International Journal of Community Medicine and Public Health
Naaz S. Int J Community Med Public Health. 2021 Oct;8(10):5106-5112
http://www.ijcmph.com
pISSN 2394-6032 | eISSN 2394-6040

DOI: https://dx.doi.org/10.18203/2394-6040.ijcmph20213822

Review Article

Knowledge, attitude and practices pertaining to healthy lifestyle in prevention and control of chronic diseases: a rapid review

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Received: 01 August 2021
Accepted: 07 September 2021

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ABSTRACT

With the emergence of non-communicable diseases (NCDs), healthy lifestyle has become critical to not only reduce the burden of NCDs, but also to prevent complications and severity of these diseases. Knowledge, attitude and practices (KAP) pertaining to healthy lifestyle play an important role in determining the occurrence and progress of NCDs. KAP elements are interrelated and dependent on each other. While awareness campaigns provide necessary information to people on healthy lifestyle, how well this information is utilised is a grey area. The objective of this rapid review is to understand the relationship between KAP elements pertaining to healthy lifestyle among individuals who are at risk of developing NCDs and those who are living with NCDs. For this purpose, a rapid review of articles available on Google scholar and Pubmed was conducted. Articles focusing on KAP elements pertaining to healthy lifestyle from the year 2015-2021 were reviewed. Findings from the reviewed studies suggested that people have knowledge about the harmful effects of unhealthy diet, physical inactivity, tobacco and alcohol. People have a positive attitude towards healthy lifestyle, however, being knowledgeable and having a positive attitude did not translate into practicing healthy lifestyle due to multiple barriers to translate existing knowledge into practice. Since practice scores are poor among people, existing behaviour change strategies must be re-examined. An epistemological analysis of existing human behaviour with identified barriers and facilitators to adopt healthy lifestyle can help in formulating sustainable and effective social and behaviour change interventions.

Keywords: Non-communicable diseases, Healthy-lifestyle, KAP, Behaviour change

INTRODUCTION

Non-communicable diseases (NCDs) are a group of diseases that are not infectious and are caused by genetic inheritance as well as unhealthy lifestyle like unhealthy diet, physical inactivity, stress, consumption of alcohol and tobacco.

NCDs comprise of diseases like diabetes, cardio-vascular diseases, cancers, stroke, Chronic obstructive pulmonary diseases (COPDs), Chronic kidney diseases (CKDs) and Non-alcoholic fatty liver disease (NAFLD). With the emergence of NCDs, the world is experiencing an epidemiological transition from communicable diseases to non-communicable diseases. NCDs kill 41 million people each year, equivalent to 71% of all deaths globally.[1] More than 3/4th (77%) of all NCD deaths occur in low and middle-income countries.[1]

MANAGEMENT OF NCDS

Practice of healthy lifestyle plays an important role in preventing NCDs. Once diagnosed, management consists of lifestyle modification along with regular intake of medicines. Due to the chronic nature of NCDs, adherence to treatment and healthy habits is often challenging for the patients. Intake of medicines alone does little to improve the quality of life and to restrict progression of the disease, which is why non-pharmacological interventions (healthy life-style practices) form a cornerstone in the management

of NCDs. A positive patient outlook towards knowledge, attitude, and practices (KAP) pertaining to healthy lifestyle determines the progress of these diseases. While elements of KAP are interrelated and dependent on each other, they are shaped by socio economic conditions, cultural beliefs and personal habits, which implies that being informed may not necessarily lead to practice of healthy lifestyle. The objective of this review is to understand the knowledge, attitude and practices pertaining to healthy lifestyle among individuals who are at risk of developing NCDs and those living with NCDs.

A rapid review of articles available on Pubmed and Google scholar was conducted. A total of 45 published research studies focusing on knowledge, attitude and practices pertaining to healthy lifestyle, from the year 2015 to 2021 were reviewed. These studies spanned across various age groups and diverse communities from different socio-economic background and geographical areas specifically in the state of Maharashtra, India.

