

**REPORT ON TOBACCO CESSATION THROUGH
COMMUNITY INTERVENTION IN INDIA**

WHO, SEARO, NEW DELHI

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EXECUTED BY SCHOOL OF PREVENTIVE ONCOLOGY, PATNA

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EXECUTIVE SUMMARY

Tobacco use prevalence in the community was reported very high (55%) and there was neither any legal framework for tobacco control nor any initiative at the community level for tobacco control. The community had negative attitude towards tobacco control; ignorant about the health and economic impact of tobacco use. Prevalence of tobacco related oral lesions were high in the community. The School of Preventive Oncology carried out the intervention for more than a year in a community covering one million populations divided in two groups having minimal intervention with low cost covering larger area (population 900,000) and another with more intensive approach in smaller area (population 100,000) in the Vaishali district. Potential volunteer groups and individuals in the communities were identified and informed, trained and empowered. The intervention led to significant changes; like about 4% of quit rate; 3% dose reduction rate and 2% reduction in multiple habits. The most remarkable point was that the quitters have turned into strong and potential anti tobacco advocates. Community took initiative and implemented counter advertisements actively. The tobacco free school policy initiative brought decrease in tobacco use among school personnel and students, decreased ETS exposure to the students, improvement in teaching and learning process in schools. Intervention in government offices resulted in overall cleanliness of government settings. The impact achieved so far was encouraging and the community is expected to continue efforts and sensitize more and more people for cessation. This pilot test demonstrated that (1) Mobilization towards cessation was better through community than cessation clinics in health camps (2) sustained minimal intervention community based approach works well than intensive approach (3) mass approach was cost effective as compared to individual approach.

STUDY FRAME

STUDY AIM: To create an ethos in communities covering the district of Vaishali, India, which makes people give up tobacco use.

STRATEGIES: Strategies were as follows

Encourage communities to recognize how tobacco use affects the user's health and economy and health and economy of their family and their communities as a whole.

Encourage communities to learn about the existing laws and regulations pertaining to tobacco control and what are their duties and rights pertaining to this.

Encourage communities to learn about the methodology to share their efforts (their intellect, money and time) toward better tobacco control in their communities.

Encourage communities to learn the ways in which tobacco promoters make users continue in the habit, despite knowing that it will kill many of the users.

Help communities counteract the influences that keep users in the habit, and engage users in a process of gaining increasing control over their lives.

Create an environment where tobacco use becomes more of a bother and burden for the user. This will include creation of clean and smoke free settings.

Reverse those influences that add to tobacco use any glamour, attraction or a feeling that it is the norm.

PERIOD OF STUDY: The programme was formally begun after a week, WHO, South East Asia workshop and training program, Colombo, September 2002. Workshop on community cessation program: some successful models, in the first week of October, 2002, anticipating the signing of the agreement with WHO and telephonic confirmation from TFI, WHO, SEARO. It ended in last week of January, 2004.

AREA OF INTERVENTION Initially the activities were limited to Mahnar Block of Vaishali District which was extended to whole Vaishali District, India, later on. Formal and informal interventions were worked out, to reach the people of the district, both on an individual and a community basis. Multisectoral intense activity in Mahnar Block and minimal activity covering few sectors in rest of the district was planned.

INTENSITY OF INTERVENTION IN MAHNAR BLOCK AT DIFFERENT TIMES

The intensity of interventions was kept at the following pace

- (1) First phase was more intense. The health facilitators were stationed in the area for 5 months.
- (2) Second phase was less intense. The health facilitators used to visit the allotted areas at the interval of one week in rotation. This continued for 2 months.

(3)Third phase was less intense as compared to second phase. The health facilitators used to visit the allotted areas at the interval of fortnight. This continued for 3 months. This phase is ending.

(4)Fourth phase was least intense. The health facilitators followed up the field at monthly intervals and only collected data and information and participated least with community actively. This lasted for three months.

INTERVENTION DESIGN

Table1. Action plan by site

Region	No of Block	Population covered (in million)	No of programs launched	Cost Share of the total expenditure of the project	Intensity of program
SITE1.Mahnar Block of Vaishali Districts	1	1/10 th	10 (1-10)	3/4 th	Intense
SITE2.In rest of the Vaishali Districts	9	9/10 th	4 (2, 4.8 &9)	1/4 th	Minimal

PROCESS INDICATORS

A. PROCESS INITIATIVE

The process was initiated by forming a core group, which consisted of four health facilitators and two program managers. The health facilitators and program managers were trained in seven days program. First two days was theoretical discussion on different modes of cessation interventions and in particular with the theme of our present community-based cessation intervention approach. Several Mock interviews, individual presentations and group presentations were the key activities on third to sixth day. Workbook prepared for health facilitators is annexed. The health facilitators and program managers were paid staff of the School of Preventive Oncology, Patna. The aim and the strategies of the programmes were discussed and finalized among the group members.

The members of the core team went in the field area wise and arranged meetings with individuals and group in the community. Initiation of these meetings was mostly initiated from tea corners. This place was felt to be most appropriate after a initial approach of house visits. Suitable leaders of the community were identified (active and enthusiastic people) in order to form field action groups. These have been established to a great extent in each area and some are very active while others are still being mobilized.

Randomly selected groups of young student and teachers groups in schools, carriers in local market, street children groups and several grades of adults from different sections of communities were mobilized as field action groups and individual and group meetings were organized both formal and informal. Outcomes of the meetings gave clues to identify the potential volunteer groups and individuals. It was followed by their training at large scale. A few interested participants who could not attend these training workshops were given training at their respective sites. The individual and

group training at site was not cost effective however it was performed maintaining the same standard for better quality work.

Refresher training of the health facilitators and the field action groups, continued to be carried on.

Translation and development of technical material is being implemented. Weekly reviews are held by the core group. At these reviews, the weekly progress is assessed, strategies and results are discussed and the varied experiences gained were shared among the members. The approaches and the materials used were modified according to these experiences. Professional and technical guidance was available at most of these reviews. The changes and the impact were assessed using relevant indicators.

A1. GROUPS OF COMMUNITY REACHED

The following field action groups were formed and mobilized.

- I. Private Practitioners (modern medicine, degree holders of other branches, Non degree holders)
2. Public Health Midwives
3. MOH (Medical Officer of Health) area.
4. Administrative officers and staff
5. Village unemployed group
6. Group of Village Panchayat
7. Chemist and Pharmacist
8. School Personnel
9. Cinema owner and staff members
10. Village entertainment parties
11. Religious groups
12. Groups of Hawkers and vendors

A2. THE GROUPS WITH ADEQUATE INTEREST

- I. Medical Practitioners (modern medicine, degree holders of other branches, Non degree holders)
2. Administrative officers and staff
3. Village unemployed group
4. Chemist and Pharmacist
5. Students and School Personnel

B1. LEVEL OF INTEREST AND COMMITMENT OF HEALTH FACILITATORS AND COMMUNITY LEVEL GROUPS

These 4 health facilitators were the permanent staff member of the organization. They had the previous experience of doing other community interventions. In addition they had the experience of arranging anti-tobacco seminars, scientific meetings in our organization.

They provided feedback adequately every week on telephone, through inland postal letters and seek suggestion from me on telephone whenever required.

B2. ABILITY OF FACILITATORS AT DIFFERENT LEVELS

We tried to get feedback from the Government officials and community people and other groups separately about ability of our Health facilitation. Almost all groups gave good remarks for them for their ability to communicate, their skill building approach and their support in creating an environment for cessation.

PRIMARY INDICATORS

Indicators were identified by the three following mentioned approaches

1. Silent Listening

2. Silent watch

3. Interactive communication

Indicators and its definitions may be seen in Appendix.

