

| 8th Annual Report

2021-2022

Healis Sekhsaria

Institute for

Public Health



***“To make difference globally in public health
through excellence in Research, Learning,
Teaching and Capacity building”***

Research | Learning | Teaching| Capacity Building

Message from the Directors

Dear Friends,

It is our great honour to share with you the Healix Annual Report 2021-22. This report comes to you with pride, as it is a compilation of our major accomplishments and our experiences from the past financial year. Healix has completed sixteen years. Institute vision is to advance public health through innovative science and evidence based research recommendation. To accomplish its vision, this year Healix has 3 new project, 6 projects in ongoing stage and 3 in data analysis phase. In addition to research, during this year, Healix has produced about 14 research publications in peer reviewed international journals.

Thank you all for your continued support on our journey!

Sincerely,

Dr. Prakash C. Gupta



Dr. Mangesh S. Pednekar



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About Healix

Healis Sekhsaria Institute for Public Health is a Non-profit Organization that aims to advance public health in India by undertaking timely high quality population based epidemiological research since 2004. Since its inception the organization is committed to improving the public health in India and in other LMIC countries addressing important public health questions and facilitating and guiding the translation of research findings into policies/programs at national level. It is among the few institutes that are solely dedicated to public health research in India.

The Institute was registered on April 29, 2005 under section 25 of the Companies Act, 1956 [corresponding to section 8 of the Companies Act, 2013 ('the Act')] as a company limited by guarantee and not having a share capital. The Institute is registered under section 12A of the Income Tax Act, 1961 vide Registration No. 39490 dated July 25, 2005.

Healis Vision

“To make difference globally in public health through excellence in Research, Learning, Teaching and Capacity building”

Goals and Objectives

- ⊕ To undertake timely, quality, and population-based epidemiological research that addresses important public health issues.
- ⊕ To facilitate the translation of research findings into policies and programs at national and international levels

About Healis

Healis works in collaboration with leading National and International Health and Research organizations. Heal is operating from the premises of its own situated at MIDC, Mahape, Navi Mumbai since January 2015.

Registrations & Recognitions

Institutional Ethics Committee (IEC) is registered with National Institutes of Health and has Federal Wide Assurance (FWA).

Healis recognition as a Scientific and Industrial Research and Development Organization (SIRO) by Department of Science and Technology, Ministry of Science and Technology. For CSR recognition, Heal is also empanelled with the Tata Institute of Social Sciences CSR Hub and Guide Star India.

Donation

Healis is registered U/S.80-G(5)(i)(a). Also have Permanent Registration of FCRA Act 1976 since April' 2009 vide registration No.083781138

Abbreviations

ACC	Asia Cohort Consortium
ACTREC	Advanced Centre for Treatment, Research and Education in Cancer
ASPH	Arnold School of Public Health
CDC	Centers for Disease Control and Prevention, USA
CFI	Cancer Foundation of India
CGHR	Center for Global Health Research
COTPA	Cigarettes and Other Tobacco Products Act, 2003
CTFK	Campaign for Tobacco Free Kids
DFCI	Dana Farber Cancer Institute, Boston, USA
DGHS	Directorate General of Health Services
FDA	Food and Drug Administration
FSSA	Food Safety and Standard Act
FWA	Federal Wide Assurance
GATS	Global Adult Tobacco Survey
GBD	Global Burden of Disease
GOI	Government of India
GSPS	Global School Personnel Survey
GTSS	Global Tobacco Surveillance System
GYTS	Global Youth Tobacco Survey
HSPH	Harvard School of Public Health
IARC	International Agency for Research on Cancer
ICMR	Indian Council of Medical Research
ITC	International Tobacco Control Project
IUATLD	International Union Against Tuberculosis and Lung Disease



Abbreviations

MCGM	Municipal Corporation of Greater Mumbai
MLA	Member of Legislative Assembly
MMC	Mumbai Municipal Corporation
MOHFW	Ministry of Health and Family Welfare
TCP	(International) Tobacco Control Project,
India	
TIFR	Tata Institute of Fundamental Research
TMH	Tata Memorial Hospital
VoTV	Voice of Tobacco Victims
WHO, India	World Health Organization, India Office
WHOSEARO	World Health Organization, South-East
Asia	
MP-VHAI	Madhya Pradesh Voluntary Health
	Association
MWTCS	Mumbai Worksite Tobacco Control Study
NCD	Non Communicable Disease
NCI	National Cancer Institute, USA
NGO	Non Governmental Organization
NIH	National Institutes of Health, USA
NSF	Narotam Sekhsaria Foundation
PHFI	Public Health Foundation of India
SBF	Salaam Bombay Foundation
SEAR	South-East Asian Region (of the WHO)
LMIC	Low Middle Income Countries



Healis Board of Directors

Dr. Prakash C. Gupta

Dr. Prakash C. Gupta is the Director of Healis. He is also an Adjunct Professor, at the Department of Epidemiology and Biostatistics, Arnold School of Public Health, University of South Carolina, USA and Visiting Scientist at the Harvard University, USA. He is a recipient of Luther Terry Award from the American Cancer Society for Exemplary Leadership in Tobacco Control in the category of Outstanding Research Contribution.

