A Study on the Pattern of Self-reported Tobacco Addiction in Hypertensive Patients in Gujarat, India

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Abstract

Background: Both hypertension (HTN) and tobacco addiction pose a threat to the health, environment, and socioeconomic status (SES) of the people. When tobacco use disorder exists in people with HTN, it hastens the disease progress and causes early complications. The present study aimed to study the knowledge and practice of tobacco addiction in patients with HTN and find out the correlates of knowledge and practice of tobacco addiction.

Methods: A cross-sectional study was conducted for a period of one year in the Jamnagar District of Western Gujarat, India. Out of total 400 samples, 50% were collected from the five selected Community Health Centers (CHCs) by random sampling and the rest from non-communicable disease (NCD) clinics at the tertiary care hospital of the district.

Findings: Most of the patients were in their fifties or above (67.0%), women (57.0%), and married (86.5%). Only 12.0% had awareness about the hazards of tobacco addiction and the prevalence of tobacco addiction was 11%. It was found that use of smokeless tobacco (SLT) among samples was the highest (72.7%) followed by dual consumption, i.e., SLT and smoking (20.5%). The frequency of consumption was ≥ 5 times/day in 54.5%, 70.4% were addicted for > 10 years, and only 15.9% had ever tried to quit tobacco while only 11.4% had successfully quit it. It was seen that those who were aged < 50 years, men, literates, employed, and those belonging to higher SES and urban residence had better knowledge of the health hazards. This was found to have significant statistical association.

Conclusion: The results provide valuable insight into the tobacco addiction in patients with HTN on which non-pharmacological treatment of HTN can be based.

Keywords: Hypertension; Smoking; Tobacco; Smokeless; Cardiovascular disease

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Introduction

According to a finding, about 1.3 billion people in the world are suffering from hypertension (HTN).\textsuperscript{1} It is expected to increase to 1.56 billion people by 2025.\textsuperscript{2} In most of the countries, it is seen that about 30% of the affected population are adults.\textsuperscript{3} The burden of HTN is on the rise in most of the developing countries including India,\textsuperscript{4} where the situation is quite alarming as around 33% urban and 25% rural Indians are hypertensive.\textsuperscript{5} Though, proper treatment of HTN prevents complications and other cardiovascular diseases (CVDs) and ameliorates the quality of life (QOL) in the affected patients, it remains inadequately-managed in most cases. One of the primary reasons of inadequate treatment might be non-compliance to the necessary lifestyle modifications. Tobacco smoking is an important cause of sudden death from coronary heart disease (CHD) in men below 50 years of age. As tobacco consumption is an independent risk factor for HTN,\textsuperscript{6,7} tobacco cessation is an imperative measure in lifestyle modification in patients with HTN. The prevalence of smoking is around 30% globally\textsuperscript{8} and 55% nationally\textsuperscript{9} and the prevalence of overall tobacco consumption is still high in India, so the chance of tobacco addiction in people with HTN is very high. Therefore, the specific objectives of this study were to assess the knowledge and practices of tobacco addiction as well as their correlates in patients with HTN.

Methods

This cross-sectional study was conducted in the district of Jamnagar, a coastal region in the western part of India in the state of Gujarat, for a period of one year, from July 2013 to June 2014. Sample size (N) was calculated using this formula: 
\[ N = \frac{pq}{L^2} \]
where \( p \) is population, \( q \) is 100-\( p \), and \( L \) is relative precision. At 95% confidence interval (CI), taking prevalence (p) as 50\%\textsuperscript{10,11} and \( L \) as 10\% of \( p \), a sample size of 400 was calculated. Out of the total calculated sample, half of the study subjects (50\%) were selected from the tertiary care hospital of the study district, Jamnagar, and the remaining half were selected from Community Health Centers (CHCs) of the district by simple random sampling method. From each CHC, forty patients were taken for the study. Data were collected from known cases of HTN who were ≥ 30 years of age were included in the study. Patients who were unwilling to participate in the study, critically or mentally ill, or pregnant were excluded from the study.