High prevalence of tobacco use was seen in almost all age groups. Numbers of buyers were high. Sale of tobacco products like Khaini ^{A1}, pan ^{A1}, gutka ^{A1} and laldantmanjan ^{A1} was reported high. Mostly people buy small quantity in one or two piece but heavy addicts buy in packets. Tobacco advertisements were rampant. Density of tobacco residue in public places was high. Tobacco use was common in schools among students and school personnel. Tobacco use in health settings was common. Tobacco products were easily available in general stores, Pan Stores and Cigarette shops.

Most of the elders were concerned about increasing use of tobacco among youth

Very few were concerned about use of tobacco in public. Some people few were concerned about Tobacco use by teachers during teaching and Students' tobacco use and its harm. Some people in community were concerned about harmful effects of tobacco use and almost negligible number of people in the community was concerned about economic loss due to tobacco use. Many people in Community were involved in business of tobacco and they had negative attitude on tobacco control issues. Promotion of Gutka and cigarette was high. Almost everyone was ignorant about harmful effects of Laldantmanjan.^{A1} Use of gul was considered harmful. Most of the people in community were against use of ganja + tobacco by Sadhus ^{A1} near the temple. Players and viewers were least bothered

regarding harm of tobacco. Cultivation of tobacco was considered as cash crop in the society. Social concern about cessation was negligible.

Tobacco use: Tobacco use prevalence in the community was very high. Multiple forms of tobacco was in use like, smoking cigarette & bidi, chewing tobacco like gutka, khanini, pan and tobacco and apply tobacco like gul and gudaku. Young students were seen using tobacco in various forms but not openly. Some people knew that tobacco is harmful but they had no idea about the fact that tobacco kills the people. Cigarette butts, empty Gutka sachets were seen every where i.e., on roads, in buses, in schools campus, in government offices, in temples, in bus stands, in railways platforms. People were seen smoking and using smokeless tobacco in public places, i.e. on roads, in buses, in schools campus, in government offices, in temples, in bus stands, in railways platforms. Students and schools personnel were seen smoking and smokeless tobacco in the school premises in some schools. Students were seen smoking and smokeless tobacco in the way to school. Young people criticized elders in the community for their double standards. The tone of note was ' they themselves use tobacco but preach us not to use the same.

Prevalence of tobacco use among males was high. Prevalence tobacco use among girls and women was moderate .Prevalence of tobacco related diseases was high. Ganja ^{A1}tobacco smoking in religious places was moderate .There was moderate Prevalence people applying tobacco Prevalence of

tobacco use in health personnel was High .prevalence tobacco use among teachers and students was high. Young and old people were using tobacco together signifying social norm.

Tobacco Control: *Tobacco control was not an issue in the community. People in the community had never heard about WHO, Tobacco free initiative o are WHO Framework Convention on Tobacco Control. There was no tobacco free initiative in the community or in the state. Tobacco use was not prohibited anywhere. Sale and promotion of tobacco was seen everywhere especially of cigarettes. Many people were seen providing tobacco to adolescents.*

INTERVENTION

Area of priority was chosen from some of the indicators like area of dense advertisements and the areas where small scale industries of tobacco seen in very large number and high density of tobacco residues in public places.

Activities under intervention included

1. Individual meetings
2. Group meetings
3. School Interventions
4. Media Interventions
5. Wall Painting
6. Health Camps
7. Health Education Camps
8. Health Information on Loudspeakers
9. Pamphlets
10. Alternative Crop Initiative

1. Individual meetings: Randomly selected individual smokers and smokeless tobacco users were properly informed and helped to quit. It required relatively more time if calculated in terms of result oriented intervention .It took 7-8 long sittings per person to make it a success for initiating cessation. The health facilitators reported that individual training at doorstep was much time consuming but they were suggested to continue the same and prepare a comparative chart on individual and mass approach. In addition it was noted that once they quit, they joined in the active process of help quit others and disseminate the trend in the community. They had been recognized as better instrument of quit

movement than else one performing this activity. Their skill of communication was automatic, natural and effective. Thus we continued this activity intensively in the first phase of intervention.

2. Group meetings: Randomly selected group of smokers and smokeless tobacco users were informed and helped to quit in schools, local markets, patients and attendants attending hospitals and private clinics and community gatherings. Group discussions helped in making up their minds and will power development. Many of them later on consulted the investigator (who is a medical doctor), health facilitators and local doctors and others and quit. Group discussions increased medical consultations to quit. One of the group discussions was with community people who were returning from death rituals of one of young man, who suffered oral cancer as a result of gutka (one of the

One of the group discussions was with community people who were returning from death rituals of one of young man, who suffered oral cancer as a result of gutka (one of the popular smokeless tobacco) use;. This meeting has tremendous effect on community and helped quitting lot of people in the same and other community.

popular smokeless tobacco) use;. This meeting has tremendous effect on community and helped quitting lot of people in the same and other community. It was managed to get media coverage.

3. School Interventions: We had a clue from the Global Youth Tobacco Survey and Global School Personnel Survey in Bihar that prevalence of tobacco use among students (59%) and school personnel

(77%) was alarmingly high. The aim of school intervention was to study the feasibility and effectiveness of additional intervention inputs for tobacco free school policy in schools in Bihar. The following steps were taken:

1. Tobacco Free School Policy initiatives at school level:

1A.Some schools and the government were informed regarding high prevalence tobacco use prevalence/ attitude/ knowledge among students and school personnel. Health facilitators approached 100 schools and wanted to know regarding their belief, regarding formulating school policy at school level. About 67 showed willingness to formulate school policy at the school level. It was followed up by a focus group discussion with few teachers in 10 schools to know the feasibility of formulation of school policy.

1. They agreed to formally display “Tobacco use is prohibited in the campus of the school.”
2. They agreed to disseminate such policy in the communities.
3. They agreed to counsel tobacco users among students and teachers to quit tobacco. The principals, teachers and students appreciated it and wanted more information and invited the facilitators for additional inputs in their schools and for open interactive program.

1B.This information was conveyed to all schools in the area concerned by our health facilitators and was announced by loud speakers throughout the area of intervention. The news also appeared in local news papers and television.

1C. In addition the School of Preventive Oncology sent stamped postcards to all schools in Bihar appealing to students and teachers not to use tobacco as it kills the young people in their middle age if

they initiate early and continue it. There was good response from schools on this postcard. Some of the principals or teachers and students appreciated it and wanted more information and invited the health facilitator to their schools for open discussions.

2. Tobacco Free School Policy Advocacy at the government level: was set in motion through the following:

2A LOBBYING EDUCATION DEPARTMENT: The Education Department of Bihar was approached and lobbied by the School of Preventive Oncology Promulgation of tobacco free school policy and no tobacco use by students/ school personnel/ others attending school in the school premises. The Education department issued a letter to district education officers to do the needful and attached the copy of letter from the School of Preventive Oncology which described the harmful effects of tobacco and appealed to not use tobacco inside school premises. These letters were conveyed to all schools through government letter no.....

2B LOBBYING MEDICAL DEPARTMENT: We lobbied the government for passing an order banning Gutka in the state. Government of Bihar by Memo No. 15/Kha-24-06/02-387 (15), on ¼ H. Patna, dated - 31/03/2003 issued the following notification

"In exercise of the powers conferred by clause (iv) of Section 7 of the Prevention of Food Adulteration Act, 1954 (37 of 1954), the Director-in-Chief, Health Services, who is also Food (Health) Authority, hereby directs that no person shall himself or by any person on his behalf, shall manufacture for sale, or store, sell or distribute "Gutka" or "Pan Masala", containing tobacco or not containing tobacco, or by whatever name called, for a period of five years with effect from 1.4.2003."

