
Study of efficacy of Plantago Major Mother Tincture in Tobacco de-addiction in age group above 15 years including both male and female: A Case Series

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Abstract:

Background: Addiction is a chronic relapsing condition marked by obsessive drug seeking and use despite negative effects.⁽¹⁾ The use of tobacco increases the chance of developing several chronic diseases, including cancer, lung disease, cardiovascular disease, and stroke. **Aim:** To study the efficacy of Plantago Major Mother Tincture in tobacco de-addiction in age group above 15 years including both male and female. **Objectives:** Primary objective: To study the efficacy of Plantago Major Mother Tincture in tobacco de-addiction. Secondary objective: To study the tobacco (Nicotine) dependency by using Fagerstrom Nicotine Dependence Scale after administration of plantago major mother tincture.⁽¹⁴⁾ **Materials and Methods:** Case series study was done among 30 subjects with Tobacco addiction randomly selected from M (N)HMC OPD and peripheral camps. Status of addiction of subjects was measured with Fagerstrom Nicotine Dependence scale. Plantago major mother tincture was administered. **Result:** Statistical analysis was done using Paired t test. Out of 30 patients, efficacy of plantago major Ø is seen in 24 patients (80%) and frequency & dependency remains same in 6 patients (20%). **Conclusion:** According to statistics of nicotine addiction calculated before and after intervention of plantago major Ø for dependency gives the t value of 7. Hence, we concluded that Plantago Major Mother Tincture is effective in management of Tobacco de-addiction.

Key words: Tobacco de-addiction, Plantago major, Fagerstrom Nicotine Dependence scale, Homoeopathy.

Introduction:

Tobacco dependence is a cluster of behavioral, physiological and cognitive phenomena that develops after repeated tobacco use that typically include a strong desire to use tobacco, difficulties in controlling its use persistence in tobacco use despite harmful consequences.⁽²⁾ Tobacco use is one of the leading causes of illness and death in India, where it is estimated that 1.35 million people die from it each year. Approximately 267 million adults (15 years and above) uses tobacco, as per the Global Adult Tobacco Survey India, 2016-17.⁽³⁾ Current use (in 2022): 11.3% (3.08 million) of middle and high schools reported using any type of tobacco product, 3.7% (1.00 million) of all students said they were currently using any type of combustible tobacco, 3.5% (960,000) reported using tobacco products in multiple ways right now.⁽⁴⁾

There are many short and long term effects of tobacco:⁽⁵⁾ Short term effects: excess saliva production, sore patches in mouth, bad breath, difficulty in chewing and swallowing and moving tongue, permanent gum loss and receding gums. Long term effects: cardiac complications, lung disorders, thrombosis, infertility, cancer.

Homoeopathic medicine Plantago major has symptoms of depression and insomnia of chronic nicotinism. Causes an aversion to tobacco.⁽⁹⁾ Appetite poor. Poor thirst causes disgust for tobacco in chewers. It produces disgust for it in chewers and cures neuralgia resulting from tobacco.

⁽¹⁰⁾⁽¹³⁾ Bad effects of excessive use of tobacco.⁽¹¹⁾ Affects the nerves, causing neuralgia of ears, teeth, face, shingles.⁽¹²⁾

Nicotine Replacement Therapy (NRT) is a kind of treatment that uses special items to administer modest, constant dosages of nicotine to assist curb cravings and reduce withdrawal symptoms.

⁽⁶⁾ The use of NRT is associated with a variety of side effects such as palpitations and chest pain, nausea and vomiting, gastrointestinal complaints, skin irritation, mouth and throat soreness, anxiety and depressive symptoms.⁽⁷⁾

Materials and Methods:

A case series study was carried out in Motiwala (National) Homoeopathic Medical College OPD and peripheral camps among the patients with Tobacco addiction.

30 patients were selected after screening based on inclusion and exclusion criteria.

Patients above the age group of 15 years including both male and female, patients using tobacco in any form like Mishri, Bidi, Cigarettes, Chewing tobacco, who are willing to quit tobacco and patients with only tobacco addiction and not other addictions have been included in the study. Patients with any buccal pathology, Pregnant and lactating women and patients with cancer, hypertension, diabetes mellitus, thyroid disorders were excluded from study.

