



Does Mindfulness is a Sustainable way for Recovery from Tobacco Addiction: A Systematic Review

Ranjit Singha, Ph.D. Research Fellow, Fellow, Reg. No. 1981004, CHRIST (Deemed to be University), Bengaluru, Karnataka, India, ranjit.singha@res.christuniversity.in

Dr Yogesh Kanna S, Assistant Professor, PhD. Research Supervisor, CHRIST (Deemed to be University), Bengaluru, Karnataka, India, yogesh.kanna@christuniversity.in

Abstract: SDG3 emphasizes "Good Health and Well-being", however amid COVID-19, SDG 3 is challenged, one of the primary reasons for the existence of tobacco smoking culture and climate prevailing in our society. Tobacco Smoking weakens the immunity system and thus clears the way for COVID-19 infection. Smoking is injurious to health; however, the surrounding beings also get impacted along with the smoker. Research data reveal that Mindfulness meditation is essentially a "mini-retreat" in which people learn how to separate themselves from their emotions and pay attention to what is going on around them; there has been researched to help in stopping smoking or nicotine addiction; to understand further the reality of the impact of MM, a systematic review of the literature on tobacco addiction and mindfulness is conducted, It is found that some literature contradicts the opinion that mindfulness is an effective way to treat nicotine addiction, some of the research has proposed that high powered RCTs should be performed. Overall, Mindfulness intervention did not significantly influence abstinence or achieve minimal, infrequent cigarette intake. Mindfulness Meditation needs integration furthermore to be more effective for Recovery from Tobacco Addiction. The effectiveness of such an intervention is subjected to further research.

Keywords: Tobacco addiction, Mindfulness meditation

I. INTRODUCTION

Smoking is injurious to health and harmful to nature. It affects the smoker and its surrounding beings. During COVID-19, it has been pronounced by WHO that there is a high possibility that Smokers may get impacted with COVID 19, as it affects the immunity system. The World Health Organisation is part of the Sustainable Development Goals that was agreed to at the United Nations General Assembly in 2015. (UNGA). It is accepted as being one of the potential ways to achieve the "Good Health and Well-being" Sustainable Development Goals (SDG 3) and to target of Non-Communicable Diseases (NCDs) is also one of the possible ways to reach the "Good Health and Well-being" Sustainable Development Goals (SDG 3). In the midst of 2020, COVID-19 challenged SDG 3 because of the existence of tobacco smoking. The recent guideline published in 2020 by the Health Ministry of Govt of India, "Standard Treatment Guideline for the management of Substance abuse disorder, and Behavioral Addictions," recommended pharmacotherapy, psychological therapy, Family and Social Support, Self Help Fellowship, Life cycle, and environmental change and Aftercare, for the management of Substance abuse disorder. India became a signatory to the WHO treaty in 2004 through the World Health Organization's Framework Convention on Tobacco Control, and on 2nd May 2018, the Indian cabinet approves to control of tobacco by eliminating illicit trade; however, it seems like control in tobacco, but it alternatively protects the legal trade of tobacco, this bill reassurance the business position of tobacco Within the WHO convention, India supposes implementing Article 6 to 17; article 12 emphasizes education, communication, training, and public awareness. The NEP (National Education Policy of India) 2020 must have the provision for such education within the curriculum; however, it is not embedded. Within the preview of Article 12, India should have a mandatory program for Tobacco control in all the spheres of education level. Still, it's limited to its operation in its full swing. Article 8 brings the "Protection from exposure to second-hand tobacco smoke" and Article 17 Allocation of assistance for commercially sustainable alternative practices. Implementing the WHO Convention in India with true spirit is limited to Article 6, "Price and tax measures to reduce the demand for tobacco," 28% of GST is imposed over Tobacco-related products in India. However, it is a preventive measure, but it's one of the best revenue boosters in the Indian economy. According to Figures, in 2019 and 2020, tobacco consumption rose in India; tobacco's overall consumption is 593 million kg. Mindfulness is a very ancient tradition in Asian countries, which focuses on the desire to remove judgment in the actual moment and pay attention to this moment, without apprehension or tension of the future. Being a mind teacher does not need any extraordinary natural talents; however, it is an open thing for

people of every age. Mindfulness is also a form of enhanced mindfulness that is also extended to your life to control your stress, deal with pain, and support your addiction.