DISSEMINATION: These two orders of the government were further disseminated to the entire community through loudspeakers, through health facilitators, news papers, radio and TV.

Process measures: Designed and pre tested materials and posters and other material towards promoting tobacco free school policy, limited course materials on tobacco and one instruction book on how to use these materials were sent to the schools. About 100 schools have been selected sampled randomly for process measures (15 interventions and 15 controls). We have collected data and information, from the principal and school personnel in focus group discussion from 30 schools in the area regarding implementation of the tobacco-free school policy and other tobacco control issues and on designated structured questionnaire from the students through our health facilitators, with each one going to 10 schools. The students were examined with the structured questionnaire (Figure15-18).

4. Media Interventions Media based Approach through radio talks, interschool competition published through loudspeakers and story coverage in news papers helped in quitting tobacco. Small Posters were distributed in different parts of districts. Village group meetings were organized. Neighboring villagers were inspired and invited investigator groups for meetings and consultations. Community people later became interested in reading news and article related to tobacco control

5. Wall Painting: The focus group discussions at different levels suggested that information on tobacco related harms and tobacco control materials should be painted on the walls in entire area, as it will remind people every moment to quit(Figure1-12). This intervention created two important events that helped a lot in extending the program with vigor, as mentioned below

A. **Sharing expenditure from the community** A few of the wall paintings were written sporadically by the School of Preventive Oncology. Some of the volunteer groups approached us to have wall paintings in their area too. It was proposed from health facilitator side that wall paintings involve a substantial expenditure. The School of Preventive Oncology has only shared and helped the communities in doing so. The communities may have technical support but not the expenditure. We can only help as a small part of the expenditure.

The community people became ready to share in wall painting for their respective community area which led to wider dissemination of tobacco related harms and information on tobacco control issues.

After a gap of one week community people became ready to share and wall painting was done in the respective community. Later on it was disseminated to larger community group and we shared them in doing so and in this way almost entire area of Vaishali District was covered and painted with various types of information on health and economic aspects of tobacco.

B. **Intense reaction from the community:** Reaction was negative on two basic issues

(1) **Tobacco makes people poor:** Tobacco is a cash crop and it gives some employment. Initially individual members were informed regarding the long term health and economic impact of tobacco later on the issue was discussed in big gatherings.

The reactions received from the communities were as follows

A. Money comes directly to cultivators before cultivation

B. Tobacco gives employment in many sectors of tobacco cultivation and manufacture

C Some of the Government officials in the area had the same feeling that tobacco gives employment.

(2) **Tobacco causes impotence:** The initial reaction from the community was not believed by the community and many communities approached facilitators to remove it.

Intense negative reaction from the community on the wall paintings were on the topic Tobacco makes people poor and Tobacco causes impotence but with the timely counteraction by the volunteer and health facilitator group it was settled and people stated believing and feeling these facts practically and reported to health camps for cessation

- A. They had different logic behind this. They did not understand the proper meaning of impotence. They had misunderstanding that impotence restricts the child birth or in other terms they were confused with sterility.
- B. One angry firing old man told the facilitator that if it could do the same why the population of India is increasing. When half of the Indian population uses tobacco in various forms and If tobacco has such actions it may be used as contraceptive pill. If it so, the Government does not need to conduct Family welfare programs, rather propagate tobacco in society, and the population will be controlled naturally.
- C. Such people were made to understand the real meaning of impotence and relative weakness in sexuality etc in individual and group meetings. After a gap of few weeks some people realized

the truth of this fact by personal experience and came to health facilitators and attending doctors giving thanks. They became leaders in the community for tobacco control and several young, middle aged and old people quit tobacco.

6. Health Camps: Health Camps (Figure13-14) were organized started after a gap of few months after a valid suggestion from few health professional groups who had organized three anti tobacco camp in the area earlier. They provided a clue that in anti-tobacco camps people get bored after few minutes and people are not attracted on only tobacco issue. Every month we started organizing one day health camps. A small voluntary group of medical and paramedical workers stationed at Patna, the capital of Bihar, took up this challenge. Six cancer detection Camps, two diabetic camps, two AIDS awareness camps were organized in the vicinity of the city of Patna. The camp personnel consisted of (A) Specialists' Team (B) General Survey Team (C) Biopsy Team and (D) Co-coordinator. The specialist team comprised of one Consultant Physician, Surgeon, Gynecologist, Pathologist and one consultant Dentist. The general help team consisted of one junior doctor in the rank of intern and house-surgeon and one senior doctor of resident and registrar level. Eight such teams functioned simultaneously. Several activities of different kinds were the part of health camp and anti tobacco counseling was the theme. Some free drugs were also distributed during these camps. Biopsy, FNAC, scraping and etc were taken on the site in required cases and feedback was provided to them on doors after a gap of one week. Consultations on cessation increased in subsequent camps. The date and time of the camp and the list of specialists had been circulated in the proposed camp locality at least 10 days before the actual camp and help was taken from local community leaders to encourage the residents to avail this opportunity. To provide an incentive, medical check-up was also done *pari pusu* in selected cases and free medicines were distributed. The entire camp activity was conducted in one sitting on a holiday lasting about 6 hours with only a short tea break. Such 6 camps were organized during pilot test

Counseling for cessation were done at multiple levels

1. Initial counseling at door level by health facilitators
2. Counseling at Health camps and followed up
3. Follow up counseling by volunteers group in the community

In the 1st phase all three levels was launched but in later phase two level counseling was feasible

Table2 Tobacco use and tobacco related diseases

		Tobacco users	Non malignant oral Disease*	Pre-malignant oral Disease**	Malignant oral disease***
1	Camp 1	401	96	12	2
2	Camp 2	400	76	12	1
3	Camp 3	171	62	10	---
4	Camp 4	293	70	16	---
5	Camp 5	107	75	6	2
6	Camp 6	384	78	12	3
		1756	457(26%)	68(4%)	8(0.5%)

*Non malignant disease included Gum recession, Pyorrhea and caries

** Pre-malignant Diseases included leukoplakia and oral sub mucous fibrosis of different grades

***Malignant diseases included oropharyngeal and airway cancers in different stages

Table3 Tobacco use and cessation attitude

		No. of Visitors	Persons found to be tobacco user	Attended cessation clinic
1	Camp 1	729	401	26
2	Camp 2	661	400	29
3	Camp 3	321	171	32
4	Camp 4	521	293	33
5	Camp 5	225	107	48
6	Camp 6	671	384	53
		3128	1756(56%)	221(12.5%)

7. Health Education Camps: In addition, 6 Health Education Camps were organized in the same manner but was managed by junior doctors and para clinical staff. These camps were follow up camps with counseling coverage only. It was one to one meeting and meeting in mass too. Several people were identified for check up in the next ensuing health detection camp and there were provided with slips for an early appointment meet in those camps(Figure14).

8. Health Information on Loudspeakers: When the intensity of discussion on issue of Impotency caused by tobacco was halted, to attract community further some health information including tobacco causing impotence was announced on loud speakers throughout the area. Announcement was arranged in a way that impotency issue comes every three minutes interval. It further initiated some reaction from other corners which had not reacted earlier. They were further educated and informed.

9. Pamphlets: Pamphlets with different grades of information in Hindi and in different size were disseminated. Quantity control had always been the key issue in the process of dissemination. One community was given maximum of 5 pamphlets. Later on they were encouraged to prepare it at the community level. Some communities came forward, developed and displayed those pamphlets in important area of the community. The groups were initially trained for preparation of impressive pamphlets after a focus group discussion with few people in the community.