Data collection was done using a pre-tested and semi-structured type of questionnaire by personal interview. The questionnaire included questions related to knowledge about HTN, the practices of tobacco consumption, disease control and complications, lifestyle, and lifestyle modifications. While collecting the data, questions on knowledge, attitude, and practice were administered together to maintain the fluidity and they were later segregated prior to data entry. Each satisfactory answer was scored as 1 and if the aggregate score was ≥ 50\%, the patient would be classified as knowledgeable (Yes/No), having right attitude (Yes/No), and having good practice (Yes/No). Using modified Prasad’s classification [All India Consumer Price Index (CPI) of the year 2013], socioeconomic status (SES) was estimated.\textsuperscript{12} Anthropometric measurements were taken according to standard guidelines and clinical examination was also carried out.

In the present study, smoked form include cigarette, bidi (tobacco hand-rolled in dried tendu leaves), and other forms of smoked material. Smokeless tobacco (SLT) use consisted of chewing gutkha or paan masala, betel quid with tobacco, and khaini. Term “ever user” was defined as a person having used tobacco even once in his/her lifetime, “current user” was defined as a person having used tobacco at least once in the last 30 days preceding the visit, and “never user” was defined as a person who never used tobacco even once in his/her lifetime.\textsuperscript{13,14}

The data entry was done using Microsoft Office Excel (version 2007). To summarize the data, descriptive statistics of frequency, percentage, mean, and standard deviation (SD) were used. Chi-square test using MedCalc (version 10.4.8.0) was done to establish statistical association, and odds ratio (OR) and its CI were calculated. Alpha level was set at 0.05 (5\%).

Study was approved by Institutional Ethics Committee of Shri M.P. Shah Government Medical College, Jamnagar. An informed consent was taken from all participants of the study after

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fully explaining the purpose of the study and assuring them of full confidentiality. The interview was conducted in a language they well understood (Gujarati and Hindi).

Results

Table 1 shows the patients’ socio-demographic characteristics. About 67.0% of the patients belonged to ≥ 50 years age group. Half of the patients were women and the male/female ratio was 1:1.3. Hinduism was found to be the predominant (80.8%) religion. Majority of the patients were married (86.5%). Around one-fourth (26.0%) of the respondents were illiterate. More than half of the patients were unemployed (55.8%) and belonged to the lower socioeconomic class (64.5%).

| Socio-demographic factors | n (%) |
|---------------------------|-------|
| Age (year)                |       |
| < 50                      | 132   (33.0) |
| ≥ 50                      | 268   (67.0) |
| Sex                       |       |
| Male                      | 172   (43.0) |
| Female                    | 228   (57.0) |
| Religion                  |       |
| Hindu                     | 323   (80.8) |
| Others                    | 77    (19.2) |
| Marital status            |       |
| Married                   | 346   (86.5) |
| Unmarried                 | 54    (13.5) |
| Type of family            |       |
| Nuclear                   | 244   (61.0) |
| Joint                     | 156   (39.0) |
| Literacy                  |       |
| Illiterate                | 104   (26.0) |
| Literate                  | 296   (74.0) |
| Employment                |       |
| Employed                  | 177   (44.2) |
| Unemployed                | 223   (55.8) |
| Socioeconomic class       |       |
| Higher class (I and II)   | 142   (35.5) |
| Lower class (III, IV, and V) | 258 (64.5) |
| Locality                  |       |
| Urban                     | 304   (76.0) |
| Rural                     | 96    (24.0) |

