

SECTION A
TABLE OF CONTENTS

| S. No | Title | Page Number |
|--------------|--|------------------------|
| 1 | SECTION A Table of Contents | 1 |
| 2 | SECTION B -Goal & Objectives -Technical Approach -Detailed Work-plan and Deliverables Schedule -References | 2 3-8 9-11 12 |
| 3 | SECTION C Organizational Detail and Staff Capacity | 13-15 |
| 4 | SECTION D Detailed Budget (Attached as excel) | |
| 5 | SECTION E Bio sketches | 16-25 |
| 6 | SECTION F -Letter of Support (Ministry of Health, Government of India) -Letter of Support (Directorate of Public Health, Odisha) -Letter of Support (Rajasthan Cancer Foundation) -Letter of Support (Barts and London School of Medicine and Dentistry, Queen Mary University) | 27 28 29 30 |

SECTION B

Goal

To strengthen the tobacco cessation component of India's 'National Tobacco Control Programme' (NTCP) by building capacity of physicians working in primary and secondary health care for providing evidence-based tobacco cessation interventions

Objectives

- To design and evaluate a training program to assist physicians in primary and secondary health care to deliver an evidence-based brief tobacco cessation intervention in health care settings in selected districts of Odisha and Rajasthan
- Create a resource network and training model for cessation that can be advocated for scaling at pan-India level
- To build the capacity of NTCP state officials to advocate for the provision of evidence-based tobacco cessation interventions at state and district level

Technical Approach

Current assessment of need in target area

In India, over 1,000,000 people die every year due to diseases related to smoking alone.¹ The myriad varieties of tobacco products and high use of tobacco in India makes the situation more complex.² The Global Adult Tobacco Survey (GATS) India Report 2009-10 estimates 35% of India's adult population (aged 15 years and above) use tobacco in some form or other.³ The prevalence of tobacco use is high in rural areas. Given the higher prevalence of tobacco use in rural populations, extending tobacco cessation services is imperative and are more likely to be strengthened in a cost effective manner when linked with existing primary health care. To combat the tobacco epidemic, the 'National Tobacco Control Programme' has been launched by Government of India. NTCP has laid special emphasis on capacity building of physicians and other health care providers in tobacco cessation.⁴ Physicians who are in-charge of primary and secondary health care act as a first point of consultation for all patients within the health care system. This provides many opportunities to identify people who use tobacco and deliver brief tobacco cessation interventions. However, recent data from GATS, India (2009-10) show that less than half of smokers who visited health care providers were advised to stop smoking.³

Odisha and Rajasthan represent two geographically different regions of the country. They are among the most backward states with a large rural population (Odisha-83%; Rajasthan: 75%)⁵ with extreme rural poverty.⁶ There is also considerable regional variation in tobacco use. For example the prevalence of tobacco use in the state of Odisha and Rajasthan is 46% and 32% respectively. The GATS, 2009-10 data for Odisha revealed that although about 50% of tobacco users visited health facilities, only 29% of smokers and 16% of smokeless tobacco users were advised by health care providers to quit. In Rajasthan, 28% of tobacco users visited health facilities. Of these tobacco users who visited health facilities, only 40% of smokers and 29% of smokeless tobacco users were advised by health care providers to quit.³ This highlights a huge gap in the provision of tobacco cessation services in India in public health services but it also presents an important opportunity to provide better help for tobacco users to quit. Health systems in Odisha and Rajasthan present two different health systems of the county. The learnings from these two different microcosms would

apply to majority of other states of India. These are some of the reasons why Odisha and Rajasthan has been identified for the present project.