10. Alternative Crop Initiative: Several meetings were arranged .The policy of tobacco industry, as we were told, has changed to help farmers with large area of cultivation and not the small cultivators. In the areas where they had received advances, they were continuing tobacco farming and with several consultations at different occasions they started thinking about discontinuing from the next year. And

they consulted the Horticulture Department for advice on alternative crops. Feedback from the Horticulture Department revealed that many farmers were switching over to cabbage and potato and other vegetables plantations as they are more price fetching.

Limitations- We could not know about the income from the alternative crop as the budget and time was not permitting this event. Health facilitators consulted those who were not switching on to alternative crops and gave examples of others who switched to alternative crops. These farmers were unable to switch over as they had already taken too much advance which can only be compensated in two to three years.

LATER INDICATORS

Later indicators were spelt out under the following headings

1. People's concern and awareness of the real damage caused by tobacco
2. The way the community presents to tobacco users
3. The way people see tobacco use and react to it
4. The amount of publicly visible tobacco use and its manner
5. The amount of tobacco promotions visible in that community,
6. People's reactions to tobacco promotions in the mass media,
7. Cleanliness of the environment (free of cigarette butts, environmental tobacco smoke and tobacco chews or 'cuds') and so on.

Later Indicators were evaluated by the identical method as of the primary indicators and were compared both pre and post intervention. It was envisaged that there was a noticeable amount of change in the overall scenario of tobacco control. Decrease in tobacco use among adolescents was visible by decreasing density of gutka sachets in the campus and the overall open use of other tobacco products among students. The amount of tobacco promotions visible in the community has not changed overall but it has been counteracted by counter advertisements and there was increasing number of people's reactions to tobacco promotions in the mass media. There was a real change in the environmental cleanliness. Now the students of certain schools object to others for smoking near them.

Item wise evaluation of later indicators has been kept in Table4-7

Table 4 Indicators through silent watch

Theme	Pre Intervention	Post Intervention
A. By number of buyers	High	Decrease
B by sale of tobacco product	Khaini, pan gutka laldantmanjan high sale	Gutka sale reduced
D By estimating the use in different age group	High prevalence in almost all age groups	decrease in adolescent
C By style of purchase of particular tobacco product	Mostly people buy small quantity in one piece but heavy addicts buy in packets and more in number	Not significant change visible
F By density of tobacco advertisements	Rampant	Gutka promotion disappeared
G Density of tobacco residue in public places	Very dense amount of tobacco residues	Decreased
H Tobacco use in schools	Common among students and school personnel	Decreased
I Tobacco use in health settings	Common	Decreased
J. Availability of tobacco in general stores	Easy availability	No changed except of absence of gutka display

Table5. Pre and Post Intervention Attitude on tobacco control issues

Concern	Pre Intervention	Post Intervention
	Positive attitude	Positive attitude
Elders - on increasing use of tobacco among youth	9/10	9/10
Use of tobacco in public	1/10	6/10
Tobacco use by teachers during teaching	3/10	7/10
Students' tobacco use and its harm.	4/10	7/10
Community - harmful effects of tobacco use.	7/10	9/10
Community - economic aspects of tobacco.	1/10	7/10
Community people involved in business of tobacco	1/10	3/10
Promotion of any particular brand of tobacco product	1/10	3/10
Social concern about use of Lalmanjan and gul.	2/10	9/10
Society about use of ganja + tobacco by Sadhus near the temple.	7/10	9/10
Players and viewers regarding harm of tobacco.	4/10	8/10
Social concern regarding cultivation of tobacco.	6/10	8/10
Social concern about cessation	1/10	9/10

Table6 Indicators through interactive communication

Prevalence of	Pre Intervention	Post Intervention
tobacco use among males	High prevalence	Decrease
tobacco use among girls and women	Moderate Prevalence	Same as before
tobacco related diseases	High prevalence	Same as before
Ganja tobacco smoking in religious places	Moderate Prevalence	Decrease
people applying tobacco	Moderate Prevalence	Same as before
tobacco use in health personnel	High prevalence	Decrease
tobacco use among teachers and students	High prevalence	Decrease
Young and old people using together	becoming social norm	A halt

Table 7 Effects in general after informing people

1 st Phase	2 nd Phase	3 rd Phase	4 th Phase
smoking in government buildings without hesitation	People were resisted while smoking by few people; smoking in government buildings still continued but with hesitation	Government staff and people attending offices were almost seen smoking outside the premises of government settings.	Overall decrease in smoking outside the premises of government settings but this has decimal effect on chewing tobacco inside and out side the government buildings
chewing tobacco and spitting in government buildings without hesitation	People were resisted while chewing by few people; chewing in government buildings still continued but with hesitation	Opposition by community people had decimal effect on chewing in government buildings	Slight decrease in chewing tobacco inside the government buildings but walls were painted with spitting
People in the community had a feeling that Gutka is spoiling the young generation but were feeling helpless	Advertisements , sale and Use of Gutka have been banned by Government of Bihar	Advertisements and sale of Gutka was restricted to a great extent but black-marketing continued. Display of Gutka sachets stopped d from shops Use by young adolescent continued but at lower pace.	Use by young adolescent continued but at lower pace. Display of Gutka sachets were replaced by Khaini sachets display in the shops

FINAL OUTCOMES

This refers to all the things that happened as a result of intervention, which lead ultimately to the cessation of tobacco use. The community understood the ways in which people were kept hooked on tobacco; the desire to help each other quit increased in the community; the community recognized the real level of harm caused by tobacco.

Final outcome included the real gains relating to the ultimate objective. The number of people who quit tobacco use and for how long they have been stable off tobacco, the number of people who have reduced their use and other changes in tobacco use behaviour were assessed on a structured questionnaire in the general population as well as in representative school samples. In the last phase of pilot intervention for evaluating the quantitative change 16 areas in site 1 and 134 areas in site 2 were selected by systematic random sampling and five houses at each area were surveyed by trained personnel on a simple structured questionnaire for their habits, cessation, decrease in dose and decrease in habit in terms of time etc. Data obtained from the survey on structured questionnaire was transcribed and presented in the tables 8-11. Cessation of tobacco habit was defined as not using tobacco in any form for more than 12 months or over. Decrease in dose of tobacco was defined as decrease of frequency by one third or more. Decrease in tobacco habit was defined as quitting major habits of tobacco but continuing with at least one form of tobacco among multiple tobacco product habituates. Knowledge and attitude were tested on four point question. Definitely yes was taken as positive. Pre and post intervention results compared in tables 12-13. Ten schools were surveyed in Pre and post intervention period and results compared in table 14

The

Table8 Tobacco users in the community

	Total	Tobacco users
Mahnar Block in Vaishali district	824 (100)	453(55.3)
Rest of the blocks in Vaishali district	6020(100)	3099(51.4)

Table9 Cessation area wise (Intense vs. minimal intervention)

	Tobacco users	Tobacco quitters	Cessation carried up to		
			+6 mo	+9 mo	+12 mo
Mahnar Block in Vaishali district	453 (100)	124 (27.4)	37 (8.2)	24 (5.2)	19 (4.2)
Rest of the blocks in Vaishali district	3099 (100)	472 (7.8)	300 (4.9)	124 (2.0)	78 (1.3)

Figure in parentheses denote percentage

Table10 Reduction in dose area wise (Intense vs. minimal intervention)

	Tobacco users	Tobacco dose reducers	Dose reduction carried up to		
			+6 mo	+9 mo	+12 mo
Mahnar Block in Vaishali district	453 (100)	114 (25.1)	26 (5.7)	22 (4.8)	18 (4)
Rest of the blocks in Vaishali district	3099 (100)	240 (7.7)	222 (7.1)	200 (3.2)	98 (3.1)