THEORIES OF BEHAVIOUR CHANGE

In a bid to understand knowledge, attitude and practices pertaining to healthy lifestyle, it is important to understand the process of behaviour change. There are various theories and health models that explain the process of behaviour change. The Health Belief Model (HBM) has been known to explain and predict patients' self-care practices. The model proposes that the likelihood of an individual to follow the recommended health-related actions is influenced by perceived severity, perceived susceptibility, perceived benefits, perceived barriers and cues to action. It emphasizes that health beliefs tend to differ across age groups.[2] Social Cognitive Theory (SCT) rests on the tenet that personal factors, environmental influences, and behaviour continually interact. A basic premise of SCT is that people learn not only through their own experiences, but also by observing the actions of others and the results of those actions. Accordingly, the key constructs of SCT are observational learning, reinforcement, self-control, self-efficacy involving goal-setting, self-monitoring and behavioural contracting.[3]

Another model of health called 'Transtheoretical model' explains the stages of behaviour change from pre-contemplation, contemplation, preparation, action, maintenance to relapse, in that order. While studying KAP elements in a population, it is important to assess these stages along with barriers and facilitators to healthy lifestyle practices.[4] These models of behaviour change can be used to explain why do people behave the way they behave. Studies that have used these models to interpret population behaviour have been included in this rapid review.

Knowledge

Knowledge plays a key role in shaping people's attitude and behaviours to adopt healthy lifestyle.

As per the reviewed studies, the main sources of health-related information are mass media (Social media, internet, TV, radio) and interpersonal communication with friends, family, workplaces and social gatherings.[16,35] It is well documented that patients with better knowledge have a good adherence to treatment and healthy lifestyle practices. As per the reviewed studies, knowledge pertaining to healthy lifestyle is determined by factors such as age, education, employment status, social engagements etc.[5] Higher education and younger age group have better knowledge about healthy lifestyle practices.[6,33] Though teenagers have decent knowledge about unhealthy eating practices, they still prefer eating junk food.[7] People who are obese or overweight have a good knowledge about healthy lifestyle practices, indicating disagreement between knowledge and practice[5,8], but to say if these individuals gained knowledge about healthy lifestyle practices after becoming obese or prior to it, remains a grey area.

NCD patients who do not have adequate knowledge about lifestyle modifications have a poor practice regime, but also those with knowledge may not adopt a healthy lifestyle.[8,29] Periodic screening plays an important role in preventing the complications of NCDs. It was found that 61% of the patients with diabetes did not have periodic eye examination, though these patients had good knowledge about diabetes.[9]

Overall findings from reviewed studies suggest that 70-80% of the individuals are aware about health hazards of unhealthy diet, physical inactivity, alcohol and tobacco consumption, with poor practice scores, hence merely being knowledgeable may not translate into practicing a healthy lifestyle.[5,7,8]

Attitude

While evaluating attitude of people towards healthy lifestyle, the studies suggested that people have a very positive attitude towards healthy lifestyle.[29] They acknowledge the fact that healthy lifestyle is essential for leading a healthy life. However, this positive attitude did not translate into healthy practices. Some of the identified barriers to practicing healthy lifestyle are lack of motivation, household dynamics, social and cultural norms, workload, time pressures, environmental factors, cost etc.[10]

Practices

As per the studies reviewed, practice scores are influenced by socio-economic factors, demographics of the population, personal factors like lack of motivation, lack of awareness, wrong information etc.

In certain instances, people might be practicing healthy lifestyle, but due to inaccurate information it may not be adequate for example in one study it was found that majority of the women considered their activity level

adequate, although they engaged in what the researchers concluded were quite low levels of activity, this shows that correct information is important in shaping people's behaviour.[11]

Thaler and Sunstein in their 2008 book, Nudge: Improving decisions about Health, Wealth, and Happines, contend that there exists a 'choice architecture' which involves all of the outside forces that may subtly guide one's decisions in one direction or another.[34] A Nudge alters people's behaviour in a predictable way without forbidding any options or significantly changing their economic incentives.

Nudges are not a compulsion, for example, putting fruits at eye level counts as a nudge but banning junk food does not, regular SMS' to the youth about bad effects of smoking and alcohol or electronically delivered nudges for daily physical activities or treatment adherence offer low cost opportunities to increase compliance. This article reiterated the fact that we live in a 'Post-truth' world, where knowledge or facts play less important role in shaping people's behaviours and opinions in comparison to their personal beliefs and emotions. The current myopic approach of public health policies is rendered rudimentary in shaping people's behaviour.

A comprehensive analysis regarding the barriers and facilitators to practicing healthy lifestyle in conjunction with nudge theory for factoring-in sustainability, can come-in handy while designing and implementing social, behaviour change and communication strategies.

Table 1: Key findings on practice scores.