Published data from India suggests that physicians lack skills in delivering brief intervention and counseling in tobacco cessation. For example a study by Vargehese et.al. (2008) showed that physicians, in general, lacked knowledge of tobacco cessation protocols and felt uncomfortable or at a loss in their ability to handle needs of their patients for tobacco cessation.⁷ A study conducted in Odisha in 2013 revealed that only 8% and 10% of physicians use behavioral techniques and educational aids for tobacco cessation.⁸ Similarly data from a study conducted in Andhra Pradesh and Gujarat in 2011 highlighted a lack of preparedness of primary care physicians to deliver brief tobacco cessation interventions.⁹

One of the reasons identified for such lack of preparedness by physicians is the fact that there are no well-established evidence-based certified tobacco cessation training programs in the country. A recent evaluation of the 'National Tobacco Control Programme' in India reported an urgent need for training in tobacco cessation among the health care providers.¹⁰ Findings from the Global Health Professionals Students Survey (GHPSS) showed a general lack of training for in patient cessation counseling techniques among dental, medical, nursing and pharmacy students¹¹. Data from southern India highlights that more than 90% of the medical and nursing students reported that the current training in their curriculum in tobacco control and cessation was minimal and they were interested in further training.¹² We believe that this training gap is a major contributing factor to the low rates of brief interventions delivered by physicians and highlights the urgent need for investments in both training physicians for delivering brief tobacco cessation interventions, as well as creating a critical number of master trainers and resource networks for long term sustainability. This has been established in a pilot project on skill building of medical students in tobacco cessation in Odisha. The project demonstrated an improvement in medical students' inquiry into tobacco use among patients.¹³

Faculty at the Public Health Foundation of India (PHFI) has been engaged in building capacity of physicians and other health care providers working at different levels in public health system in tobacco cessation. For example a recently concluded project called STEPS (Strengthening of Tobacco Control Efforts through innovative Partnerships and Strategies) funded by Bill and Melinda Gates Foundation (BMGF) helped train a total of 150 master trainers, 1134 physicians and 3364 non-physicians (Counselors, ANMs and nurses, lab technician and pharmacists) in tobacco cessation techniques such as brief intervention and motivational counseling to enable them to deliver brief tobacco interventions effectively in the states of Gujarat and Andhra Pradesh. The Centre for Tobacco Control and Health Promotion (CTCHP) at PHFI also enabled delivery of online tobacco control training to a limited number of health professionals from different states.¹⁴ However, specific tobacco cessation interventions targeted at physicians have not been a part of these online efforts. We intend to use this opportunity to build expertise in the delivery of a hybrid (both online as well as offline) courses in tobacco cessation targeted specifically at physicians.

We will build on our past experiences and envisage that this project will address the gaps highlighted by our previous research. We propose to develop and nurture a group of master trainers and champions in tobacco cessation under the NTCP from across two states. These master trainers will also be trained to advocate for prioritization of cessation in tobacco control programs across the country.

Our long-term goal is to develop a selection of online-course options ranging from brief interventions to specialist tobacco cessation certificate courses delivered through CTCHP. We plan to use this funding to specifically focus on the development of a face to face brief intervention training program in conjunction with an online training curriculum.

Intervention Design and Methods

The project will have 3 phases:

Phase I – Development of the Training Program (1-6 months): During this phase we will

(1) Identify the participants

In this phase medical officer in-charge of primary and secondary health care in the two states will be identified from total number of physicians working in Department of Health in the selected districts. Selection will be done in consultation with state and district administration, as well as the willingness of Physicians to be part of the cessation efforts.

(2) Training needs assessment

We will invite physicians from the two states to complete an online training needs assessment survey. This will assess their current knowledge and practices of physicians in tobacco cessation as well as perceived barriers to providing tobacco cessation intervention. It will also gather information, from physicians, about what sort of cessation materials and training will enable them to intervene with tobacco users. This will help in generating and modifying themes and content of face-to-face and online training resource material.

In addition to the baseline survey, consultation will be conducted with the national and state level officials of Ministry of Health, researchers, academicians and Non Government Organizations (NGOs) working in tobacco control to both identify their interests as well as to develop a formal buy-in with them.

(3) Drafting the training program

Training will be rolled out at two different levels i.e. training of master trainers at state level and training of physicians at district level. Based on the inputs of baseline, as well as our experiences from project STEPS, the study team at PHFI in consultation with global and national experts will design the training program. The draft training content and materials, as well as methods of delivery, instructional techniques and evaluation will be shared and discussed with all relevant stakeholders. These stakeholders will include training participants, policy makers, academicians, researchers and experts in tobacco cessation.

