{131 (21.0\%)\}$ .

Majority of study subjects had poor SOC {137 (43.6%)}, poor SE {141 (44.9%)}, and poor tobacco cessation motivation and readiness {156 (49.7%)} [Table 5].

On applying logistic regression model, it was determined that study participants with high SE (P = 0.01\*) and high SOC (P = 0.00\*) had significant impact on good tobacco cessation motivation and readiness [Table 6].

| Table 2: Tobacco cessation motivation and readiness among study participants (n=314)             |                         |
|--|-------------------------|
| Tobacco cessation motivation and readiness   | n (%)                   |
| Q1. Are you seriously considering cutting back on your tobacco consumption?                      |                         |
| $N_0=0$  | 178 (56.7)              |
| Yes=1  | 136 (43.3)              |
| Total  | 314 (100)               |
| Q2. How much do you want to reduce the amount of packets you consume right now?                  | 450 (545)               |
| Not at all=0   | 178 (56.7)              |
| A little=1   | 38 (12.1)               |
| Some=2 Very much=2   | 29 (9.2)                |
| Very much=3 Total  | 69 (22)                 |
| Q3. How confident are you that you will be able to cut it down right now?                        | 314 (100)               |
| Not at all sure=0  | 139 (44.3)              |
| A little sure=1  | 88 (28)                 |
| Somewhat sure=2  | 71 (22.6)               |
| Very sure=3  | 16 (5.1)                |
| Total  | 136 (100)               |
| Q4. How committed are you to cutting down?   | , ,                     |
| Not at all determined=0  | 19 (14.0)               |
| A little determined=1  | 51 (37.5)               |
| Somewhat determined=2  | 32 (23.5)               |
| Very determined=3  | 34 (25)                 |
| Total  | 136 (100)               |
| Q5. Have you ever stopped tobacco consumption for at least 24 h on purpose in the last year?     |                         |
| $N_0=0$  | 233 (74.2)              |
| Yes=1  | 81 (25.8)               |
| Total  | 314 (100)               |
| Q6. Are you seriously thinking about quitting tobacco?   |                         |
| No=0   | 240 (76.4)              |
| Yes=1  | 74 (23.6)               |
| Total  | 314 (100)               |
| Q7. How much do you want to quit tobacco?  | 92 (26.1)               |
| Not at all=0 A little=1  | 82 (26.1)<br>101 (32.2) |
| Some=2   | 88 (28.0)               |
| Very much=3  | 43 (13.7)               |
| Total  | 314 (100)               |
| Q8. How confident are you that you would be able to quit tobacco fully if you made the decision? | 0 - 7 ( - 0 0 7         |
| Not at all sure=0  | 127 (40.4)              |
| A little sure=1  | 89 (28.3)               |
| Somewhat sure=2  | 57 (18.2)               |
| Very sure=3  | 41 (13.1)               |
| Total  | 314 (100)               |
| Q9. Do you plan to quit tobacco?   |                         |
| $N_0=0$  | 282 (89.8)              |
| Yes=1  | 32 (10.2)               |
| Total  | 314 (100)               |
| Q10. If you want to quit tobacco, when do you intend to do so?                                   |                         |
| More than 6 months=0   | 290 (92.4)              |
| 6 months=1   | 9 (2.9)                 |
| 3 months=2   | 8 (2.5)                 |
| 1 month=3  | 7 (2.2)                 |
| Total O11. How determined are you to guit tobacco if you want to do so?                          | 314 (100)               |
| Q11. How determined are you to quit tobacco if you want to do so?  Not at all determined=0       | 201 (64.0)              |
| A little determined=1  | 201 (64.0)<br>89 (28.3) |
| Somewhat determined=2  | 15 (4.8)                |
| Very determined=3  | 9 (2.9)                 |
| Total  | 314 (100)               |
|  | 211 (100)               |

