

Groundbreaking clinical trial confirms effectiveness of nicotine gums to curb tobacco addiction

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Study indicates that nicotine gums help smokers quit smoking



India's fight against tobacco takes a significant step forward with a groundbreaking clinical trial conducted at Bengaluru's Krishnadevaraya College of Dental Sciences, which has firmly established the efficacy of Nicotine Replacement Therapies (NRT) in aiding smoking cessation.

Led by Dr Murali R, Professor and Head of the Department of Public Health Dentistry, the study conducted by Dr Anagha Reji concluded that the combined use of two successful smoking cessation methods, i.e., behavioural counselling and NRT in the form of nicotine gums, significantly enhances success rates in smoking cessation.

The clinical trial enrolled 105 participants aged between 18 and 50, who were regular smokers. The participants were then divided into three distinct groups. The first group received behavioural counselling only, the second group received nicotine gums only and the third group received both behavioral counselling and nicotine gums.

For each group, exhaled breath carbon monoxide levels were measured (this is a measure to check smoking cessation) during the initial assessment and across six consecutive follow-up visits spanning over 12 weeks. The results showed a distinct reduction in carbon monoxide (CO) levels among participants in all three intervention groups. However, this reduction was remarkable and statistically significant in the group that received both behavioural counselling and nicotine gums as

compared to the groups that received only counselling or nicotine gums, highlighting the effectiveness of the synergetic cessation strategies.

This is the second such clinical trial to present compelling evidence on the effectiveness of NRT in helping smokers successfully quit the habit. In another landmark study by S.C.B. Dental College & Hospital, Cuttack, Odisha, nearly 70% of trial participants were consumers of smokeless tobacco. The participants were divided into three groups, all of which received behavioral counselling and two of these groups were given either nicotine patches or gums. These two groups were 5.2 and 4.6 times respectively more likely to successfully quit the habit than the group that was offered behavioral counseling alone (data on file). This is the first trial in the world to demonstrate efficacy of NRT in smokeless tobacco consumers.