

## The Challenge of Motivating Bidi Smokers to Quit by Approaching Them Even When They Say They Are Not Ready to Quit

Sir,

A bidi delivers 2–3 times more nicotine and tar than cigarettes, resulting in greater risk of oral cancers, heart, lung disease, and stroke.<sup>[1]</sup> Having noticed a lot of construction going on near her residence in South Delhi and having observed that most of the construction workers smoked bidis frequently, the first author and interventionist (Mira B. Aghi, a Behavioural Scientist) wanted to meet with them and persuade them to stop smoking. Most bidi smokers have less than primary or only primary education.<sup>[2]</sup>

The objective of the present study was to persuade construction workers that bidi smoking can cause serious diseases and motivate them to quit. The method used was to provide them with targeted information, using the technique of motivational interviewing (MI).<sup>[3]</sup> This is a counseling method that enhances a patient's own motivation.

The sample consisted of 47 construction workers, all from four sites within a distance of one and a half kilometers from one another in South Delhi, India

The selection was made based on voluntary participation, language spoken (the interventionist spoke and understood Hindi), and being bidi users, resulting in a total of 15, 11, 12 and 9 workers from each of the four sites. The interventionist wanted to use her previous experience that showed that by filling the knowledge gaps of tobacco users through MI they may decide to quit.<sup>[3]</sup>

Although not known to one another before migrating for work, all these workers hailed from Bihar and Uttar Pradesh. Most of them (93.6%) had studied up to 6<sup>th</sup> or 7<sup>th</sup> grade. Three had not gone to school at all. These had learnt to write their names with the help of other workers and calculate their earnings and expenses. They were all poorly equipped with knowledge on the harms of tobacco. They had only been exposed to information on the harms of tobacco smoking through pictures of disease on the bidi pack but were not convinced, as these images did not make sense to them. Except for two of the workers, they were all in their thirties. They had been smoking about 15 bidis a day for the last 5 years.

Before launching the study, first author, who as mentioned earlier, was the interventionist, visited each of the sites four times as she wanted the construction workers to not only be familiar with her presence at their site but also comfortable while she spoke to them. Before holding the discussions, the interventionist took permission from their supervisors, who

consented that she could speak with them at the time most suitable for them (gatekeeper consent). Since this intervention was a small voluntary effort that could only benefit the workers, would not invade their privacy, and did not present any risk to them, the interventionist did not consider IEC clearance to be necessary. No personally identifiable information was collected for this pilot behavioral intervention.

The interventionist carried a folder for note-taking and some pictures to show to the workers which might make them question their habit. As she wanted her presence to be unobstructed by on-lookers, she went alone. When she met the workers to hold the discussions with them, she told them that she wanted to understand why they smoked bidis. She made sure that they believed and trusted her and her motives. She answered all their questions regarding her visits, assuring them that participation was voluntary, the conversations would stay confidential and that they could leave the discussion any time.

The interventionist met the workers in groups and held discussions on cancer (especially oral) heart attack and stroke<sup>[4]</sup>; three of the most common diseases which a bidi smoker is likely to suffer from due to his bidi smoking. They were also told that bidi smoking is associated with emphysema and increased risk for chronic bronchitis. All the interactions revolved around the science of the diseases. The science was explained very simply utilizing nonscientific lingo and showing photographs of diseased conditions.

After this brief introduction, MI was used to involve bidi smokers in an in-depth analysis of symptoms of diseases associated with bidi smoking, asking them if they had experienced any of the symptoms themselves or had seen them in others. The aim was to so educate the workers on the most common disease consequences of bidi smoking: cancer, heart attack and stroke by a fully participatory and consultative process that would encourage, prompt, and compel them to think about their bidi smoking [Table 1].

The workers' responses indicated that the process of persuasion seemed to have worked, as many said they wanted to quit smoking. Their reasons for wanting to quit included avoiding the potential disease consequences. All 47 bidi smokers ranked mouth cancer as more serious than the other diseases, as according to them, cancer has no cure. As many as 39 of them mentioned the possibility of heart attack as a reason to quit, associating its symptoms with general weakness. Only 8 of them mentioned the possibility of stroke as a reason to quit.