Figure in parentheses denote percentage

Table11 Reduction in habit area wise (Intense vs. minimal intervention)

	Tobacco users	Multiple habits	Habit reducers	Habit reduction carried up to		
				+6 mo	+9 mo	+12 mo
Mahnar Block in Vaishali district	453 (55.3)	52 (11.5)	26 (27.4)	18 (3.4)	11 (2.4)	12 (2.6)
Rest of the blocks in Vaishali district	3099 (51.4)	400 (12.9)	156 (5.0)	138 (4.5)	128 (4.1)	88 (2.8)

Figure in parentheses denote percentage

Table 12 Knowledge and attitude on tobacco use

	Initial Phase	Later phase
Adolescent and young should not use tobacco	Mostly	84%
Tobacco is addictive	A few	54%
Tobacco causes cancer	A few	70%
Tobacco causes impotence	No one	30%
Alternative crop may give the same cost benefit	A few	40%
Law for smoking ban is correct	A few	94%
Tobacco control is essential for public health	A few	73%
Harm caused by tobacco use is dose dependent	No one	45%

Tables 13 Knowledge on existing regulations pertaining to the existing tobacco control law

	Initial Phase	Later Phase
Tobacco use in dental care product is prohibited by Govt. law	No one	> 30%
Supreme Court of India and Government of India has banned smoking in public places	A few	> 43%
Advertisements , sale and Use of Gutka have been banned by Government of Bihar	XXXX	> 73%
Use of tobacco is prohibited in Government settings	A few	> 30%

Table 14 Pre and post intervention attitude and behaviour of students in the age group 13-15 years

	Pre Intervention	Post Intervention
1. Use tobacco in any form	67%	34%
2. Wish to start tobacco in future (one or two years) later	12%	3%
3. Prevent anyone who smokes near them	3%	32%
4. Taught on harmful effects of tobacco in class during this year	21%	43%
5. Demonstrated skill building programs in class	3%	23%
6. Heard that the other schools are having anti tobacco policy	1%	32%

Note Percent figure has been rounded off

COST EFFECTIVENESS

The intervention was extended up to the area covering one million people and nearly half of them used tobacco. If we project the cessation rates of 12+ months (4.2%) in the present study the projected number of tobacco quitters comes to 4200 at one site and 10800 at another site. The cost per cessation thus comes to Indian rupees 88(\$2) at Mahnar site and Indian rupees 1.2(1/45\$) at another site where less money was spent and less intensive intervention was done. This clearly indicated that minimal intervention covering larger area is better than intensive approach in limited area

Table15 Cost estimation per cessation

Cessation or dose reduction at different sites	Cessation rate carried up to +12 mo	Population	Estimated number of quitters/dose reducers	Total Cost incurred	Cost in Indian Rupees per Cessation****	Cost in US\$ per Cessation
Cessation at Mahnar	4.2%	100,000	4,200	370,000**	88	\$2
Cessation at other sites	1.3%	900,000	10,800	125,000***	1.2	1/45\$
Dose reduction at Mahnar	4%	100,000	4000	370,000	92.5	\$2
Dose reduction at other sites	3.1%	900,000	27000	125,000	0.4	1/90\$
Total number of Quitters and dose reducers			46,000	495,000*	10.7	¼\$

Total cost of the project is Indian Rupees 495,000*(370,000** invested at site 1 +125,000*** invested at site2.Total cost spent at the site divided by number of quitters/dose reducers measures the cost for individual cessation and reduction****.

Estimated cost on cessation is far less than cost saved due to cessation. For a expenditure of Indian Rupees 495,000 we achieved cessation on 2500 individuals and a saving of Indian Rupees 9000,000 which is 18 times more than expenditure on the project.

Table16 Cost estimation of Income and expenditure balance sheet for cessation

	Estimated number of quitters	Estimated saved hours by quitters*	Estimated time saved in hours during one year **	Estimated days saved converted into usable days ***	Cost of these hours in terms of minimum fixed wage
Mahnar	4,200	700	252000	31500	2520000
Other Sites	10,800	1800	648000	81000	6480000
Saved money by cessation					9000,000
Expenditure on this project					495,000
Gross gain					18 times

*Time saved per dose of tobacco as two minute and average at the frequency rates of 5/day. Thus time saved by individual comes to 10 minutes (1/6hours).Hours divided by 8 gives the number of usable days. ** (X30 days X 12 months)*** Divided by 8 (as wage earners has to work for 8 hours per day)

In addition over 2% (multiple tobacco users) quitted major tobacco habit and continuing with one habit and the same proportion of single tobacco product users decreased the dose by one third. Added to the above advantage is the change in attitude of the community towards tobacco control and the price of such change is inestimable. Estimation of cost effectiveness of individual intervention could not be feasible.

CONCLUSION

The impact of these interventions achieved so far is reflected by the following facts

(1) Tobacco use prevalence in the community was reported very high (55%) and there was neither any legal framework for tobacco control nor any initiative at the community level for tobacco control. The community had negative attitude towards tobacco control. The community was uninformed about the health and economic impact of tobacco use. In health camps nearly one third of tobacco users had tobacco related oral lesion.

(2) Among tobacco users 4% quit for more than a year and about 5% for more than 9 months.

(3) In communities over 10% of the tobacco users reduced their tobacco dose and the same proportion of multiple habituates of tobacco reduced to single habit.

(4) The quitters have turned into strong and potential anti tobacco advocates and their voice is well tolerated and perceived in the community as compared to others.

(5) Community started discussing the agenda of tobacco free initiative and in planning process and some of them have been implemented. The community people started investing on counter advertisements. They shared in wall painting for their respective community area which led to wider dissemination of tobacco related harms and information on tobacco control issues.

(6) Community seems to be informed and becoming enthusiastic to know about many aspects of tobacco control.

(7) Mobilization towards cessation was better through community than cessation clinics in health camps.

(8) The tobacco free school policy initiative has brought (a) decrease in tobacco use among school personnel and students (c) decrease ETS exposure to the students (e) improvement in teaching and learning process in schools (f) dissemination of school prohibition policy in neighboring schools.

(9) Certain premises (e.g.: Schools, Hospitals etc) are in the process of creating an environment non-conducive to smoking. They are cleaning tobacco quid from their premises. They are preventing tobacco quid and becoming hesitant towards spitting here and there.

(10) Minimal intervention proved to be better than Intensive intervention in terms of cost and number of quitters.

The impact achieved so far was encouraging and the community should effort to continue to sensitize more and more people for cessation and prevention of tobacco use. This test demonstrated that community as a tool for cessation is the best cost effective tool for cessation.

APPENDIX 1

SPECIAL TERM USED IN INDIAN CONTEXT

Indian tobacco products

Pan=Betel + lime + catechu +tobacco mixture

Gutka=industrially manufactured tobacco product, containing areca nut, tobacco etc available pouch/sachets

Sadhu=Religious class like priests and monks

Bidi=tobacco rolled in tendu leaf

Lalmanjan=Tobacco containing red tooth powder

Gul=Pyrolysed tobacco product marketed in tins and used as dentifrice

Khaini=tobacco leaf and lime mixture, chewable tobacco product, prepared manually by users or available in market in sachets

Ganja=Tobacco mixed with ganja (hashish).