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| Table 3: Sense of coherence among study participants ( <i>n</i> =314)                                       |            |
|---|------------|
| Sense of coherence  | n (%)      |
| Q1. Do you ever get the impression that you are unconcerned with what is going on around you?               |            |
| Very often=1  | 69 (22.0)  |
| Sometimes=2   | 143 (45.5) |
| Very seldom or never=3  | 102 (32.5) |
| Total   | 314 (100)  |
| Q2. Have you ever been shocked by the actions of people you thought you knew well?                          |            |
| Always happened=1   | 119 (37.9) |
| Sometimes happened=2  | 139 (44.3) |
| Never happened=3  | 56 (17.8)  |
| Total   | 314 (100)  |
| Q3. Has it ever happened to you that people you relied on let you down?                                     |            |
| Always happened=1   | 100 (31.8) |
| Sometimes happened=2  | 147 (46.9) |
| Never happened=3  | 67 (21.3)  |
| Total   | 314 (100)  |
| Q4. Have you set concrete goals in your life up until now?  | , ,        |
| Very seldom or never=1  | 156 (49.7) |
| Sometimes=2   | 119 (37.9) |
| Very often=3  | 39 (12.4)  |
| Total   | 314 (100)  |
| Q5. Do you ever feel as if you are being handled unequally?   | ` /        |
| Very often=1  | 120 (38.2) |
| Sometimes=2   | 128 (40.8) |
| Very seldom or never=3  | 66 (21.0)  |
| Total   | 314 (100)  |
| Q6. Do you have the feeling that you are in an unfamiliar situation and don't know what to do?              | ,          |
| Very often=1  | 155 (51.3) |
| Sometimes=2   | 111 (36.9) |
| Very seldom or never=3  | 48 (11.8)  |
| Total   | 314 (100)  |
| Q7. Do you get gratification and satisfaction from doing the things you do every day?                       | ,          |
| Very seldom or never=1  | 153 (48.4) |
| Sometimes=2   | 47 (14.9)  |
| Very often=3  | 114 (36.1) |
| Total   | 314 (100)  |
| Q8. Do you have a lot of conflicting emotions and ideas?  | 311 (100)  |
| Very often=1  | 158 (50.3) |
| Sometimes=2   | 107 (34.1) |
| Very seldom or never=3  | 49 (15.6)  |
| Total   | 314 (100)  |
| Q9. Do you ever have emotions inside that you'd rather not feel?  | 221 (200)  |
| Very often=1  | 162 (51.6) |
| Sometimes=2   | 91 (29.0)  |
| Very seldom or never=3  | 61 (19.4)  |
| Total   | 314 (100)  |
| Q10. In many cases, many people, including those with powerful personalities, feel like sad sacks (losers). | 311 (100)  |
| How many times have you felt this way before?   |            |
| Very often=1  | 157 (50.0) |
| Sometimes=2   | 83 (26.4)  |
| Very seldom or never=3  | 74 (23.6)  |
| Total   | 314 (100)  |
| Q11. Have you ever noticed that you had roughly measured the value of something before it happened?         | 51.(100)   |
| Very seldom or never=3  | 165 (52.5) |
| Sometimes=2   | 83 (26.4)  |
| Very often=1  | 66 (21.0)  |
| Total   | 314 (100)  |
|   | 317 (100)  |

Contd...

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| Table 3: Contd   |            |  |  |
|--|------------|--|--|
| Sense of coherence   | n (%)      |  |  |
| Q12. How much do you feel as if the things you do in your everyday life have no meaning? |            |  |  |
| Very often=1   | 98 (31.2)  |  |  |
| Sometimes=2  | 178 (56.7) |  |  |
| Very seldom or never=3   | 38 (12.1)  |  |  |
| Total  | 314 (100)  |  |  |
| Q13. How often do you experience emotions that you are not sure you can manage?          |            |  |  |
| Very often=1   | 102 (32.5) |  |  |
| Sometimes=2  | 171 (54.5) |  |  |
| Very seldom or never=3   | 41 (13.1)  |  |  |
| Total  | 314 (100)  |  |  |