II. METHODS

A thorough analysis was conducted to review the effectiveness of the use of mindfulness meditation techniques. All papers only discuss adults. Mindfulness-based stress reduction (MBSR), and MBCT or even more intense meditation were also included. Studies have covered such approaches as mindfulness, qigong, tai chi, and body scanning, and transcendental meditation techniques. Meditation procedures without proper mindfulness planning are skipped. This study explores using therapies as usual (TAU), standard care, waitlist monitoring, no treatment/therapy, or aggressive/intense treatment. Reports of cigarette smoking and the reduction in their use of nicotine are to be included in the study. The blood sample or lab report was not a prerequisite for the research.

III. SEARCH STRATEGY

During December 2020 and January 2021, we searched for PubMed, PsycINFO, CINAHL, PsycNET, EBSCO, Oxford University Press, JSTOR, List of Open Access Papers (DOAJ), and Christ University repository. All of the literature relies on the English language. A search of the key citations was performed to discover further innovative studies. Based on the papers of the past 20 years, the conclusions were drawn. Gray literature reviews were undertaken to classify ongoing trials that had not yet been published. Two hundred fifty-three cities of re-searches and tentative systematic tobacco research have been listed through electronic database searches and reference mining. Tables display the flow of literature. It listed the key elements of the study and recorded the details as mentioned below. Only 14 citations were specified according to inclusion requirements; the full text of the article was retrieved. For the following factors, several of these papers were omitted: some studies did not investigate tobacco use; Some did not yield-related data. Some studies employed a method that did not adhere to our notion of mindfulness. Some of the reviews were not spontaneous trials, most findings were abstract of seminars, and some were repeated research publications.

The following RCTs thus satisfy the criteria of inclusion. Google also searched grey literature databases, conference proceedings, and Dissertation Abstracts International; ProQuest was also considered for the search. A systematic quarry of the literature in the scientific research database was conducted intensively among the collections of articles, books and grey documents, and unpublished and foreign journal literature. Literature queries have been performed using keywords in the following databases in related psychology, Social Science, Sociology, Some of the Keywords used. At the same time, searching is "mindfulness* or mindfulness-based or mbsr or mbct or m-bct or meditation or meditate* or Vipassana or Zen or zazen or Shambhala or buddhis* or satipatthana or Anapanasati." Tobacco, nicotine, Smoking, Tobacco Nicotine dependence, Mindfulness, Behavioral treatment, Addiction, Tobacco and RTC, Tobacco and mindfulness.

IV. QUALITY EVALUATION

The reviewers measured the possibility of bias in the studies using the "Cochrane bias risk" and U.S. Task Group's process of consistency criteria for Preventative Services (USPSTF). Reviewers assessed the sum of a standard of the research depending on each consideration of the subjects (N) (reporting bias). Besides all the other considerations applicable to the included research eligibility criterion, the accuracy of results should also be considered and clarified. These were techniques used by scholars to decide if particular experiments were accurate. Guidelines for the screening of the content/research method of research papers/research/Sample size were considered to assess individual reports' compliance. This degree of grade is based on the USPSTF evaluative norm.

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Table 1: 2007 to 2009 Research details

Researcher	USPSTF Quality of Evidence	Sample Size	Therapy (Experimental Gr)	Therapy (Control Gr)	Result
Cropley, M., et al. (2007). [1]	Poor	N=30	Guided relaxation routine (body scan) N = 15 (10+cigs/d) Three years	Listen to a history passage. N = 15 (10+cigs/d) Three years	Body scans showed lower ratings of excitability, agitation, and restlessness.
Ussher, M., et al. (2009). [2]	Fair	N=52	Body Scanning (BS) N = 18 & Isometric Exercise (IE) IE, N = 14 ≥10 cigs/d	Reading about natural history N = 16	Brief IE and BS were efficient.

Table 2: 2011 to 2013 Research details

Researcher	USPSTF Quality of Evidence	Sample Size	Therapy (Experimental Gr)	Therapy (Control Gr)	Result
Brewer et al. 2011 [3]	Fair	N=88, (20 cigs/d) were randomly assigned to receive	MT	FFS	The impact of MT was greater than that of FFS
Rogojanski, J., et al. (2011) [4]	Poor	N=61	MT	Suppression instruction	MT has an Impact
Erskine, J., et al. (2012). [5]		N=90	suppressed smoking thoughts N=29 expressed	thoughts of anything they wished N=31	Suppressing thoughts did not succeed in stopping

			smoking thoughts N=30		smoking.
Tang, Y. Y., et al. (2013). [6]	Poor	N=27	Integrative body-mind Training IBMT	Relaxation training (RT)	A significant drop in smoking 60% for IBMT & Np for RT.
Goldberg, S. B., et al. (2013). [7]	Fair	N=196	MT N=105	Quitline and nicotine patches N=91	The therapeutic partnership would not significantly key smoking outcomes,