Other words

Chawks=squares

ETS= Second hand smoke

Gumti =Small shop made up in wooden frame made to sale tobacco products mainly

Parag(Product name) **gutka is from Kothari**(Name of company) **Company**

charagah =Playgrounds

Maulana=Teacher or priests in Islamic religion

APPENDIX 2A

INDICATOR THROUGH SILENT LISTENING

EXPECTATION OR THEME

- (1). Elders concern regarding increasing use of tobacco among youth
- (2). Concern about use of tobacco in public.
- (3). Concern regarding tobacco use by teachers during teaching.
- (4). Concern among students regarding tobacco use and its harm.
- (5). Community concern regarding harmful effects of tobacco use.
- (6). Community concern regarding economic aspects of tobacco.
- (7). Concern among tobacco merchants, shop-keepers.
- (8). Concern regarding promotion of any particular brand of tobacco product b Community people and people involved in business of tobacco.
- (9). Social concern about use of Lalmanjan and gul.
- (10).Concern in society about use of ganja + tobacco by Sadhus near the temple.
- (11).Concern among players and viewers of radio + TV regarding harm of tobacco.
- (12).Social concern regarding cultivation of tobacco.
- (13).Social concern about cessation.
- (14).Concern about harmful effects of second-hand smoke.

IMPORTANT PLACES WHERE THEY LISTENED

- (1) In chowk, street and roads
- (2) In schools
- (3) In hospitals and health centers

- (4) Village market and weekly markets
- (5) In temples and nearby places
- (6) In tea shops.
- (7) In miscellaneous stores
- (8) In tobacco shops
- (9) During marriage ceremony
- (10) During other social gatherings
- (11) In field and charagah (Playgrounds)
- (12) In play-ground

IMPORTANT GROUPS WHICH WERE LISTENED

- (1) Persons talking on roads
- (2) By group talking on roads
- (3) Students after the school
- (4) School personnel
- (5) Shop Keepers, and customers
- (6) Groups during occasions
- (7) Doctors and other staffs
- (8) Farmers and labors
- (9) Patients and their relatives
- (10) Players and viewers
- (11) A few other groups

DEFINITIONS OF INDIVIDUAL THEME

Following narratives on individual themes were noted and labeled into four groups by health facilitators (i) Positive attitude* (ii) Negative attitude** or (iii) Neutral *** or Ignorance***

(1) Elders concern regarding increasing use of tobacco among youth

- (i) Increasing use of tobacco among youth will ruin our society*
- (ii) I don't think that it may change our future if we take plenty of nutritious diet**
- (iii) Yes, I see, but what we can do? They are beyond our control***
- (iv) I have not heard this type of thing***

(2) Concern about use of tobacco in public.

- (i) Very bad, it may attract youngsters to do the same.*
- (ii) They should not do like this. They can use it in their houses. We should try to stop them. *
- (iii) Let them do, it is not our matter.**
- (iv) I know, but I do not hear my own idea***.

(3) Concern regarding tobacco use by teachers during teaching:

- (i) It is very bad, they are putting very wrong example.*
- (ii) They should not be allowed to teach.*
- (iii) Yes, I have them seen using *
- (iv) I have not seen any teacher doing this. ***
- (v) If they are teaching well, then it is all right if they use tobacco. *
- (vi) If the teacher has bad habit, how can he could be ideal for his students?*

(vii) At least they should not use tobacco before students?*

(viii) This is very wrong. Student can be affected by second-hand smoke.*

(4) Concern among students regarding tobacco use and its harm:

(i) My friend is having difficulty in opening his mouth .The doctor said it is due to use of Gutka. *

(ii) All is nonsense. My father has been using Khaini since 30 years. He has not any disease.**

(iii) Last year my uncle died of cancer. I have heard tobacco caused cancer.*

(iv) He is right. The doctor instructed my father to stop tobacco use completely in case of heart disease and high B.P.*

(5) Community concern regarding harmful effects of tobacco use:

(1) Are you making Khaini give me to. I missed my packet.**

(2) Another person, uncle, you both did not know use of tobacco is very harmful and may cause cancer and heart disease? *

(3) Yes, my uncle died by cancer at the very early age of 38, definitely it is harmful to health.*

(4) What are you saying? Rajaram Babu(Name) also died of cancer. He never used tobacco in his life.**

(5) In a radio programme a doctor has given a speech about tobacco cancer relationship is brief last evening. Really that was very interesting and informative. *

(6) Community concern regarding economic aspects of tobacco

(i) My two sons are user of Gutka. I have to pay them more pocket money otherwise they become angry and steal money. Gutka should be banned completely by the government.*

- (ii) Don't mind. We also use Khaini. They are young after sometimes they will be all right. **
- (iii) I have spent 1/3rd of my money on my sick family members. One is suffering through cancer. My mother is heart-patient doctor advised both of them not to use tobacco at all. Alas, they had not this bad habit in the past. *
- (iv) What we are earning for? If tobacco gives you happiness, definitely we should use it**

(7) Concern among tobacco merchants, shops-keepers:

- (1) Sale of Gutka is increasing very fast. I am thinking to establish another Gumti^{A1} for my brother.**
- (2) Why are you selling Gutka to my younger brother? If you will do this again, I will teach you a lesson. *
- (3) No, tobacco marketing is not a profitable business in this village. I have to look for other work.*

(8) Concern regarding promotion of any particular brand of tobacco product by community people and people involved in business of tobacco:

- (1) Look, this is a new brand of gutka, very effective. Is there a scheme on it? 1 free on 4 pouches. Taste it once. **
- (2) Parag gutka is from Kothari Company. It is most reliable and less harmful. **
- (3) You decide what brand you want to purchase. I have all brands of gutka and cigarette and Khaini. **
- (4) In Mohan's shop I got very fine Khaini. **

(9) Social concern about use of Laldantmajan and Gul:

- (1) Last night my wife threw out my gul pack. Please do not use it*
- (2) Due to pyorrhoea I started use of lalmanjan and it is very effective**
- (3) Someone was saying lalmanjan contains tobacco. it should be harmful to children.*
- (4) No. Lalmanjan contains only herbal things.**
- (5) I do not have idea. About lalmanjan. I don't use it.**

(10) Concern in society about use of ganja and tobacco by sadhus near temple.

- (1) They are not doing well. Other persons can adopt the habit from them.*
- (2) Don't mind. This is Prasad of Lord Shiva.**
- (3) It is very common every where. I don't have problem.**

(11) Concern among players and viewers regarding harm of tobacco:

- (1) Player- My coach instructed me not to use tobacco to maintain the stamina and health.*
- (2) I am very tired. I need a bit of tobacco.**
- (3) Look these forwards. They are very fast. They have very much stamina - yes they never used tea, coffee, tobacco or wine. *

(12) Social concern regarding cultivation of tobacco:

- (1) It is very beneficial. It does not need pesticides and its' marketing is very easy. **
- (2) What do you think? It is a harmful crop for society. We should look for other options?*

(13) Social concern about Cessation:

- (1) It is worthless. They are wasting time **
- (2) Really it is needed. We got knowledge about the relationship between tobacco and cancer.
We will get more information through this project regularly.*
- (3) Government should start cessation regularly. It will be very useful to youth.*

(4) What is it? I do not know about it?***

(14) Concern about harmful effects of second-hand smoke:

(1) The day before yesterday I went to town, there I watched on T.V. about second-hand smoke and effects.*

(2) No, I do not have any idea.***

(3) In cities every person got smoke in his lungs from vehicles. Some cigarettes or bidis what harm can they do?***

APPENDIX 2B

INDICATORS BY INTERACTIVE APPROACH

(1). Interactive discussions took place between health facilitators and different groups of people in different places: (a). On turnings and squares of roads (b) on public lanes and roads (c) During social programmes (d) in schools (e) in temples and mosques (f). In fields (g) in health care centers of the government (h) in markets and small townships (g) In playgrounds (i) Small industries of villages and petty businessmen (j) vehicle drivers in jeeps, cars, buses, trucks, rickshaws etc. (k.) Nearby rivers and ponds.