Table 2 shows that only 12.0% (n = 48) were aware of the harmful health effects of tobacco addiction. The prevalence of tobacco addiction, in any form, in the study population was 11.0% (n = 44). Among the ever users of tobacco (n = 44), the proportion of SLT use was found to be the highest (72.7%, n = 32), followed by dual consumption (20.5%, n = 9), and only smoking (6.8%, n = 3). In more than half of the tobacco consumers (54.5%, n = 24), the frequency of daily consumption was equal to or more than five times. A higher proportion of respondents (70.4%, n = 31) were addicted for more than 10 years and 84.1% (n = 37) never tried to quit while only 11.4% (n = 5) had successfully quit tobacco.

| Table 2. Tobacco consumption knowledge and practice in the patients with hypertension (HTN) |
|---------------------------------------------|----------|-------|
| Knowledge about harmful effects of tobacco consumption (n = 400) | n (%) |
| Yes                                         | 48 (12.0) |
| No                                          | 352 (88.0) |
| Tobacco consumption ever (n = 400)          |         |
| Yes                                         | 44 (11.0) |
| No                                          | 356 (89.0) |
| Types of addictions (n = 44)                |         |
| Only SLT                                    | 32 (72.7) |
| Only smoking                                | 3 (6.8) |
| Dual consumption                            | 9 (20.5) |
| Frequency of consumption per day (n = 44)   |         |
| < 5                                         | 20 (45.5) |
| ≥ 5                                         | 24 (54.5) |
| Duration of tobacco addiction (year) (n = 44) |         |
| ≤ 10                                       | 13 (29.6) |
| > 10                                       | 31 (70.4) |
| Trying to quit (n = 44)                     |         |
| Yes                                         | 7 (15.9) |
| No                                          | 37 (84.1) |
| Quitting tobacco (n = 44)                   |         |
| Yes                                         | 5 (11.4) |
| No                                          | 39 (88.6) |

SLT: Smokeless tobacco

Table 3 shows association of knowledge regarding harmful effects of tobacco use on health with various socio-demographic variables. It showed significant statistical association (P < 0.0500) with age and education. There was highly significant association (P < 0.0010) with sex, locality (urban or rural), literacy, employment, and SES.

Table 4 shows highly significant association (P < 0.0010) of knowledge of harmful effects of tobacco use with tobacco addiction. We did not find any significant statistical association (P > 0.0500) between tobacco addiction and the socio-demographic factors (Table 5).
Table 3. Association of socio-demographic variables with knowledge about effects of tobacco addiction on hypertension (HTN) (n = 400)

| Socio-demographic factors | Knowledge about effects of tobacco addiction on HTN | P        | OR (95% CI) |
|---------------------------|---------------------------------------------------|----------|-------------|
|                           | Yes (n = 48)                                      | No (n = 352) |              |
| Age (year)                |                                                   |           |             |
| < 50                      | 25 (18.9)                                         | 107 (81.1) | 0.0027*     | 2.48 (1.35-4.58) |
| ≥ 50                      | 23 (8.5)                                          | 245 (91.4) |             |                 |
| Sex                       |                                                   |           |             |
| Male                      | 32 (18.8)                                         | 140 (82.3) | 0.0004**    | 3.02 (1.60-5.73) |
| Female                    | 16 (7.0)                                          | 212 (93.0) |             |                 |
| Locality                  |                                                   |           |             |
| Urban                     | 44 (19.7)                                         | 179 (80.3) | < 0.0001**  | 10.63 (3.74-30.22) |
| Rural                     | 4 (2.3)                                           | 173 (97.7) |             |                 |
| Education                 |                                                   |           |             |
| Illiterate                | 5 (4.8)                                           | 99 (95.2)  | 0.0087**    | 0.29 (0.11-0.77) |
| Literate                  | 43 (14.5)                                         | 253 (85.5) |             |                 |
| Religion                  |                                                   |           |             |
| Hindu                     | 37 (11.5)                                         | 286 (88.5) | 0.4900†     | 0.78 (0.38-1.60) |
| Others                    | 11 (14.2)                                         | 66 (85.7)  |             |                 |
| Marital status            |                                                   |           |             |
| Married                   | 44 (12.7)                                         | 302 (87.3) | 0.2700†     | 1.82 (0.63-5.29) |
| Unmarried                 | 4 (7.4)                                           | 50 (92.6)  |             |                 |
| Type of family            |                                                   |           |             |
| Nuclear                   | 29 (11.9)                                         | 215 (88.1) | 0.9300†     | 0.97 (0.52-1.80) |
| Joint                     | 19 (12.2)                                         | 137 (87.8) |             |                 |
| Employment                |                                                   |           |             |
| Employed                  | 34 (19.2)                                         | 143 (80.8) | < 0.0001**  | 3.55 (1.84-6.85) |
| Unemployed                | 14 (6.3)                                          | 209 (93.7) |             |                 |
| Socioeconomic class       |                                                   |           |             |
| Higher class (I and II)   | 30 (21.1)                                         | 112 (78.9) | < 0.0001**  | 3.57 (1.91-6.67) |
| Lower class (III, IV, and V) | 18 (6.9)                        | 240 (93.1) |             |                 |