**Table 1: Cancer, heart attack and stroke/mini stroke-related interventions and participant responses**

Interventions	Responses
a. Do you get any cuts, sores or bumps in the mouth?	10.6% (5) reported cuts and “rash” symptomatic or oral precancer or cancer; 6.4% (3) get a sporadic “rash;” Only one worker reported long lasting rash.
b. These are signs of harms due to smoking: Just look in each other’s mouth	When the workers at <i>site 3</i> looked into each other’s mouths, they found that two workers had white patches, one under the lip and the other in the cheek. They all looked worried and concerned
c. The sign will go away if you quit	A little relaxation was visible
d. The heart gets affected by smoking and the beats change, not right away, but over time. Breathlessness is another sign	From each site, at least 8.5% (4) workers reported difficulty climbing stairs and feeling breathless while carrying a load
e. The initial signs of heart trouble with more smoking can increase	They looked worried
f. These signs can disappear by quitting smoking	They wanted to know if they could become risk-free by quitting
g. Potential symptoms of a mini-stroke (transient ischemia) were explained as follows	The workers looked very attentive
h. The workers were asked to look for numbness, incoherent speaking, confusion, trouble seeing with one or both eyes: Vision blurred, trouble walking, severe headache and/or dizziness, all symptoms of mini stroke	Very few among the workers said they had experienced any of these signs: Only dizziness and leg weakness were mentioned. One worker each from <i>sites 1, 2, and 3</i> had experienced dizziness and were told by the doctor that it was because of too much bidi smoking in the hot weather

a, b and c: Interventions related to cancer; main message: Bidi smoking increases the risk for oral, lung, stomach and esophageal cancer. Oral cancer is the most common cancer in India, often seen in bidi smokers. d, e and f: Interventions related to heart attack; main message: Bidi smoking could lead to heart ailments manifested in breathlessness, persistent cough and irregular breathing due to decreasing oxygen to the heart. g and h: Interventions related to stroke/mini-stroke; main message: Bidi smoking can disturb the blood reaching the brain, causing conditions that might become serious over time

The workers ranked the benefits of quitting thus: (1) not feeling helpless when they are out of bidis; (2) their family being happy; (3) a cleaner environment; (4) no foul smell; (5) saving money.

After the intervention was over, the participants were encouraged to express how they felt about the process (most had more than one response, hence numbers overlap):

- 42 (89.4%) of them found the information convincing and believable
- 15 (31.9%) were partially convinced and felt they needed support
- 12 (25.5%) wanted to reduce the number to exactly half and quitting in ten days
- 7 (14.9%) decided to smoke the remaining bidis, then quit
- 5 (10.6%) wanted to speak in private before deciding their quitting time-table
- 5 (10.6%) others wanted the process to be repeated to get fully convinced
- 5 (10.6%) were quiet but seemed affected
- 3 (6.4%) were ready to quit right away

The interactions impacted each of the 47 workers and made them think about the risks that bidi smoking posed to them, to consider whether to quit right away or quit later, possibly after more deliberations. This indicated that the dynamics of the process have great promise. The involvement of the workers in this process influenced their thinking, quite a departure from what they had said earlier about how the pictures of disease on the bidi pack did not make sense to them. They were now keen to get help to quit.

Approaching bidi smokers with MI empathetically helps them to find the internal motivation they need to quit, despite their attachments to the practice. Such uninformed tobacco users can thus be benefitted from cessation by reaching out to them

at their workplace. Testing this process in a broader population and involving more research staff would help to determine the efficacy of this intervention strategy.

At such an extraordinary time as this coronavirus disease (COVID-19) pandemic, MI with information on increased risk of severe disease in smokers would be even more effective because there is already the fear of death due to this disease.

#### Presented in part at

- The 2017 WELCOA Summit Day 1: Innovations in Wellness and Mayo Clinic and Beyond, The Mayo Clinic, Rochester, Minnesota, USA (November 8, 2017)

#### Acknowledgments

Authors are indebted to the supervisors to permit us to talk to the workers and workers to agree to participate in the discussion.

#### Financial support and sponsorship

Nil.

#### Conflicts of interest

There are no conflicts of interest.

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<b>Quick Response Code:</b> 	<b>Website:</b> <a href="http://www.ijcm.org.in">www.ijcm.org.in</a>
	<b>DOI:</b> <a href="https://doi.org/10.4103/ijcm.ijcm_959_21">10.4103/ijcm.ijcm_959_21</a>

**How to cite this article:** Aghi MB, Ray CS, Kapoor S. The challenge of motivating bidi smokers to quit by approaching them even when they say they are not ready to quit. Indian J Community Med 2022;47:296-8.

**Received:** 21-06-21, **Accepted:** 16-12-21, **Published:** 11-07-22

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