Table 3: 2014 Research details

Researcher	USPSTF Quality of Evidence	Sample Size	Therapy (Experimental Gr)	Therapy (Control Gr)	Result
Davis, Goldberg, et al. 2014[8]	Fair	N= 196 low socioeconomic status smokers	MT	Usual care therapy includes Tobacco quit line and nicotine patches	The researcher recommends further study
Davis, Manley et al., 2014 [9]	Fair	N= 175 low socioeconomic status smokers	MT	FFS	MT resulted in positive outcomes
Goldberg, S. B., et al. (2014). [10]	Poor	N=43, 5-month follow-up (N 38).	MT	No Control group	Practice effect measurements are critical for MT.
Singh, N. N., et al. (2014).	Fair	N=51	MT	treatment as usual 1-year follow-up	MT was effective
Schuman-Olivier, Z., et al. (2014). [11]	Fair	N=85	MT (3.9 cigs/d) n = 39	Freedom from Smoking (FFS) (11.1 cigs/d) n	The MT group smoked less cigarettes a day than any other group.

Table 4: 2016 -2019 Research details

Researcher	USPSTF Quality of Evidence	Sample Size	Therapy (Experimental Gr)	Therapy (Control Gr)	Result
Ruscio, A. C., et al. (2016). [12]	Poor	N=44, (10cigs/d) 2yr	MT N =24	Sham meditation N=20	MT reduce craving and cigarette use
Vidrine, J. I., et al. (2016). [13]	Good	N=412, Mean 19 cigs/d) 3 years (SD (10.01)	Mindfulness- Based Addiction Treatment (MBAT) N=154	Cognitive Behavioural Treatment (CBT) N= 155	MBAT could help improve lapses better than CBT or UC.
				Or UC=N =103	
Lotfalian, S., et al. (2019). [14]	Fair	N=60 Ages 18 to 65 years	Mindfulness- based yogic breathing (MB) N=20	Cognitive strategy (CS) N=20 and no- treatment (NT) N=20	MB and CS did better than NT. MB was more competitive compared to NT & than that of CS

V. RESULTS

The experiments so far conducted weren't built to endorse an argument on the equivalence of efficacy of mindfulness for recovery from Tobacco Addiction; it is often believed that mindfulness can be used for the recovery from tobacco addiction; however, it lacks substantial evidence, and there is also a mixed finding; thus, the need for further research arise or the need for integration of other therapeutic models along with mindfulness comes into being.

VI. DISCUSSIONS

In our experience, systematic analysis has many strengths. First, a priori design and an analysis set, details, a scan of electronic documents, risk of bias assessments, and test evidence have been applied to shape the research. Mindfulness treatment did not impair smoking cessation compared to other interventions. Additional comparative examples were used. The American Lung Association (ALA) has announced that its exemption from smoking is a suggested treatment. Mindfulness interventions were not more successful than other smoking prevention services. The tests weren't designed to check whether or not there were similar effects. The practice of mindfulness varies from one practitioner to another; there

is no one unique way. Each school has its ways to practice. Even the way it's conducted varies from practitioner to practitioner, thus raising a challenge to determine the conclusion.

VII. CONCLUSION

The experiments so far conducted weren't built to endorse an argument on the equivalence of efficacy for recovery from Tobacco Addiction; there is a requirement for further in-depth study.

VIII. LIMITATIONS AND FUTURE STUDIES

Although this study has several faults, they are not important enough to ignore them. One explanation was that the number of studies in this research field was small. We also compared only a small number of methods, comparators, and lengths in this article. The few studies have not elucidated the superiority of specific mindfulness techniques.

We also noticed that there is an array of variations in how different scientific experiments are conducted. Unfortunately, some RCTs did not obey the rules because they did not say the randomization procedure, and there were a few RCTs that did not tell the participants and outcome assessors. Even though an individual's creative capacity was not addressed directly, the research used recorded observations of individuals. Each study must be taken into consideration since no research will substitute the other experiments. There is a variation of mindfulness; each one is not unique.