Each patient was prescribed with Plantago major mother tincture on basis of inclusion and exclusion criteria. Follow ups were taken on every 15 days. Plantago major mother tincture was prescribed till any changes in Fagerstrom nicotine dependence scale⁽¹⁴⁾ score was observed. Status of addiction of subjects was measured with Fagerstrom Nicotine Dependence scale in each follow up.

Result:

OBJECTIVE	RESULT
To study the efficacy of plantago major Ø in tobacco de- addiction	Out of 30 patients, Efficacy of plantago major Ø is seen in 24 patients (80%). And Frequency & Dependency remains same in 6 patients (20%). 7 > 2.042 i.e. calculated value of t (7) is greater than the table value of t 0.05 (2.042) Hence, null hypothesis is rejected.
To study the tobacco dependency by using Fagerstrom Nicotine Dependence Scale after administration of plantago major Ø	After administration of plantago major Ø, Fagerstrom Nicotine Dependence Score reduced in 24 patients (80%). and FTND Score is remains same in 6 patients (20%)

Graph No. 1 Pie chart representing Gender wise proportion of patient of tobacco de-addiction

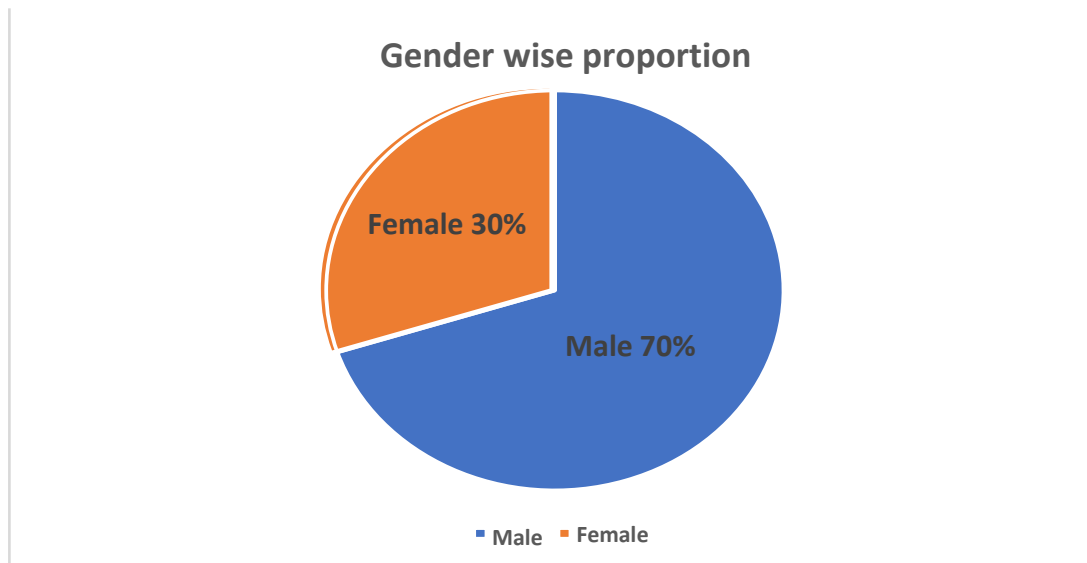


Table No. 1 Gender wise proportion of patient of tobacco de-addiction

Gender	Percentage
Female	30%
Male	70%

Graph No. 2 representing Outcome of study

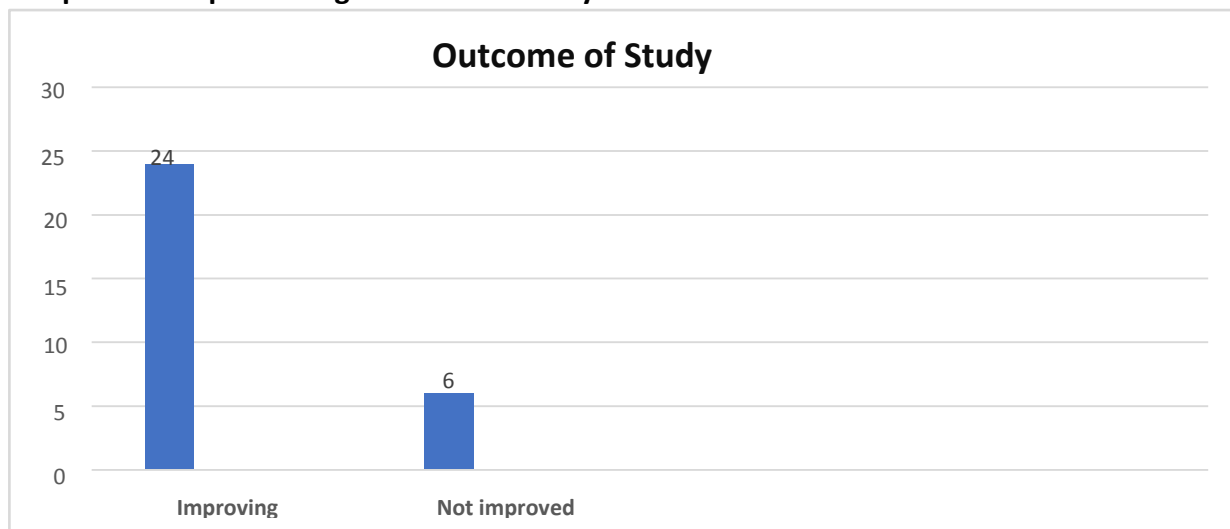


Table No. 2 representing Outcome of study

Outcome	No. of patients
Improving	24 Patients