Risk factors	Key findings
Unhealthy diet	• In India, consumption of salt, sugar and oil has increased in all the states. Consumption of sugar and fat was found to be higher in states with high Human development index (HDI). Consumption of salt was higher in states with low HDI.[19]
	• Prevalence of reported wholegrain consumption everyday was only 15.7%.[15]
	• High socioeconomic status was found to have a significant association with junk food consumption.[7]
	• Low-income participants believed that eating a healthy diet (rich in fruits and vegetables, limited in fat and cholesterol) was important, but this belief did not translate into confidence that they were making healthful choices.[17]
	• Despite the knowledge about health hazards of carbonated drinks and junk food, participants did not refrain from consuming carbonated drinks/junk food.[7,14,29]
	• Junk food was preferred 5-6 times a week by population. Fruits were preferred 3-4 times a week.[18]
	• Despite having the knowledge about ill effects of unhealthy food and practicing healthy dietary habits, the study population was found to be overweight.[6]
Physical inactivity	• Large percentage of people in India are inactive with fewer than 10% engaging in recreational physical activity.[12,31,32]
	• Physical inactivity was higher in the urban areas, among literate people, among females and the intensity of physical activity was found to be decreasing with increase in age.[12,13]
Tobacco consumption	• Though people recognize the deleterious effects of tobacco on health, very few individuals try or completely quit consuming tobacco.[35-40,43]
Alcohol consumption	• People recognize and understand the bad effects of alcohol on health, but the quitting rates were found to be minimal.[35,43]
Self-care practices among NCD patients.	• Most NCD patients have poor adherence to treatment, however treatment adherence is better when compared to adherence to healthy lifestyle practices.[20,21]
	• All patients had discontinued the treatment for chronic diseases at some point of time since detection. Reasons for noncompliance were lack of money, lack of motivation, living far away from health care provider and difficulty to remember to take daily medication due to work or forgetfulness.[22,23]
	• More than 75 percent of the respondents suffering from hypertension and diabetes were utilizing health services regularly. Almost 75% of respondents were taking medication without further consultation with their physician for over a year. Respondents who can afford to spend more than Rs 500 on monthly treatment utilized health care services more regularly. Proximity of the health care provider was a factor affecting regular treatment.[24]
	• Patients older than 57 years and staying in extended family showed high adherence to treatment. Those who experienced symptoms showed higher adherence compared to those who did not experience symptoms. This study concluded that adherence is poor among patients with lower age groups, patients staying in nuclear families and those who did not experience symptoms.[25]

Continued.

Risk factors	Key findings
	• The most common reason behind the non-adherence to medication was found to be forgetfulness (35.3%) followed by financial constraints. Also, adherence is higher among patients with a shorter duration of disease.[26]
	• Diabetes self-care practices remain a significant problem as many do not engage in adequate self-care despite being knowledgeable.[2,29,30,32]
	• Although women have good knowledge and positive attitude towards cervical cancer screening and prevention, there is still a gap to transform it into practice.[16]

Table 2: Facilitators and barriers to adopting healthy lifestyle.

Risk factors	Facilitator	Barrier
Unhealthy Diet	• Water availability and access to land which allows for cultivation of fruit and vegetables in a kitchen garden, were identified as facilitators to consumption of fruits and vegetables.[10] • Sources of food, cooking skills, method involved and preparation time are important physical determinants of food taken. The respondents who prepared food at home were more likely to consume whole grains.[15]	• Eating habits are influenced by factors like economic constraint, time constraint, preferences of the household members, distribution of food within the household, social and cultural norms household's technology etc.[17,10] • The amount of time individual spends preparing food for consumption in the household is affected by household and individual factors such as income, labour force participation, number of children in the household and sociodemographic characteristics such as education, ethnicity, gender, prices of healthy v/s unhealthy foods, access to food outlets particularly unhealthy food outlets favour utility of unhealthy food and is associated with obesity because what is available is utilized.[10,17]
Physical inactivity	• Seeing others walk or walking in pairs and pleasant walking routes were considered as facilitators of physical activity.[11] • Some identified personal and social enablers in school going children are.[27,28] – Personal enablers: All participants reported perceived health benefits of physical activity. Fitness followed by Competence were the two important reasons why boys and girls participated in physical activity – Social enablers: Several participants mentioned active parents and sports role models as motivators for participating in physical activity.	• Lack of time, lack of motivation and interest, fear of stray dogs, narrow roads and not being used to the culture of walking.[11] • Some identified personal and social barriers in school going children are.[27,28] – Personal barriers: Private school girls cited body image related negative consequences of participating in a physical activity – Social barriers: Girls from both private and government schools faced more social censure for participating in physical activity. – Environmental barriers: Reduced opportunity for physical activity in schools was commonly reported across all participants.
Tobacco consumption	• Staying with a family.[39] • Education, mass media exposure, economic status and chronic disease emerged as enablers to quit tobacco.[45]	• Dependency on tobacco.[38] • Unmarried and staying alone, peer influence.[39-41] • History of tobacco consumption in the family.[41] • Advertisements, relief from stress.[39,40] • Some females consume tobacco to get relief from pain during periods.[41] • Alcohol use and social backwardness.[45]
Alcohol consumption	Consequences of drinking lifestyle and personal resolve were identified as facilitators to quit alcohol.[44]	• Reasons to begin drinking include social drinking, functional use of alcohol, stress, and boredom.[44] • Proximity of alcohol outlets to schools, influence of media, family and peers, web series.[42]

