



## Awareness of Nicotine Replacement Therapy Methods Amongst Graduating Health Professionals of Coastal Karnataka, A Cross Sectional Study

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### Abstract

**Introduction:** Today, users of tobacco have more support when it comes to quitting the habit. New medications, some over-the-counter and some prescription, can help take the edge off nicotine withdrawal. Nicotine replacement products help relieve some of the withdrawal symptoms. Nicotine Replacement Therapy in the form of Nicotine gums, Nicotine patches and Nicotine Lozenges have become an accepted and proven method now used in the cessation of tobacco. Nicotine nasal spray and Nicotine Inhaler are also available on prescription in some countries.

Non-Nicotine Replacement Therapy includes the use of prescription drugs like Bupropion, Varenicline and Selegiline. It is important for graduating health professionals to have an awareness about Nicotine Replacement Therapy and Non NRT Methods to advice and counsel patients in using the appropriate methods. This study was planned to assess the awareness levels of graduating health professionals in Coastal Karnataka.

**Methods:** A cross sectional questionnaire study amongst Interns of Dental, Medical and Nursing Institutions of Coastal Karnataka. The questionnaire covered all aspects of NRT and Non NRT and the response from the Interns was collected appropriately and subjected to statistical analysis.

**Results:** 80.4% of the participants were aware of Nicotine Replacement Therapy. 54.5 % were in the know of Pharmacological therapy used for tobacco cessation. 58.9% were aware of Tobacco cessation services and Nicotine Replacement Therapy available in the vicinity. 68.8% were favouring to have tobacco cessation and Nicotine replacement therapy in the curriculum of undergraduate health science programs.

**Conclusion:** It is important for health professionals to have an orientation towards the Nicotine Replacement and Non-Nicotine Replacement methods used in tobacco cessation.

**Keywords:** Awareness; Nicotine Replacement Therapy; Pharmacological Therapy; Interns

### Introduction

Nicotine replacement therapy (commonly abbreviated to NRT) is a way to supply nicotine to the human body by means other than tobacco. It is used to decrease withdrawal symptoms triggered by stopping smoking or chewing tobacco cessation. Today users of tobacco have more support when it comes to quitting the habit. New medications, some over the counter and some prescription can help take the edge off for withdrawal of nicotine<sup>1</sup>. NRT products help relieve some of the withdrawal symptoms. NRT in the form of Nicotine gums, patches and lozenges have become an accepted and proven method now used in the cessation of tobacco. Nicotine nasal spray and Nicotine inhaler are also available [1].

Nicotine replacement therapy approximately doubles cessation rates compared with controls (placebo or no NRT), irrespective of the intensity of adjunctive support.

As a rule of thumb, in primary care it doubles cessation rates from approximately 5% to 10%, and in intensive settings from approximately 10% to 20% [2,3].

Non-Nicotine Replacement Therapy includes the use of prescription drugs like Bupropion, Varenicline and Seligiline.

This study was planned to assess the awareness levels of graduating health professionals in Coastal Karnataka, as there is not much information on the awareness levels, of this useful therapy.

## Materials and Methods

A cross sectional questionnaire study amongst 112 interns of Dental, Medical, and Nursing Institutions of coastal Karnataka was planned, ethical committee permission sought, and study conducted. The questionnaire covered various aspects of NRT and Non NRT and the response from the Interns was collected appropriately, with the help of a study coordinator in each Institution, data entered appropriately and subjected to statistical analysis.

**Study design:** Cross sectional study.

**Study setting:** Institutional.

**Study population:** Interns (Medical, Dental, Nursing) - graduating health professionals.

**Study period:** November 2014 – January 2015.

Study duration: 3 months.

A pre-designed anonymous questionnaire was administered with written informed consent.

## Results

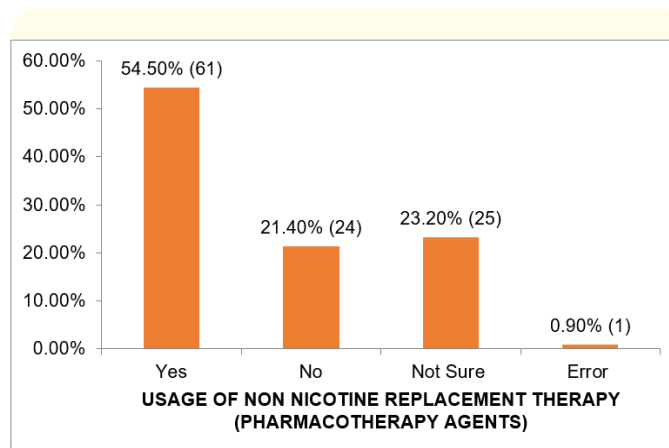
The result of this study has been summarized in the master table as below along with a graphical representation of the responses received.