REFERENCES

- [1] Cropley, M., Ussher, M., & Charitou, E. (2007). Acute effects of a guided relaxation routine (body scan) on tobacco withdrawal symptoms and cravings in abstinent smokers. *Addiction*, 102(6), 989-993. <https://doi.org/10.1111/j.1360-0443.2007.01832.x>
- [2] Ussher, M., Cropley, M., Playle, S., Mohidin, R., & West, R. (2009). Effect of isometric exercise and body scanning on cigarette cravings and withdrawal symptoms. *Addiction*, 104(7), 1251-1257. <https://doi.org/10.1111/j.1360-0443.2009.02605.x>
- [3] Schuman-Olivier, Z., Hoepfner, B. B., Evins, A. E., & Brewer, J. A. (2014). Finding the right match: mindfulness training may potentiate the therapeutic effect of nonjudgment of inner experience on smoking cessation. *Substance use & misuse*, 49(5), 586-594. <https://doi.org/10.3109/10826084.2014.850254>
- [4] Rogojanski, J., Vettese, L. C., & Antony, M. M. (2011). Coping with cigarette cravings: Comparison of suppression versus mindfulness-based strategies. *Mindfulness*, 2(1), 14-26
- [5] Erskine, J. A., Ussher, M., Cropley, M., Elgindi, A., Zaman, M., & Corlett, B. (2012). Effect of thought suppression on desire to smoke and tobacco withdrawal symptoms. *Psychopharmacology*, 219(1), 205-211. <https://doi.org/10.1007/s00213-011-2391-4>
- [6] Tang, Y. Y., Tang, R., & Posner, M. I. (2013). Brief meditation training induces smoking reduction. *Proceedings of the National Academy of Sciences*, 110(34), 13971-13975
- [7] Goldberg, S. B., Davis, J. M., & Hoyt, W. T. (2013). The role of therapeutic alliance in mindfulness interventions: Therapeutic alliance in mindfulness training for smokers. *Journal of clinical psychology*, 69(9), 936-950. <https://doi.org/10.1002/jclp.21973>
- [8] Davis, J. M., Goldberg, S. B., Anderson, M. C., Manley, A. R., Smith, S. S., & Baker, T. B. (2014). Randomized trial on mindfulness training for smokers targeted to a disadvantaged population. *Substance use & misuse*, 49(5), 571-585.
- [9] Davis, J. M., Manley, A. R., Goldberg, S. B., Smith, S. S., & Jorenby, D. E. (2014). Randomized trial comparing mindfulness training for smokers to a matched control. *Journal of substance abuse treatment*, 47(3), 213-221.
- [10] Goldberg, S. B., Del Re, A. C., Hoyt, W. T., & Davis, J. M. (2014). The secret ingredient in mindfulness interventions? A case for practice quality over quantity. *Journal of Counseling Psychology*, 61(3), 491. <https://doi.org/10.1037/cou0000032>
- [11] Singh, N. N., Lancioni, G. E., Myers, R. E., Karazsia, B. T., Winton, A. S., & Singh, J. (2014). A randomized controlled trial of a mindfulness-based smoking cessation program for individuals with mild intellectual disability. *International Journal of Mental Health and Addiction*, 12(2), 153-168.

- [12] Singh, N. N., Lancioni, G. E., Myers, R. E., Karazsia, B. T., Winton, A. S., & Singh, J. (2014). A randomized controlled trial of a mindfulness-based smoking cessation program for individuals with mild intellectual disability. *International Journal of Mental Health and Addiction*, 12(2), 153-168.
- [13] Vidrine, J. I., Spears, C. A., Heppner, W. L., Reitzel, L. R., Marcus, M. T., Cinciripini, P. M., ... & Wetter, D. W. (2016). Efficacy of mindfulness-based addiction treatment (MBAT) for smoking cessation and lapse recovery: A randomized clinical trial. *Journal of Consulting and Clinical Psychology*, 84(9), 824.
- [14] Lotfalian, S., Spears, C. A., & Juliano, L. M. (2020). The effects of mindfulness-based yogic breathing on craving, affect, and smoking behavior. *Psychology of Addictive Behaviors*, 34(2), 351.
- [15] Dr.A.Senthil Kumar, Dr.G.Suresh, Dr.S.Lekashri, Mr.L.Ganesh Babu, Dr. R.Manikandan. (2021). Smart Agriculture System With E – Cabbage Using Iot. *International Journal of Modern Agriculture*, 10(01), 928 - 931. Retrieved from <http://www.modern-journals.com/index.php/ijma/article/view/690>
- [16] Dr.G.Suresh, Dr.A.Senthil Kumar, Dr.S.Lekashri, Dr.R.Manikandan. (2021). Efficient Crop Yield Recommendation System Using Machine Learning For Digital Farming. *International Journal of Modern Agriculture*, 10(01), 906 - 914. Retrieved from <http://www.modern-journals.com/index.php/ijma/article/view/688>