Not improved	6 patients

Graph No. 3 representing percentage of forms of tobacco taken by patients

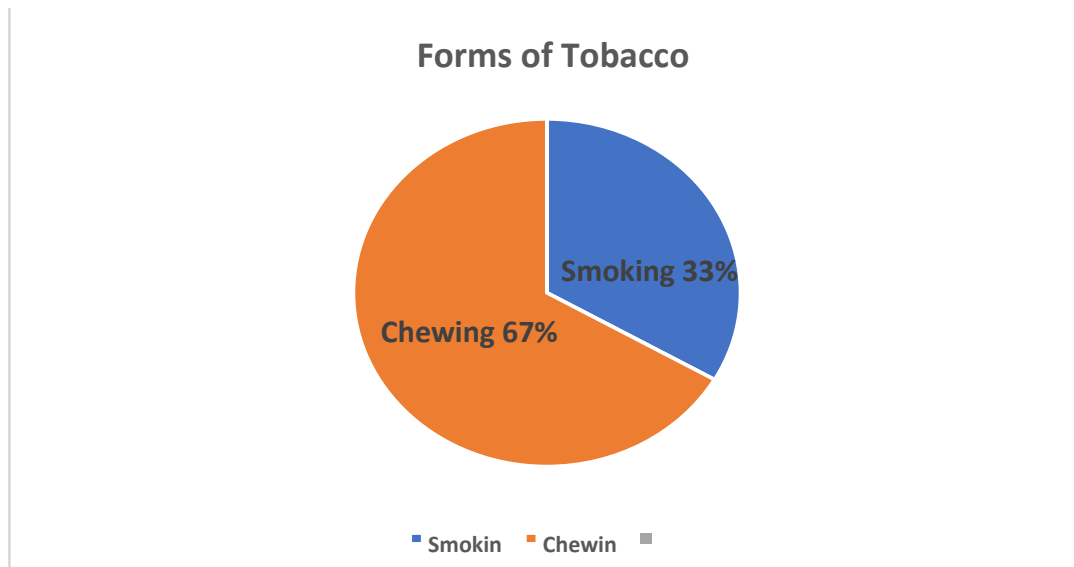


Table no. 3 percentage of forms of tobacco taken by patients

Forms of tobacco	Percentage
Smoking	33%
Chewing	67%

Graph No. 4 representing number of patient's vs age in years

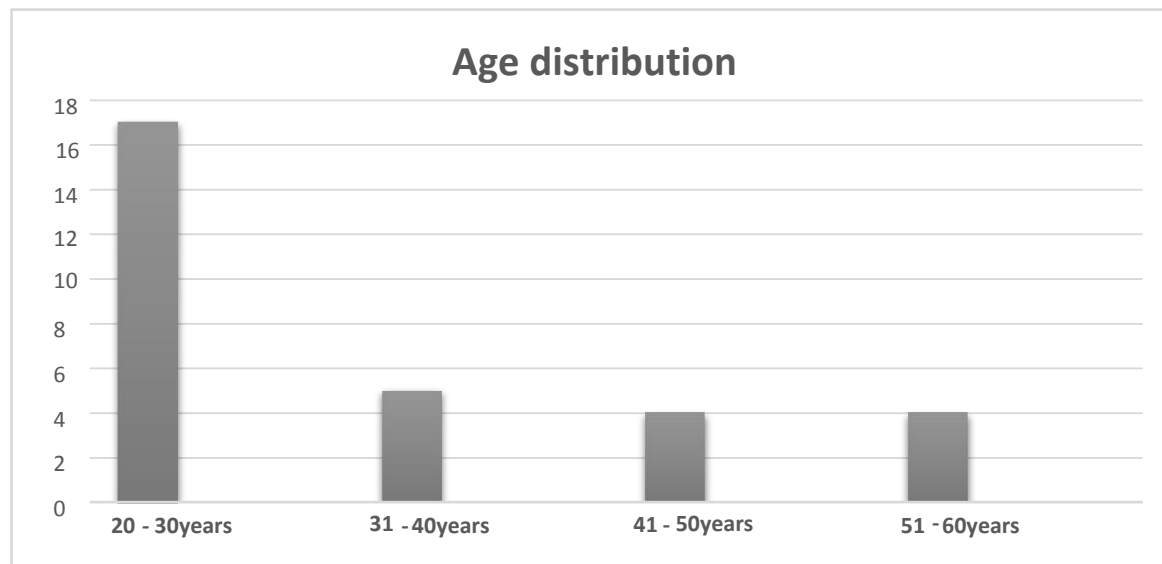


Table No. 4 number of patient's vs age in years

Age group in years	No. of patients
20-30 years	17
31-40 years	5
41-50 years	4
51-60 years	4

Discussion:

In our study we have 33 patients from M (N)HMC OPD & Peripheral Camps from which 3 patients were dropped out & we have retain 30 patients, as study size. Patients were enrolled and Case taking was done according to case taking format. The duration of study was 6 months. The dependency of tobacco addiction was measured according to Fagerstrom nicotine dependence scale in every follow up.

A statistically significant reduction in the craving of nicotine and efficacy of plantago major Ø was demonstrated within the study. In terms of objective, this study was reasonably successful in reducing craving of tobacco after administration of plantago major Ø.

Age Incidence: Highest incidence is seen in age group 20-30 years.

Sex incidence: From the study it was observed that male were found to be more addicted than females; out of 30 cases 21 (70%) were male and 9 (30%) were Female.

Changes observed during the study: It is observed in study that out of total 30 patients 8 (26%) patients showed poor appetite, 5 (16%) patients showed poor sleep and 7(23%) patients presented both, before giving medicine.

After administration of plantago major Ø, 8 patient showed improvement in appetite, 2 patients showed improvement in sleep and out of 7 patients with both appetite and sleep disturbances, 6 patients showed improvement in appetite while 3 patients showed improvement in sleep.

Limitations: Duration of the study was not sufficient to observe major changes in case of tobacco de addiction.

Scope: Plantago major Ø has shown to be effective in cases of tobacco de addiction it reduces the craving of nicotine. We believe that the study outcomes will be useful in future studies.

Difficulties faced:

1. It was difficult to find patients with tobacco addiction who were willing to quit tobacco.
2. Duration of the study was not sufficient in order to get the desired result.

Conclusion:

It may be concluded that plantago major Ø is effective in reducing craving of tobacco when plantago major Ø taken once in a morning. There is reduction in frequency and Fagerstrom nicotine dependence score. According to statistics of nicotine addiction calculated before and after intervention of plantago major Ø for dependency gives the t value of 7. Hence, we concluded that our study is highly significant.

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