Training sessions will be made participatory with the use of audio-visual training materials, case studies, and other resource materials which have been tested in our earlier work.¹¹¹¹ Such training sessions will provide an opportunity for a stimulating exchange of ideas and experiences among participants working in tobacco cessation regionally and nationally. These training activities will aim to provide health functionaries with a standardized evidence-based brief intervention model that can be incorporated into their routine practices to encourage and support patients to quit tobacco use.

(4) Development of a trainers resource pack

Based on the inputs obtained from the training participants, we will adapt existing cessation materials (posters, patient leaflets, and training modules) from previous work. We have

tested and evaluated these resource materials across 12 districts in 2 states in India in our previous work.

A trainer resource pack will be designed to support trainers in the delivery of the training program in brief intervention in tobacco control. The brief intervention includes 5A's approach (Ask, Assess, Advice, Assist and Arrange), which is the most commonly used intervention in tobacco cessation. The resource pack will have three purposes:

- To provide relevant resource material for training program in brief intervention and counseling in tobacco cessation
- To provide an evidence base to support this material
- To comprise a resource for trainers to guide further reading that will deepen their knowledge and understanding of the subject matter and related issues

(5) Planned delivery of the training program

We propose to use a hybrid model comprising of both face-to-face contact classes and online webinars and classes. The main advantage of hybrid model is the opportunity for trainers to make use of the features unique to each delivery environment that optimizes learning. It will also provide the flexibility needed to accommodate the varied busy schedules and professional development needs of health professionals.

The online training is a cost effective approach for reaching large number of health care providers. Efforts are currently underway to reach health providers worldwide through such strategies. There are some courses that focus on other aspects of tobacco control like advocacy and law enforcement of smoking ban. However, there is no such combination of online and face-to-face training program in tobacco cessation focused particularly on physicians in the country.

In the training program, participants will be paired with experienced, public health cessation experts and thus will also have access to a national network of tobacco cessation peers and champions with whom they can exchange ideas and share knowledge.

The contact classes will be delivered through local partnerships with PHFI state units, state training divisions, medical colleges and regional cancer institutes. On successful completion of assignment, certification will be provided to the participants by PHFI, NTCP and Queen Mary University of London.

We will use existing tobacco cessation resources available at CTCHP. We will also link resources available at CTCHP with the Global Bridges Network. This will help leverage the tobacco cessation efforts in India by enhancing exchange of knowledge and expertise among practitioners working in tobacco cessation across the globe.

Phase II – Delivery of the Training Program (7- 21months)

This phase would involve:

(1) Identification of master trainers

The master trainers will be health professionals drawn from NTCP, state health departments, training division of the National Health Mission, faculty of reputed medical colleges and regional cancer institutes who are currently working in NTCP districts in the country. It will help in building a cadre of experts in tobacco cessation. This phase will involve training of faculties of medical colleges which in the long run will pave the path for the introduction of a comprehensive tobacco curriculum to educate students on brief intervention in tobacco cessation.

(2) Training of master trainers

Training will be conducted by experts working in tobacco cessation at PHFI and national and regional institutes. The face to face training will be provided to master trainers at state level. The master trainer will be trained to provide evidence-based training to physicians. An emphasis will be made to train the master trainer on the importance of the trainees' communication skills and their role as a health care provider in promoting their patients active involvement in their decision to quit tobacco.

(3) Training of physicians

Training of physicians will be conducted by master trainers and experts working in tobacco cessation at regional institutes. The face to face training will be provided to medical officer at district level. The training will be complemented by an online training program. The online training program will help in reinforcing the training message.

At the end of training program the trainees will be available to:

- Identify the major clinical implications of tobacco and provide clear and accurate information surrounding tobacco use and dependence.
- Adapt and apply evidence-based screening and assessment tools and brief interventions for tobacco dependence.
- Integrate behavior change and counseling strategies into clinical practice with clients who are ambivalent towards behavior change.
- Adapt treatment plans for specific populations with high tobacco use prevalence and/or risk
- Contextualize tobacco use within a broader tobacco control policy framework
- Access additional clinical tools and resources to use in clinical practice and continuing professional development