### Master table with numerical description of the important parameters of the study:

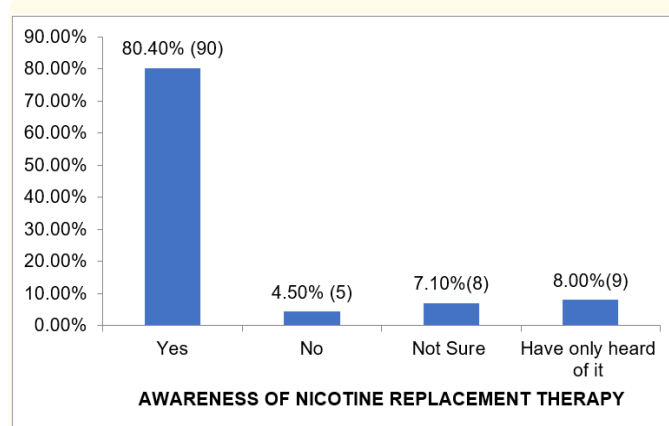
	Codes	Count	Column N %
Awareness of nicotine replacement therapy	Yes	90	80.4%
	No	5	4.5%
	Not Sure	8	7.1%
	Have only heard of it	9	8.0%
Usage of non-nicotine replacement therapy (pharmacotherapy agents)	Yes	61	54.5%
	No	24	21.4%
	Not Sure	26	23.2%
	Error	1	0.9%
Awareness of tobacco cessation and nrt services in the vicinity	Yes	66	58.9%
	No	22	19.6%
	Does Not Exist	10	8.9%
	Not Sure	14	12.5%
Tobacco cessation and nicotine replacement therapy in the curriculum of undergraduate health programs	Yes	77	68.8%
	Not Sure	20	17.9%
	If Possible	15	13.4%

**Table 1**

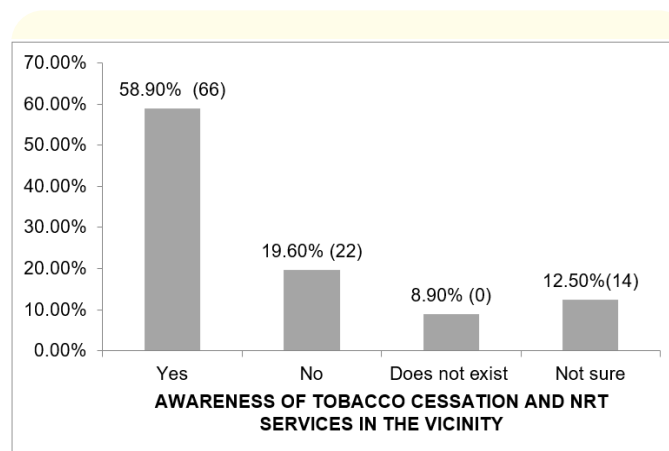
### Graphical representation of responses received



**Figure 1**



**Figure 2**



**Figure 3**

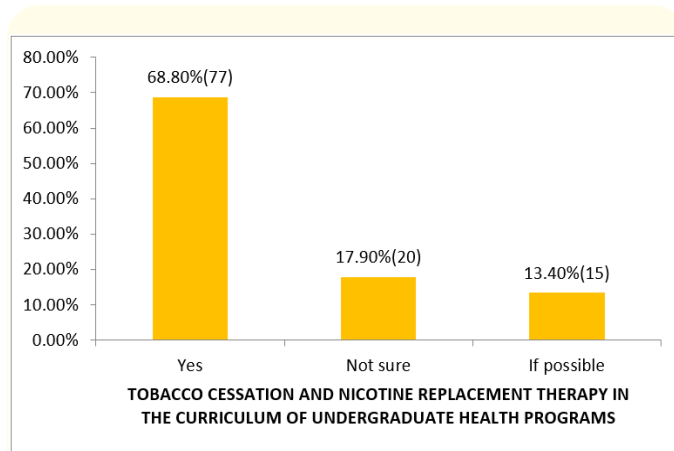


Figure 4

## Discussion

It has been seen in earlier studies that the most commonly identified themes in relation to Nicotine Replacement Therapy were knowledge deficits, prior NRT use, incorrect use of NRT, negative expectations of NRT, the view of willpower as the means to achieve abstinence, concerns about side effects and possible addiction to NRT, price, positive expectations and nicotine misperceptions [4].

This builds evidence to make the health professionals role more responsible.

In our study, amongst the graduating health professionals, the awareness levels were excellent, but they were short of the required skills to use it effectively. Among the forms of replacement, Nicotine Patch and Nicotine Lozenges were the most familiar. Tobacco Cessation referral facilities were known, but there were limitations with respect to availability of trained personnel. Most of the respondents felt that they needed to be trained better to handle this aspect of health care and were in favor of including this topic in the undergraduate health science curriculum. The respondents were in the need of more sensitisation and training regarding the detailed use of pharmacotherapy in tobacco cessation.

Nicotine Replacement therapy can help smokers stop, even if they have tried it before. Clinical trials have shown that NRT doubles the chance of success of smokers wishing to stop. NRT usually provides nicotine in a way which is slower and less satisfying, but safer and less addictive than cigarettes. NRT reduces withdrawal symptoms like irritability, depression and craving, although it does not eliminate them entirely. Very few people become addicted to NRT. For the best results, NRT should be used in sufficient quantities and for long enough [5].

## Recommendations

It is important for graduating health professionals to be well informed about the benefits of Nicotine Replacement Therapy and Non-Nicotine Replacement Therapy methods to advise and counsel patients appropriately [6,7].

## Conclusion

It is important for health professionals to have an orientation towards Nicotine Replacement methods and Non-Nicotine Replacement methods used in tobacco cessation. It will be of immense value if the governing health regulatory bodies are able to introduce this topic in the academic curriculum of the health sciences programs. This study provides baseline data to pursue the same in order to improve patient treatment and eventually improved community health outcomes.

## Acknowledgements

1. Health Sciences Library, Manipal, Manipal Academy of Higher Education,
2. Mr. Vasudeva Guddattu, Dept. of Statistics, Manipal Academy of Higher Education, Udupi, Karnataka.

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