Continued.

Risk factors	Facilitator	Barrier
		• Availability of alcohol at social events, stress, lack of family support, physical withdrawal symptoms, peer pressure.[44]

CONCLUSION

Behaviour change is imperative for preventing non-communicable diseases. Multiple factors affect individual behaviours, which are critical for formulating population level policies around behaviour change. In a given population, behaviour change is better understood with KAP elements pertaining to healthy lifestyle. Availability and accessibility to accurate information from credible sources lays the foundation for people's attitude and practices. We saw that though individuals had the necessary information and positive attitude towards healthy lifestyle, they did not practice healthy lifestyle, this shows that being knowledgeable may or may not translate into practicing healthy life style due to myriad reasons. A lot of times it is the standpoint within the society that determines individual knowledge and behaviours as well as the perception towards healthy and unhealthy lifestyle. Epistemological analysis can help a great deal in determining and explaining existing health behaviours within a given population and thereby strategizing interventions around behaviour change. In recent years, the nudge approach to behaviour change has emerged from the behavioural sciences to challenge the traditional use of regulations in public health strategies to address modifiable individual-level behaviours related to the rise of non-communicable diseases and their treatment.

ACKNOWLEDGEMENTS

Author is grateful to Dr. Shailendra Kumar B Hegde, Senior Vice President- Public Health Innovations, PSMRI and Dr Radha Rao Valaulikar, Senior Manager, NCD-TSU, Maharashtra, for their support and guidance on this article.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: Not required

REFERENCES

1. WHO. Global status report on noncommunicable diseases, 2021. Available at https://www.who.int/newsroom/factsheets/detail/noncommunicable-diseases. Accessed on 20 July 2021.
2. Srinath KM, Basavegowda M, Tharuni NS. Diabetic self care practices in rural Mysuru, Southern Karnataka, India - A need for Diabetes Self Management Educational (DSME) program. Diabetes Metab Syndr. 2017;11(1):181-6.
3. Schunk D, Dibenedetto M. Motivation and Social Cognitive Theory. Contemporary Educational Psychology. 2019 Dec 1; 60:101832. Available from: https://www.sciencedirect.com/science/article/abs/pii/S0361476X19304370.
4. Heath GW, Liguori G. Physical Activity and Health Promotion. In: Wright JD, editor. International Encyclopedia of the Social & Behavioral Sciences (Second Edition). Oxford: Elsevier; 2015 [cited 2021 Apr 21]. p. 91–9. Available from: https://www.sciencedirect.com/science/article/pii/B9780080970868141169.
5. Mathews E, Lakshmi JK, Ravindran TK, Pratt M, Thankappan KR. Perceptions of barriers and facilitators in physical activity participation among women in Thiruvananthapuram City, India. Glob Health Promot. 2016;23(4):27-36.
6. Arora NK, Pillai R, Dasgupta R, Garg PR. Whole-of-society monitoring framework for sugar, salt, and fat consumption and noncommunicable diseases in India. Ann NY Acad Sci. 2014;1331:157-73.
7. Kharde AL, Deshpande JD, Phalke DB. Knowledge, Attitude and Practices (KAP) regarding carbonated drinks among students of medical college of western Maharashtra. Int J Med Sci Public Health. 2013;2(4):912-5.
8. Fatema K, Hossain S, Natasha K. Knowledge attitude and practice regarding diabetes mellitus among Nondiabetic and diabetic study participants in Bangladesh. BMC Public Health. 2017;17:364.
9. Srinivasan NK, John D, Rebekah G, Kujur ES, Paul P, John SS. Diabetes and Diabetic Retinopathy: Knowledge, Attitude, Practice (KAP) among Diabetic Patients in A Tertiary Eye Care Centre. J Clin Diagn Res. 2017;11(7):1-7.
10. Pratinidhi SA. A Study of Whole Grain Consumption Pattern along with its Determinants and Health Benefits in Various Students of Western Maharashtra, India. J Pediat Dent. 2020;1:5.
11. Satija A, Khandpur N, Satija S, Mathur GS, Prabhakaran D, Reddy KS, et al. Physical Activity Among Adolescents in India: A Qualitative Study of Barriers and Enablers. Health Educ Behav. 2018;45(6):926-34.
12. Pethkar V. Adopting active lifestyle: A study of school children's physical activity readiness, motives and decisional balance of physical activity. Int J Physiol Nut Phys Edu. 2018;3(1):2163-6.
13. Agrawal D, Khadilkar A, Chiplonkar S, Khadilkar V. Knowledge of nutrition and physical activity in apparently healthy Indian adults. Public Health Nutr. 2018;21(9):1743-52.
14. Landge JA, Khadkikar GD. Lifestyle and nutritional status of late adolescent in an urban area of Western Maharashtra: cross sectional study. Int J Community Med Public Health. 2020 Jul 24;7(8):3027.
15. Khanna S, Dharap A, Gokhale D. Breakfast eating habits and its association with mental wellbeing and