Phase III – Evaluation of the Training Program (21-24months): A process evaluation will be undertaken to show how the training model was developed, modified, and implemented. This evaluation will also identify practical considerations that may need to be considered while scaling up this training program at a national level and adapting the resource pack in

different states. We also plan to roll out and use qualitative studies to understand the subtle nuances of the process that helped empower physicians to adopt cessation practices at the end of the project. A qualitative study among patients in a sub sample of practise areas will also be conducted to document any relevant changes in the practises of physicians from patient's perspective. This will help refine the model

Evaluation Design

A comprehensive evaluation strategy with process and outcome evaluation indicators is planned. The primary outcome indicators, and how we will measure these, are described below:

i) Number of trained physicians to manage tobacco cessation activities: We will record the number of physicians that are invited and complete the training activities. We will collect data on pre and post training change in knowledge, attitude and practices to measure the effectiveness of the training program.

ii) Relevance of the training content and materials: Trainees will complete a training feedback questionnaire at the completion of the training activities. Trainees will rate their interest and usefulness of the various training components.

iii) Effectiveness of the training: We will conduct an online baseline survey to determine the knowledge, attitude, practices and training need of physicians in tobacco cessation. This data will feed into our development phase. In order to determine the change in knowledge, attitude and practices of physicians an online survey will also be conducted after the training intervention.

The secondary outcomes will be:

i) Increased availability and provision of cessation services at health facilities: The training initiative intends to train a cadre of physicians in tobacco cessation at the district level. It will increase the availability and uptake of cessation services at the health facilities. We are recording such changes in knowledge and behaviour through both self-reported quantitative studies as well as qualitative studies.

ii) Development of sustainable partnerships: As the training activities will be conducted in regional training institutes of the states, this project will help in development of sustainable partnerships with the training institutes to deliver tobacco cessation trainings in the future.

iii) Increase in cessation practises of trained physicians: In order to understand whether training has an effect on clinical practice we will conduct a qualitative exit interview survey among the patients who use tobacco visiting a sub-sample of physicians before and after training. The exit interview survey will collect information on patients' tobacco use, views of support from the medical officer, if they were provided with advice to quit, and if so how likely they are to follow that advice. The same survey will be undertaken post training.

Sample Size Calculation

We aim to train around 800-1000 physicians from 10 selected districts in the state of Odisha and Rajasthan. The overall population covered in these districts is around 6 million.

The estimated proportion of the health care providers providing advice to tobacco users at the time of baseline in Odisha and Rajasthan is 0.22 and 0.35 respectively (Source GATS,2009-10 Data). The proportion change expected in the practices of physicians at the time of end-line is 0.32 in Odisha and 0.44 in Rajasthan (10% increase in practice). To detect this increase (90% power, alpha=0.05) we require a total sample of around 100 physicians in each state. Following formula has been used to calculate the sample size.

$$N = \frac{(Z_{1-\alpha/2})^2 p (1-p)}{d^2}$$

where

Z_{1-α}=the z score corresponding to a significance level (95% in this case)=1.96

d is 90% statistical precision of the estimates

P =the anticipated proportion of practice (10% increase in tobacco cessation practices)

Advocacy and Dissemination

Efforts would be undertaken with our partners in the state health departments to roll out the cascade training programs in the two states in the country. Even a modest success rate could have a large effect on the availability and uptake of cessation services in health care. This will make a valuable contribution to lowering tobacco prevalence in the selected districts of Odisha and Rajasthan. We will engage policy makers and program planners from the very beginning by partnering with the NTCP and Non Communicable Diseases division of the Department of Health in the state of Odisha and Rajasthan. The results of the study will be disseminated through peer reviewed publications, and policy notes which will be used for advocacy at various levels.