2. GROUP OF PEOPLE PARTICIPATED IN INTERACTIVE SESSIONS

- (1) People coming and sitting on road turnings and squares
- (2) People coming from public lanes and roads
- (3) People who are participating and attending social programmes
- (4) Teachers and staff and students of various schools
- (5) The Priests, saints and maulana of temples and mosques and other persons present there
- (6) People working in fields and other persons there
- (7) Doctors, nurses, compounders and Health workers and patients and also from their family members in health centres of the government of private
- (8) Shopkeepers, people who are shopping and people visiting small markets
- (9) The owner, managers and workers of small factories and industries and every person there
- (10) Players and audience in playgrounds
- (11) Auto- rickshaws, bus, trucks, jeeps and cars: drivers and other staff and passengers
- (12) People bathing and working in rivers and ponds and other people presents nearby it.

(3). THEME OF INTERACTIVE SESSIONS

- (1) Do many people use tobacco here, or are the numbers of people using it is small?
- (2) In this village, Is it the old males who mostly use tobacco or the younger males are also using it in abundance?
- (3) Does the young generation here use tobacco in lesser amount or in abundance?
- (4) During evening, do people use Ganja (chilam) in temple and mosques and for what duration do they use it?
- (5) Do the ladies and girls use tobacco, pan masala and other such items etc. in lesser amount or in more amount?
- (6) We have come to know that the tradition of using hukka has decreased to a great extent. Is this true here also?
- (7) Here for cleaning teeth, is Datun (wood stick) only used or is other tooth-paste, Red-tooth powders or Gul also used by a large amount of people?
- (8) In the schools located here, do school children, teachers, other staff members use tobacco etc?
- (9) Do the doctors and other medical workers in Health centers here use a large amount of tobacco?
- (10) Do people use tobacco along with their parents and elder or younger brothers / sisters?
- (11) Do people here chew/apply tobacco or smoke in front of the elderly persons of the society?

INDIVIDUAL THEME AND DEFINITIONS

Answers obtained during interactive discussions on every individual theme were defined in the following manner:

(1) Are most of the people addicted to tobacco or only few people are addicted?

Answer: - (a) Mostly-High prevalence of tobacco use

(b) Much people-Moderate Prevalence

(c) Few people- Low Prevalence

(d) Very few people- Very low prevalence

(2) Are most males addicted to tobacco or only a few males are addicted?

Answer:- (a) Mostly-High prevalence of tobacco use

(b) Much males-Moderate Prevalence

(c) Few males- Low Prevalence

(d) Very few males- Very low prevalence

(3) Do the girls and women also use tobacco?

Answer:- (a) Mostly-High prevalence of tobacco use

(b) Much females -Moderate Prevalence

(c) Few females - Low Prevalence

(d) Very few females- Very low prevalence

(4) Asking the doctors and the co-workers in the hospital, what percentage of tobacco related diseases you treat?

Answer (a) Mostly-High prevalence of tobacco use
(b) Much people-Moderate Prevalence
(c) Few people- Low Prevalence
(d) Very few people- Very low prevalence

(5) Asking the priests, saints, in the temple, mosque etc. whether people take Ganja in the morning, evening and for how long they take?

Answer (a) All the time-High prevalence of tobacco use
(b) In evening only-Moderate Prevalence
(c) Sometimes seen only- Low Prevalence

(6) What percentage of people apply tobacco in the form of Lal dantmanjun, gul etc?

Answer: - (a) Mostly-High prevalence of above mentioned tobacco products
(b) Much people-Moderate Prevalence
(c) Few people- Low Prevalence
(d) Very few people- Very low prevalence

(7) Do all the doctors and the medical workers use tobacco?

Answer:- (a) Mostly-High prevalence of tobacco use among doctors and staff

- (b) Much people-Moderate Prevalence
- (c) Few people- Low Prevalence
- (d) Very few people- Very low prevalence

(8) Do the teachers, workers, students in the schools use tobacco too much or less?

Answer: -(a) Mostly-High prevalence of tobacco use

- (b) Much people-Moderate Prevalence
- (c) Few people- Low Prevalence
- (d) Very few people- Very low prevalence

(9) Do the people use tobacco with their elder-younger brothers and parents?

Answer: - (a) Mostly-Acceptable social norm

- (b) Much people-Becoming social norm
- (c) Few people- In the process of becoming social norm

APPENDIX 2C

INDICATORS THROUGH SILENT WATCH

THEME

1. Rough estimation of tobacco use
2. Tobacco use in different age groups
4. Tobacco use among different professional group school personnel in school.
5. Tobacco use among youth and adolescents
2. Density of tobacco shops.
6. Tobacco crops
7. Tobacco Advertisement and promotion
8. Anti tobacco message
9. Lal dantmanjan
9. Anti tobacco activity
- 10 Tobacco use in social function
10. Tobacco small scale industry.
- No. of tobacco butts and sachets

Places where Health facilitators silently watched

- i). Weekly markets and local markets ii). School iii) Square iv). Health center v). Tobacco shops vi) Miscellaneous stores vii). Temples / Mosques / Church viii) In field and farm house ix). Meeting Community people in morning on road x) on road xi) in community building xii) Private clinics and hospitals xiii) During marriage ceremony xiv). On the occasion of death feast.

SILENT WATCH ITEM AND PLACEWISE

i). Weekly and local Harts

- a. Grade of Tobacco sale
- b. Sale of individual brands
- c. Tobacco use among people of different age
- d. No. of tobacco shops.
- e. Advertisement and promotion.

ii). In school and its surroundings.

- a. No. of cigarette and bidi, butts and Gutka Pouches.
- b. Tobacco use by school personnel in lunch and other periods.

iii). On chowks (Squares)

- a. No. of Gutka pouches
- b. Sign of Betel quid spillage.
- c. No. of cigarette and bidi Butts
- d. No. and ---- of tobacco users people

iv) Health center

- a. How many health personnel are tobacco users?
- b. How many patients are tobacco users?
- c. How many guardians (attendants) are tobacco users.
- d. No. of posters and hoardings against tobacco use.

V). Tobacco shops

- a. Advertisement related tobacco use enhancing
- b. Hoarding related tobacco use enhancing
- c. Grade of tobacco selling
- d. Age of tobacco users and buyers

vi). Miscellaneous store

- a. No. of miscellaneous stores where tobacco is sold
- b. Ratio of selling of different types of tobacco
- c. Whether tobacco is displayed or not
- d. Tobacco advertisement displayed
- e. Hoardings (bill boards) related tobacco

vii). Temple / Mosque / Church and their surrounding

- a. No. of ganja and bhang users
- b. Age of ganja and bhang users

viii). In field and farm houses

- a. Cultivated areas of ganja and bhang

ix). How many people use lal dantmanjan or gul etc

- a. Which type of Lal dantmanjan do most of people use?
- b. Which type of Lal dantmanjan do most of people use?