| Table 4: Self-efficacy among study participants (n=314)  |            |
|--|------------|
| Self-efficacy  | n (%)      |
| Q1. You are irritable or nervous. Are you certain you would abstain from using tobacco?                |            |
| Certainly=4  | 30 (9.6)   |
| Probably=3   | 40 (12.7)  |
| Neutral/don't know=2   | 42 (13.4)  |
| Probably not=1   | 98 (31.2)  |
| Certainly not=0  | 104 (33.1) |
| Total  | 314 (100)  |
| Q2. You are (extremely) enraged. Are you certain you would abstain from using tobacco?                 |            |
| Certainly=4  | 89 (28.3)  |
| Probably=3   | 78 (24.8)  |
| Neutral/don't know=2   | 71 (22.6)  |
| Probably not=1   | 53 (16.9)  |
| Certainly not=0  | 23 (7.4)   |
| Total  | 314 (100)  |
| Q3. You are in a cafe, at a wedding, or just dropping by. Are you certain you would abstain from using |            |
| tobacco?   |            |
| Certainly=4  | 46 (14.6)  |
| Probably=3   | 55 (17.5)  |
| Neutral/don't know=2   | 67 (21.3)  |
| Probably not=1   | 75 (23.9)  |
| Certainly not=0  | 71 (22.7)  |
| Total  | 314 (100)  |
| Q4. You are (extremely) depressed. Are you certain you would abstain from using tobacco?               |            |
| Certainly=4  | 39 (12.4)  |
| Probably=3   | 38 (12.3)  |
| Neutral/don't know=2   | 58 (18.3)  |
| Probably not=1   | 81 (25.8)  |
| Certainly not=0  | 98 (31.2)  |
| Total  | 314 (100)  |
| Q5. Someone gives you your own brand of tobacco. Are you certain you would abstain from using tobacco? |            |
| Certainly=4  | 12 (3.8)   |
| Probably=3   | 16 (5.1)   |
| Neutral/don't know=2   | 56 (1.8)   |
| Probably not=1   | 99 (31.5)  |
| Certainly not=0  | 131 (21.0) |
| Total  | 314 (100)  |
| Q6. You see someone smoking. Are you certain you would abstain from using tobacco?                     |            |
| Certainly=4  | 08 (2.5)   |
| Probably=3   | 17 (5.4)   |
| Neutral/don't know=2   | 72 (22.9)  |
| Probably not=1   | 111 (35.4) |
| Certainly not=0  | 106 (33.9) |
| Total  | 314 (100)  |

# Discussion

The current study tried to determine the effect and impact of SOC and SE on tobacco cessation motivation and readiness. Many health behaviour theories include the concept of motivational readiness, and it is at the core of many therapeutic approaches. [23] It aims at enhancing the inner desire to alter one's behaviour and emphasizes that when inner desire is strong in the form of motivation (internal), the possibility of positive transformation in behaviour is most likely to happen and persist. Motivational interview and brief interventions (BI) resulting from it have a lot of supportive evidence in a variety of contexts, study reports, and target behaviours [23,24] and it has been used successfully to assist smokers to quit smoking. [25-27]

Tobacco usage is a dynamic phenomenon for which no single explanation can account for all aspects. While research suggests that SE as a motivational justification is effective, different encouraging channels for behaviour interventions should be explored further. As a result, tobacco cessation prevention methods must make use of all available information on

Table 5: Self-efficacy, sense of coherence and tobacco cessation motivation and readiness scores among study participants

|  | n (%)      |
|--|------------|
| Sense of coherence                         |            |
| Low (13-21)                                | 137 (43.6) |
| Medium (22-30)                             | 118 (37.6) |
| High (31-39)                               | 59 (18.8)  |
| Total                                      | 314 (100)  |
| Self-efficacy                              |            |
| Low (0-8)                                  | 141 (44.9) |
| Medium (9-16)                              | 88 (28.0)  |
| High (17-24)                               | 85 (27.1)  |
| Total                                      | 314 (100)  |
| Tobacco cessation motivation and readiness |            |
| Poor (0-8)                                 | 156 (49.7) |
| Fair (9-17)                                | 98 (31.2)  |
| Good (18-25)                               | 60 (19.1)  |
| Total                                      | 314 (100)  |

effective care. Tobacco cessation approaches that incorporate comprehensive and individualized education with sentimental assistance and reasonable behavioural therapies provided by medical practitioners have a proven track record of being successful.<sup>[28]</sup>

It was stated in a study by Igna CV *et al.*<sup>[29]</sup> that activity of smoking was linked to SOC levels. Present smokers had a lower SOC than non-smokers.