From policy perspective, the project will provide the critical evidence to inform policy both at the state as well as the country level. We reason that showcasing a well-developed and certified evidence-based training program will be the best advocacy tool and NTCP will itself be in a position to scale up such trainings at the national level. All these activities will eventually strengthen the 'National Tobacco Control Programme'. We have close linkages and ongoing collaborations with NTCP, Ministry of health and family welfare, Government of India, State Institutes of Health and Family Welfare (SIHFW), regional cancer institutes and foundations. Many of these partner institutes are apex level training and research organization of the state government and have great influence in scaling up of training programs. The Indian Institutes of Public Health, Bhubaneswar, a PHFI affiliated institute in the state of Orissa is involved in many capacity building activities of physicians and other health care providers. It is uniquely positioned to engage with physicians and senior functionaries working in ministry of health. These centers will serve as resource center both in the project period and in the future for sustained impact of the project. We have already received approval and support letter from the NTCP division of Ministry of Health and

Department of Health Odisha. We are in process of seeking approval from Department of Health, Rajasthan and already have the Rajasthan Cancer Foundation as a partner.

Advocacy component will make efforts at engaging policy makers and program planners from the beginning so that cessation plays a prominent role in tobacco control policies and is firmly enshrined in the NTCP. There is interest for expanding capacity in cessation within the NTCP by both Government of India as well as state governments. We also plan to reach out to the large number of private health care providers in the country through a business model through our well established training division at a later stage. We believe through these efforts the project will serve as a catalyst and resource reservoir for mainstreaming cessation in health care throughout India very much along the lines of the global bridges network. We will link this work also to our current work in building a network of tobacco control experts in India so that the national network is able to learn and share from the well-established global bridges network. The network that we are building aims at connecting academicians, researchers, practitioners and policy makers on one platform. Our key findings from the formative research on establishing a tobacco control network in India validates the fact that there is an interest amongst different health care professionals in learning about cessation and integrating it in their clinical practises. Through this project we envisage that we will use resources from the global bridges network in informing and updating our existing resources in cessation. This will help in the building a structured tobacco dependence treatment services in the country based on both national as well as global evidence.

Detailed Work-plan and Deliverables Schedule

The project will involve three phases i.e. Phase I: Development of the training program (1-6 months); Phase II: Delivery of the training program (7-21 months); and Phase III: Evaluation of the training program (22-24 months)

In Phase I, training participants will be identified, training need of participants will be assessed and a training program will be drafted. Based on the inputs from the participants a resource pack will be adapted and designed. At the end of this phase, training participants will be identified and resource pack will be designed.

Phase II will involve delivery of the training program. In this phase master trainers will be identified and trained in brief intervention in tobacco cessation. Master trainers will further conduct training of physicians at district level. At the end of this phase a total number of 50 master trainers and 800-1000 physicians will be trained in brief interventions in tobacco cessation.

Phase III will involve evaluation of the training program. Evaluation will be based on number of physicians trained in brief intervention in tobacco cessation and effectiveness of the training program. Effectiveness of the training program will be measured by change in knowledge, attitude and practices of physicians in tobacco cessation before and after training. It will be measured through an online survey conducted before and after training activities. A qualitative exit interview survey will also be conducted before and after the training program to determine the practices of physicians. In this phase, advocacy efforts

would be made to disseminate the outcomes of the project to the stakeholders and policy makers.

| S. No | Phase | Work Plan | Months | Deliverables |
|-------|---|---|-------------|--|
| 1 | Phase I Development of the Training Program (1-6 months) | Identification of the training participants | 1-2 months | A listing of 800-1000 physicians done |
| | | Training need assessment | | Baseline report for KAP generated Consultation report generated |
| | | Drafting the training program | 3-4 months | Training program finalized |
| | | Development of a trainers resource pack | 5-6 months | Training resource pack finalized |
| 2 | Phase II Delivery of the training program (7-21 months) | Identification of master trainers | 7-8 months | A listing of 50 master trainers |
| | | Training of master trainers | 9-21 months | A total of 50 master trainers trained in brief intervention in tobacco cessation at state level |
| | | Training of physicians | | A total of 800-1000 physicians trained in brief intervention in tobacco cessation at district level |

| | | | | |
|---|--|--|--------------|---|
| 3 | Phase III Evaluation of the Training Program (22-24months) | Process Evaluation | 22-24 months | Process evaluation report generated |
| | | Evaluation of the training participation and content | | Training evaluation report generated |
| | | Advocacy and Dissemination | | Policy note prepared and disseminated Advocacy workshop report conducted |

Note: Text marked with bold has been linked with the budget

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