mindful attention awareness among university students of Pune district, Maharashtra, India. Int J Community Med Public Health. 2017;3(6):1584-8.
16. Narayana G, Suchitra MJ, Sunanda G, Ramaiah JD, Kumar BP, Veerabhadrappa KV. Knowledge, attitude, and practice toward cervical cancer among women attending Obstetrics and Gynecology Department: A cross-sectional, hospital-based survey in South India. Indian J Cancer. 2017;54(2):481-7.
17. Kehoe SH, Dhurde V, Bhaise S, Kale R, Kumaran K, Gelli A, et al. Barriers and Facilitators to Fruit and Vegetable Consumption Among Rural Indian Women of Reproductive Age. Food Nutr Bull. 2019;40(1):87-98.
18. Antony LCM, Bhatti RK. Junk Food Consumption and Knowledge about its Ill Effects among Teenagers: A Descriptive Study. Int J Sci Res. 2013;4(6):4.
19. Anjana RM, Pradeepa R, Das AK. Physical activity and inactivity patterns in India – results from the ICMR-INDIAB study (Phase-1) [ICMR-INDIAB-5]. Int J Behav Nutr Phys Act. 2014;11:26.
20. Patnaik L, Paul KK, Pattnaik S, Sahu T. Lifestyle Pattern and Hypertension Related Knowledge, Attitude and Practices among Diagnosed Patients of Hypertension Attending a Tertiary Care Hospital. JCDR. 2017;8(4):108-11.
21. Kotian SP, Waingankar P, Mahadik VJ. Assessment of compliance to treatment of hypertension and diabetes among previously diagnosed patients in urban slums of Belapur, Navi Mumbai, India. Indian J Public Health. 2019;63(4):348-52.
22. Kakumani K, Waingankar P. Assessment of Compliance to Treatment of Diabetes and Hypertension amongst Previously Diagnosed Patients from Rural Community of Raigad District of Maharashtra. J Assoc Physic India. 2016;64:36-40.
23. Deshmukh S, Kalaskar SK, Kadam SB, Mote B, Paslawar SK, Adhav AS, et al. Utilization pattern of health services for noncommunicable diseases in an urban slum: a study of Turbhe stores slum in Navi Mumbai, Maharashtra, India. Int J Community Med Public Health. 2017;4:139-45.
24. Nagarkar AM, Gadhave SA, Sharma I, Choure A, Morisky D. Factors influencing medication adherence among hypertensive patients in a tertiary care hospital, Pune, Maharashtra. Nat J Community Med. 2014;4(4):5.
25. Kushwaha AS, Kumari S, Kushwaha N. Self-care in diabetes: a study amongst diabetics in an urban community. International Journal of Community Medicine and Public Health. 2017 Jan 31;3(1):293–8.
26. Tabassum N, Rao RLL. Factors Associated with Adherence to Antihypertensive Treatment among Hypertensives in Urban Field Practicing Areas of Osmania Medical College, Hyderabad. Int J Health Sci. 2017;(12):9.
27. Patil C, Dhoble M, Kaware A. A study of physical activity levels and its correlates among adults: a cross-sectional study. Int J Community Med Public Health. 2017;4:1154.
28. Kazi RN, Bote MM, Raikar KJ. Knowledge, attitude and practices about diabetes mellitus and its complications in T2DM patients attending the UHC in Mumbai. Int J Community Med Public Health. 2017;4(8):2793-7.
29. Okonta HI, Ikombele JB, Ogunbanjo GA. Knowledge, attitude and practice regarding lifestyle modification in type 2 diabetic patients. Afr J Prim Health Care Fam Med. 2014;6(1):1-6.
30. Solanki JD, Sheth NS, Shah CJ, Mehta HB. Knowledge, attitude, and practice of urban Gujarati type 2 diabetics: Prevalence and impact on disease control. J Educ Health Promot. 2017;6:35.
31. Committee on Examination of the Adequacy of Food Resources and SNAP Allotments, Food and Nutrition Board, Committee on National Statistics, Institute of Medicine, National Research Council. Supplemental Nutrition Assistance Program: Examining the Evidence to Define Benefit Adequacy. Caswell JA, Yaktine AL, eds. Washington: National Academies Press; 2013.
32. Mohandas A, Bhasin SK, Upadhyay M, Madhu SV. Diabetes self-care activities among adults 20 years and above residing in a resettlement colony in East Delhi. Indian J Public Health. 2018;62(2):104-10.
33. Deepali BS, Mangala S, Soumya G, Vikyath BR, Aarudhra P, Ankitha M, et al. Knowledge of diabetes, its complications and treatment adherence among diabetic patients. Int J Community Med Public Health. 2017;4:2428-34.
34. Leonard TC, Thaler RH, Sunstein CR. Improving decisions about health, wealth, and happiness. Nudge. New Haven: Yale University Press; 2008: 356-60.
35. Patil H, Vibhute NA, Shah U, Baad R, Belgaumi U, Kadashetti V, et al. Knowledge and risk perception of oral cancer among rickshaw drivers in Karad City, Maharashtra, India. CHRISMED J Health Res 2019;6:207-9.
36. WHO. GATS 2, 2017. Available at: https://www.who.int/tobacco/surveillance/survey/gats/GATS_India_2016-17_FactSheet.pdf. Accessed on 20 July 2021.
37. Raute LJ, Sansone G, Pednekar MS, Fong GT, Gupta PC, Quah ACK, et al. Knowledge of health effects and intentions to quit among smokeless tobacco users in India: findings from the International Tobacco Control Policy Evaluation (ITC) India Pilot Survey. Asian Pac J Cancer Prev. 2011;12(5):1233-8.
38. Parakh MK, Ulaganambi S, Ashifa N, Premkumar R, Jain AL. Oral potentially malignant disorders: clinical diagnosis and current screening aids: a narrative review. Eur J Cancer Prev. 2020;29(1):65-72.
39. Shrivastava SR, Bobhate PS. Tobacco Quit Rates among Youth in an Urban Health Centre of Mumbai: A Cross Sectional Study. Addict Health. 2010;2(3):111-7.