*P < 0.05 (statistically significant), **P < 0.001 (highly statistically significant), †P > 0.05 (not statistically significant)

Discussion

In the present study, it was observed that only 12.0% of the subjects had awareness about the harmful health hazards of tobacco addiction. The overall prevalence of tobacco addiction (smoking/smokeless/dual form) was found to be 11.0%. This was much encouraging compared to the 29.3% and 18.2% found as prevalence in studies carried out in the same state, Gujarat.15,16 However, social desirability bias towards the interviewer might have hidden the actual prevalence which might have been higher. Among the ever users of tobacco in our study, the proportion of SLT use was found to be the highest (72.7%), followed by dual consumption (20.5%), and only smoking (6.8%). Similarly, in her study, Pandor observed that tobacco chewing (SLT) was the most popular form of addiction followed by smoking.15 In contrast to our study, in another study done in rural Gujarat, it was found that 77.8% smoked, 51.7% chewed tobacco in several forms, while 27% used tobacco in both forms.16

Table 4. Association of knowledge about effects of tobacco addiction with its consumption (n = 400)

| Ever user of tobacco | Awareness about effects of tobacco addiction | P        | OR (95% CI) |
|----------------------|---------------------------------------------|----------|-------------|
|                      | Yes [n (%)]                                 | No [n (%)] |             |
| Yes                  | 14 (29.2)                                   | 30 (8.5)  | < 0.0001*   | 4.42 (2.14-9.14) |
| No                   | 34 (70.8)                                   | 322 (91.5)|             |                 |

*P < 0.001 (highly statistically significant)
OR: Odds ratio; CI: Confidence interval
Table 5. Association of tobacco addiction with various socio-demographic factors (n = 400)