In the light of present knowledge, it was determined that no study was conducted on present study previously. Just 23.6% of study participants chose to quit tobacco, compared to 52.2% in a study by Kar SS *et al.*,<sup>[30]</sup> which showed the findings from the Global Adult Tobacco Survey India, 2016–17. This may be because the research is taking place in slums, where illiteracy is higher, and motivation and willingness to quit are lower.

The latest research shows that tobacco the user's SOC and SE are poor. The same findings were found in a study by Froelicher ES et al.,[31] who found that high perceived SE predicted one's achievement in stopping tobacco consumption, and that SE predicted tobacco cessation maintenance six and twelve months after quitting. Another study by Ockene JK et al.[32] reported a clear and strong link among SE and cessation end result. The bond was powerful (0.47 SD) when SE after quitting was evaluated, according to a meta-analysis by Gwaltney CJ et al.[33] However, since the research involved only abstainers during the SE test, the effect was limited (28 SD). When it came to smoking habits at the time of SE evaluation, the link between SE and future smoking was significantly reduced. While SE has a strong link to future abstinence, it is not as strong as one might assume. In a study conducted among patients with myocardial infarction, Hayrumyan V et al.[34] found that people who had quit smoking had higher mean SE scores than non-quitters. According to Lindstrom B et al.[35] and Chhabra et al.,[36,37] adolescents with a higher tendency to overcome pressure, or a higher SOC, have higher possibilities to uphold a desire against smoking since they are better able to identify generalized resistance sources to help themselves deal better with stressful situations before falling prey to harmful habits such as smoking.

Table 6: Logistic regression model applied to determine the impact of sense of coherence and self-efficacy on tobacco cessation motivation and readiness

| Tobacco history    |                     | To    | Tobacco cessation motivation and readiness |      |                       |      |
|--------------------|---------------------|-------|--|------|-----------------------|------|
|                    | Good                | P     | Fair                                       | P    | Poor                  | P    |
|                    | Exp (B) 95% CI      |       | Exp (B) 95% CI                             |      | Exp (B) 95% CI        |      |
| Sense of coherence |                     |       |  |      |                       |      |
| High               | 1.289 (0.461-2.314) | 0.01* | 0.742 (0.178-3.801)                        | 0.14 | 0.237 (0.155-7.619)   | 0.25 |
| Medium             | 0.618 (0.024-1.033) | 1.01  | 1.345 (0.146-3.451)                        | 1.87 | 1.112 (10.371-31.225) | 1.78 |
| Low                | $O_p$               | -     | $O_p$                                      | -    | $O_p$                 | -    |
| Self-efficacy      |                     |       |  |      |                       |      |
| High               | 2.891 (1.462-3.299) | 0.00* | 0.922 (0.163-2.395)                        | 1.30 | 0.957 (0.110-1.341)   | 0.38 |
| Medium             | 0.233 (0.111-4.554) | 2.33  | 0.584 (0.372-1.033)                        | 2.69 | 0.846 (0.176-2.400)   | 1.28 |
| Low                | $O_{P}$             | =     | $O_{P}$                                    | -    | $O_{P}$               | -    |

### Conclusion

From the present study, it was concluded that study participants with a high sense of Coherence and high self-efficacy had a significant impact on good tobacco cessation motivation and readiness. Besides the COVID-19 health emergency, a very less number of tobacco consumers were interested in quitting tobacco. Since the current research is cross-sectional in nature, further longitudinal research should be undertaken in the future.

# Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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#### **Conflicts of interest**

There are no conflicts of interest.

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