DEFINITIONS

(1) By number of buyers

- a Large number of buyers High prevalence
- b Moderate number of buyers Moderate prevalence
- c Less number of buyers Low prevalence

B By sale of particular tobacco product

- Particular tobacco product selling in huge quantity Use of X product very high
- X tobacco product selling in particular age group Use of X product in particular age group high

C By style of purchase of particular tobacco product

- In bundles- Chronic addict or heavy user
- 2-3 in number -moderate user
- Single

D By estimating the use in different age group

- All age groups people seen using and buying tobacco High prevalence
- Old and middle age groups people seen using and buying tobacco Moderate prevalence
- Old age groups people seen using and buying tobacco Low prevalence

E By density of tobacco shops

- a. Many tobacco shops seen in every thorp streets and chowk - High prevalence
- b. Few tobacco shops seen in every thorp streets and chowk Moderate prevalence
- c. Tobacco shops in limited thorp streets Low prevalence

F By density of tobacco advertisements

- a. Tobacco advertisement seen in large number-No legal framework on tobacco control
- b. Tobacco advertisement seen in less number- Legal framework without proper enforcement

G Density of tobacco residue

- a. 3-4/100Sq feet High prevalence
- b. 1-2/100Sq feet A.3-4/100Sq feet High prevalence
- c. 1-2/ entire area low prevalence

H Tobacco use in schools

- a. Students and teachers not found using tobacco and information displayed -Existing Policy
- b. Students and teachers seen using tobacco -No Policy
- c. Only a few teachers seen using tobacco- Policy without proper enforcement

I Tobacco use in health settings

- a. Doctors, staff, patients and attendants seen using tobacco - Health settings without policy
- b. Few patients and attendants seen using tobacco - Health settings without enforcement
- c. Policy displayed but Cigarette butts etc found Health settings without proper enforcement
- d. Policy displayed and no one found using tobacco - Health settings with proper policy

J Availability of tobacco in general stores

- 1. In almost all stores- High prevalence
- 2. Some store- Moderate prevalence

APPENDIX 3

QUESTIONNAIRE FOR THE STUDENTS

1. Do you use tobacco in any form?

Yes

No

2. Do you wish to start tobacco in future (one or two years) later?

Yes

No

3. Do you prevent anyone who smokes near you?

Yes

No

I do not care

4. Are you being taught on harmful efforts of tobacco in your class during this year.

Yes

No

I do not care

5. Had you been practiced/ demonstrated skill building programs for refusing tobacco or saying no to tobacco in your class?

Yes

No

6. Have you heard that the other schools are having anti tobacco policy?

Yes

No

APPENDIX 4

QUESTIONNAIRE FOR COMMUNITY SURVEY

(1) Since how long have you been using any tobacco product?

- A. One year
- B. More than one year
- C. More than 5 year
- D. More than 10 year
- E. I don't use tobacco

(2) Have you ceased to use tobacco?

- A. Yes
- B. No

If no skip to q6

(3) When did you cease to use tobacco?

(In the month of)

(4) Are you still not using tobacco in any form?

- A. Yes
- B. No

(5) When did you start reusing tobacco?

(In the month of)

(6) Have you decreased tobacco use? *Ask about the previous quantity and recent quantity. If there is decrease by one third than tick yes.*

- A. Yes

B. No

If no skip to q6

(7) When did you decrease tobacco use?

(In the month of)

(8) Are you still continuing with decreased dose of tobacco?

A. Yes

B. No

(9) Do you believe adolescents and youths should not use tobacco?

A Definitely not

B Probably not

C Probably yes

D Definitely yes

(10) Do you believe that tobacco is addictive?

A Definitely not

B Probably not

C Probably yes

D Definitely yes

(11) Do you believe that tobacco causes cancer?

A Definitely not

B Probably not

C Probably yes

D Definitely yes

(12) Do you believe that tobacco causes impotence?

A Definitely not

B Probably not

C Probably yes

D Definitely yes

(13) Do you believe that alternative crop may give the same cost benefit?

A Definitely not

B Probably not

C Probably yes

D Definitely yes

(14) Do you believe that law for smoking ban is correct?

A Definitely not

B Probably not

C Probably yes

D Definitely yes

(15) Do you believe that tobacco control is essential for public health?

A Definitely not

B Probably not

C Probably yes

D Definitely yes

(16) Do you believe that harm caused by tobacco use is dose dependent?

A Definitely not

B Probably not

C Probably yes

D Definitely yes

(17) Do you know that tobacco use in dental care product is prohibited by Govt. law?

A. Yes

B. No

C. I don't know

(18) Do you know that Supreme Court of India and Government of India has banned smoking in public places?

A. Yes

B. No

C.I don't know

(19) Do you know that advertisements, sale and Use of Gutka have been banned by Government of Bihar?

A. Yes

B. No

C.I don't know

(20) Do you know that use of tobacco is prohibited in Government settings?

A. Yes

B. No

C.I don't know

(21) Do you know that sale, use and advertisement of gutka is banned by Govt. of Bihar

A. Yes

B. No

C.I don't know

APPENDIX 5

BIHAR GOVERNMENT ORDER ON GUTKA BAN

Government of Bihar
Health Department
NOTIFICATION

¼ H Patna, dated-31/03/2003

15/Kha-24 – 06/02-387 (15)

No. - WHEREAS rule 42 (ZZZ) of the Prevention of Food Adulteration Rules, 1954 (37 of 1954), framed under the Prevention of Food Adulteration Act, 1954 (37 of 1954) hereinafter referred to as “the said Act”), provides that every package of chewing tobacco shall bear a label to the effect that “Chewing of tobacco is injurious to health”;

AND WHEREAS rule 42 (ZZZ) (3) of the Prevention of Food Adulteration Rules, 1955, provides that every package of PAN MASALA and advertisement relating thereto, shall carry the warning namely “chewing of Pan Masala may be injurious to health”;

AND WHEREAS consumption of preparation containing tobacco or not containing tobacco commonly known as “GUTKA” or “PAN MASALA”, or by whatever name called, is injurious to health;

AND WHEREAS school going children and college students easily fall victim to the consumption tobacco or by whatever name called and there is apprehension of their getting addicted to these harmful food articles;

AND WHEREAS it is necessary, in the interest of public health, to take immediate effective measures to prevent the general public from being addicted to “GUTKA” or “PAN MASALA”, containing tobacco or not containing tobacco or by whatever name called;

AND WHEREAS clause (iv) of section 7 of the said Act empowers the Food (Health) Authority to prohibit the sale of any article of food for the time being in the interest of public health;

AND WHEREAS the Food (Health) Authority of the State of Bihar as stated above, is satisfied that, the consumption of any article of food, containing tobacco or not containing tobacco, commonly known as “GUTKA” or “PAN MASALA” or by whatever name called, is injurious to health; and it is necessary in the interest of public health, to prohibit the sale of article of food containing tobacco or not containing tobacco commonly known as “GUTKA” or “PAN MASALA”, or by whatever name called under clause (iv) of said section.

THEREFORE, in exercise of the powers conferred by clause (iv) of Section 7 of the Prevention of Food Adulteration Act, 1954 (37 of 1954), the Director-in-Chief, Health Services, who is also Food (Health) Authority, hereby directs that no person shall himself or by any person on his behalf, shall manufacture for sale, or store, sell or distribute “Gutka” or “Pan Masala”, containing tobacco or not containing tobacco, or by whatever name called, for a period of five years with effect from 1.4.2003.

Order:- It is hereby ordered that this notification be published in the state official gazette extra-ordinaire for information to general public.

(Dr (Capt.) Anil Kumar),
Director-in-Chief, Health Services-Cum-
Food (Health) Authority, Bihar.

Memo No. 15/Kha-24-06/02-387 (15)

¼ H. Patna, dated – 31/03/2003

Copy to Superintendent, Government press, Gulzarbagh, Patna-7 for Publication in official gazette extra ordinaire issue. It is requested to provide 500 Copies of this notification to the Health, Med. Edu. & F. W. Department.

Copy to A. G, Bihar/All Department/All Head of the Department/All Divisional Commissioners/All District Officers/ All Civil Surgeon-Cum- Chief Medical Officers/Chief Minister Secretariat/Bihar Legislative Assembly/Bihar Legislative Council Secretariat for information & necessary action.

Copy to Minister/State Minister, Health/Secretary to Commissioner & Secretary, health/Additional Secretary, Health for information.

Director-in-Chief, Health Services-Cum-
Food (Health) Authority, Bihar

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