| Socio-demographic factors          | Ever user of tobacco | P     | OR (95% CI) |
|------------------------------------|----------------------|-------|------------|
|                                    | Yes (n = 44)          |       |            |
|                                    | No (n = 356)          |       |            |
| Age (year)                         |                      |       |            |
| < 50                               | 13 (9.8)             |       | 0.6400*   |
|                                    | 119 (90.2)           |       | 0.84 (0.42-1.66) |
| ≥ 50                               | 31 (11.6)            |       |            |
|                                    | 237 (88.4)           |       |            |
| Sex                                |                      |       |            |
| Male                               | 22 (12.8)            |       | 0.3200*   |
|                                    | 150 (87.2)           |       | 1.37 (0.73-2.57) |
| Female                             | 22 (9.6)             |       |            |
|                                    | 206 (90.4)           |       |            |
| Locality                           |                      |       |            |
| Urban                              | 36 (2.6)             |       | 0.4700*   |
|                                    | 274 (87.4)           |       | 1.35 (0.60-3.01) |
| Rural                              | 8 (8.9)              |       |            |
|                                    | 82 (91.1)            |       |            |
| Education                          |                      |       |            |
| Illiterate                         | 14 (13.5)            |       | 0.3500*   |
|                                    | 90 (86.5)            |       | 1.38 (0.70-2.72) |
| Literate                           | 30 (10.1)            |       |            |
|                                    | 266 (89.9)           |       |            |
| Religion                           |                      |       |            |
| Hindu                              | 33 (10.2)            |       | 0.3100*   |
|                                    | 290 (89.8)           |       | 0.68 (0.33-1.42) |
| Others                             | 11 (14.3)            |       |            |
|                                    | 66 (85.7)            |       |            |
| Marital status                     |                      |       |            |
| Married                            | 38 (10.9)            |       | 0.9800*   |
|                                    | 308 (89.1)           |       | 0.99 (0.40-2.46) |
| Unmarried                          | 6 (11.1)             |       |            |
|                                    | 48 (88.9)            |       |            |
| Type of family                     |                      |       |            |
| Nuclear                            | 24 (9.8)             |       | 0.3500*   |
|                                    | 220 (90.2)           |       | 0.74 (0.40-1.39) |
| Joint                              | 20 (12.8)            |       |            |
|                                    | 136 (87.2)           |       |            |
| Employment                         |                      |       |            |
| Employed                           | 22 (12.8)            |       | 0.3200*   |
|                                    | 150 (87.2)           |       | 1.37 (0.73-2.57) |
| Unemployed                         | 22 (9.6)             |       |            |
|                                    | 206 (90.4)           |       |            |
| Socioeconomic class                |                      |       |            |
| Higher class (I and II)            | 15 (10.6)            |       | 0.8700*   |
|                                    | 127 (89.4)           |       | 0.93 (0.48-1.80) |
| Lower class (III, IV, and V)       | 29 (11.2)            |       |            |
|                                    | 229 (88.8)           |       |            |

*P > 0.05 (not statistically significant)
OR: Odds ratio; CI: Confidence interval

We observed that in the majority of the tobacco consumers (54.5%), the frequency of consumption was ≥ 5 times/day. In the study done by Kahar et al., frequency of tobacco consumption was reported to be between 8 and 10 times a day,16 while Bhanushali, in his study, observed that 33.3% of the patients smoked 1-20 times a day while the rest smoked even more frequently, which was higher than the present study.17 Similar to Sochaliya’s study,18 where 69.9% of respondents were using tobacco for > 10 years, in our study, 70.4% were addicted for > 10 years. It was observed that only 15.9% had ever tried to quit tobacco while a meagre percent of 11.4% had successfully quit. This was poorer compared to the observation of Srivastava et al., where 42.0% of the ever users of tobacco made an attempt to quit tobacco and of these, 42.0% were successful.19

The knowledge of harmful effects of tobacco addiction on health showed significant statistical association (P < 0.0500) with age and education, and highly significant association (P < 0.001) with sex, locality (urban or rural), literacy, employment, and SES. It was seen that those who aged < 50 years, men, literates, employed, and those belonging to higher SES and having urban residence had better knowledge of the health hazards of tobacco. Similarly, another study found that those with male sex, younger age, and literacy showed higher levels of knowledge about tobacco hazards and this was found to have significant statistical association.16 Overall, non-users had higher awareness of the health hazards of tobacco use compared to tobacco users. This was in agreement with the findings of Kahar et al.16 Though, we did not find any significant statistical association of tobacco addiction with the socio-demographic factors (P > 0.050), other studies observed significant association.16,20
It was found that more than half of the patients (57.0%) were women. Female predominance was also noted in studies conducted by Osman et al. in Eastern Sudan and Jesus et al. in Sao Paulo. More than half of the patients, in our study, were in their fifties or above (67.0%) and married (86.5%). Similar to our study, the majority of the patients in the study done by Jesus et al. were in fifties and also most were married.