40. Rahul GN. Tribal Tobacco Survey among Young Adolescent of Central Part of India. World J Dent. 2019;10(2):109-13.
41. Narayan DD, Dhondibarao GR, Ghanshyam KC. Prevalence of Tobacco Consumption among the Adolescents of the Tribal Areas in Maharashtra. undefined. JCDR. 2011;5(5):1060-3.
42. ICRW. Normalising alcohol consumption among youth in Mumbai, India, 2019. Available at: http://strive.lshtm.ac.uk/system/files/attachments/STRIVE_evidence%20brief%20alcohol%20Mumbai%202019.pdf. Accessed on 20 July 2021.
43. Singh A, Gupta P, Srivastava M, Zaidi Z. A cross sectional study on tobacco and alcohol abuse among medical college students. Int J Community Med Public Health. 2017;4:3372.
44. Mackinnon N, Bhatia U, Nadkarni A. The onset and progression of alcohol use disorders: A qualitative study from Goa, India. J Ethn Subst Abuse. 2019;18(1):89-102.
45. Pradhan MR, Patel SK. Correlates of tobacco quit attempts and missed opportunity for tobacco cessation among the adult population in India. Addict Behav. 2019;95:82-90.

Cite this article as: Naaz S. Knowledge, attitude and practices pertaining to healthy lifestyle in prevention and control of chronic diseases: a rapid review. Int J Community Med Public Health 2021;8: 5106-12.