**Conclusion**

The results of this study provided valuable insight to the prevalence and pattern of tobacco addiction in the patients with HTN in the Indian society and the findings can help in developing a non-pharmacological treatment protocol based on lifestyle modification with tobacco cessation as its mainstay. Since the knowledge of the hazards of tobacco addiction was found to have a significant association with tobacco use, more attention should be given to the cohorts of female, older age group, unemployed, rural, illiterate, and lower SES patients in whom knowledge was found to be lower, while disbursing non-communicable disease (NCD) counseling.

**Conflict of Interests**
The Authors have no conflict of interest.

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**References**

1. Bloch MJ. Worldwide prevalence of hypertension exceeds 1.3 billion. J Am Soc Hypertens 2016; 10(10): 753-4.
2. Kearney PM, Whelton M, Reynolds K, Munter P, Whelton PK, He J. Global burden of hypertension: Analysis of worldwide data. Lancet 2005; 365(9455): 217-23.
3. Staessen JA, Wang J, Bijnens L. Essential hypertension. Lancet 2003; 361(9369): 1629-41.
4. Reddy KS. Hypertension control in developing countries: Generic issues. J Hum Hypertens 1996; 10(Suppl 1): S33-S38.
5. Anchala R, Kamnuri NK, Pant H, Khan H, Franco OH, Di Angelantonio E, et al. Hypertension in India: A systematic review and meta-analysis of prevalence, awareness, and control of hypertension. J Hypertens 2014; 32(6): 1170-7.
6. Pais P, Fay MP, Yusuf S. Increased risk of acute myocardial infarction associated with beedi and cigarette smoking in Indians: Final report on tobacco risks from a case-control study. Indian Heart J 2001; 53(6): 731-5.
7. Alam N, Soni GP, Jain KK, Verma S, Panda PS. Prevalence and determinants of hypertension in elderly population of Raipur city, Chhattisgarh. Int J Res Med Sci 2015; 3(3): 568-73.
8. Mackay J, Erikson J. The tobacco atlas. 2nd ed. Geneva, Switzerland: WHO; 2002.
9. Ministry of Health and Family Welfare Government of India. Global Adult Tobacco Survey (GATS), India: 2009-2010 [Online]. [cited 2010]. Available from: URL: http://www.who.int/tobacco/surveillance/en_tfi_india_a_gats_fact_sheet.pdf
10. Lwanga SK, Lemeshow S. Sample size determination in health studies: A practical manual. Geneva, Switzerland: World Health Organization; 1991.
11. Sarkar A, Mawana N, Pradeep P, Parmar V. Compliance to antihypertensive therapy and its predictors: A Cross-sectional Study in western coastal region of India. J Clin Diag Res 2018; 12(3): LC26-LC30.
12. All India Consumer Price Index (General) for Industrial Workers [Online]. [cited 2014 Sep 20]; Available from: URL: http://cyberjournalist.org.in/manisana/aicpinew.html
13. Reynolds K, Liese AD, Anderson AM, Dabelea D, Standiford D, Daniels SR, et al. Prevalence of tobacco use and association between cardiometabolic risk factors and cigarette smoking in youth with type 1 or type 2 diabetes mellitus. J Pediatr 2011; 158(4): 594-601.
14. Chhabra SK, Rajpal S, Gupta R. Patterns of smoking in Delhi and comparison of chronic respiratory morbidity among beedi and cigarette smokers. Indian J Chest Dis Allied Sci 2001; 43(1): 19-26.
15. Pandor J. A study on Hypertension and its risk factors in Jamnagar city [Thesis]. Gujarath, India: Saurashtra University; 2006.
16. Kahar P, Misra R, Patel TG. Sociodemographic correlates of tobacco consumption in rural Gujarath, India. Biomed Res Int 2016; 2016: 5856740.
17. Bhanushali VV. Risk factor modification through life style interventions in coronary artery disease patients [Thesis]. Gujarath, India: Saurashtra University; 2002.
18. Sochaliya K. A study on assessment of risk factors of lifestyle diseases in Jamanagar city [Thesis]. Gujarath,
India: Saurashtra University; 2010.

19. Srivastava S, Malhotra S, Harries AD, Lal P, Arora M. Correlates of tobacco quit attempts and cessation in the adult population of India: Secondary analysis of the Global Adult Tobacco Survey, 2009. BMC Public Health 2013; 13(1): 263.

20. Bhaskar RK, Sah MN, Gaurav K, Bhaskar SC, Singh R, Yadav MK, et al. Prevalence and correlates of tobacco use among adolescents in the schools of Kalaiya, Nepal: A cross-sectional questionnaire based study. Tob Induc Dis 2016; 14: 11.

21. Osman el FM, Suleiman I, Alzubair AG. Clinico-epidemiological features of hypertensive subjects in kassala town, eastern Sudan. J Family Community Med 2007; 14(2): 77-80.

22. Jesus ES, Augusto MAO, Gusmao J, Junior DM, Ortega KC, Pierin AMG. Profile of hypertensive patients: Biosocial characteristics, knowledge, and treatment compliance. Acta Paul Enferm 2008; 21(1): 59-65.
مطالعه‌ای در مورد الگوی خودگزارش‌دهی اعتیاد به تنباکو در بیماران مبتلا به پرفشاری خون در گجرات، هندوستان
آمریتا سارکار، دیجیت روی، میت چاهان، نارش آر. مک وانا، دیپش و. پارمار، سودها یاداو

چکیده
مقدمه: پرفشاری خون و اعتیاد به تنباکو، هر دو تهدیدی برای محیط، سلامتی و وضعیت اقتصادی افراد می‌باشند. اختلال استفاده از تنباکو در بیماران مبتلا به پرفشاری خون، بیشتر از بیماری‌های دیگر می‌باشد. بررسی این امر به دنبال محیطی است که در آن غیر از انجام برنامه‌های بهداشتی، شیوه‌های جوامعی و سیاسی می‌تواند بهبود بسزایی بر این وضعیت ارائه دهد.

روش‌ها: این مطالعه یک مطالعه مقطعی-توصیفی در منطقه جام نگر گجرات غربی هند به مدت یک سال انجام شد. از میان 400 نمونه، 50 نفر را از مرکز منطقه‌ای سلامتی و 50 نفر از کلینیک‌های سلامتی غیر واگیر در بیمارستان مرکزی گیری کرده و تیم پژوهشی در آنها شرکت کردند.

یافته‌ها: بیشتر بیماران در رده سنی 50-67 سال قرار داشتند. 57 درصد آنها مؤنث و 86/86 درصد میانه بودند. تنها 12 درصد مصرف دوگانه (تنباکو بدون دود و دود کردن) را خود اختصاص دادند. بیشتر از مصرف تنباکو بدون دود برای افراد بیشتر از 15 سال اعتیاد داشتند و تنها 5/15 درصد تاکنون برای ترک تنباکو تلاش کرده بودند. تست آزمون 20 برای شناخت و پاسخگویی به شیوه‌های استفاده از تنباکو انجام شد.

نتیجه‌گیری: نتایج به دست آمده اطمینان ارائه دهنده دارد که مصرف تنباکو بدون دود، نگرانی هنگام اعتیاد در بیماران مبتلا به پرفشاری خون می‌تواند بهبودی در محیط ساخته و تأثیر عمده‌ای در مورد خطرات اعتیاد به تنباکو داشته باشد.

واژگان کلیدی: فشار خون بالا، استفاده از چربی‌های تولید شده، تنباکو، مصرف دوگانه - بیماری قلبی- عروقی

ارجاع: سارکار آمریتا، دیجیت روی، میت چاهان، نارش آر. مک وانا، دیپش و. پارمار، سودها یاداو. مطالعه‌ای در مورد الگوی خودگزارش‌دهی اعتیاد به تنباکو در بیماران مبتلا به پرفشاری خون در گجرات، هندوستان. مجله اعتیاد و سلامت 1397/11: 32-22.

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