Dr. Mangesh S. Pednekar

Dr. Mangesh S. Pednekar is Director of Healis. He is also a visiting Scientist at the Department of Society, Human Development, and Health, Harvard School of Public Health, USA and Visiting Faculty, Tata Institute of Social Science, Mumbai, India. He is also a panel evaluation member of S. P. Jain Institute of Management and Research, Mumbai and guest lecturer at K J Somaiya Institute of Management, Mumbai.

Healis Board

Prof. P. V. S. Rao

Prof. Rao is past President of the Bombay Association for the Science Education, past President and Fellow of the Computer Society of India, Distinguished Fellow of the Institute of Electronics and Telecommunication Engineers, Fellow of the Indian Academy of Sciences, the Indian National Science Academy, and Indian National. He is recipient of the Padma Shri (1987) from the President of India, the Om Prakash Bhasin Award (Electronics and Telecommunications 1987), the VASVIK (1987) awards [Electrical and Electronics (combined) for 1985] and the Vikram Sarabhai Research Award (1976).





Institutional Ethics Committee



Healis Institutional Ethics Committee (IEC) consists of 12 members, out of which nine are external members and three are from Healis. The committee is multidisciplinary and multi-sectoral in composition as per NIH and ICMR guidelines and maintains gender equity. This body has two functions, one is to assess the compliance of the research proposals with the protection of human subjects' guidelines and the other is to assess the scientific value of the studies.

The Chairperson of the Committee, a basic medical scientist, with many years of scientific experience, is from outside the Institution so that the independence of the Committee is maintained. Other members are a mix of medical / non-medical, scientific and non-scientific persons including a housewife to reflect differing viewpoints. The Committee is highly qualified, through the experience and expertise of its members, and the diversity of its member backgrounds, to foster respect for its advice and counsel in safeguarding the rights and welfare of human subjects in research.

Institutional Ethics Committee

List of Members during 2021-2022

- 1. Dr. Daniel Joseph, Chairman, Professor, MUHS*
- 2. Dr. Pankaj Chaturvedi, Oncosurgeon, TMH*
- 3. Dr. Prakash C. Gupta, Epidemiologist, Healix*
- 4. Dr. Mangesh S Pednekar, Epidemiologist, Healix*
- 5. Ms. Farida Poonawala Tata, Advocate*
- 6. Ms. Cecily Ray, Epidemiologist, Healix*
- 7. Ms. Manorama Agarwal, Housewife*
- 8. Ms. Tshering Bhutia, Social Scientist, SBF*
- 9. Dr. Rajendra Agarkar Medical Scientist*
- 10. Dr. Sabita M. Ram, Dentist, Dean, MGM*
- 11. Dr. Sharmila Pimple, Professor, TMH*
- 12. Dr. Raju Jotkar, Medical Scientist*

International Collaborators

Healis work is carried out in collaboration with leading national and international organizations leading to publications in peer-reviewed journals and resulting in key policy level actions to improve public health, epidemiological research, tobacco control and dissemination and capacity building.

April 2021- March 2022

1. [Harvard School of Public Health Boston, DFCI , USA](#)
2. [University of Michigan, USA \(UM\)](#)
3. [University of Waterloo, Canada](#)
4. [University of Minnesota Cancer Center, USA](#)
5. [Arnold school of Public Health, University of South Carolina, USA](#)
6. [Center for Global Health Research, University of Toronto, Canada](#)
7. [Campaign for Tobacco Free Kids, USA](#)
8. [American Cancer Society, Atlanta, USA](#)
9. [National Cancer Institute, Bethesda, Maryland, USA](#)

International Collaborators

10. Centers For Disease Control and Prevention, CDC Atlanta, USA
11. Roswell Park Cancer Institute USA
12. International Union Against Tuberculosis and Lung Disease (The Union)
13. Tobacco Free Initiative, WHO, Geneva, Switzerland
14. International Agency for Research on cancer, Lyon, France
15. Bloomberg School of Public Health, Johns Hopkins University, USA
16. University of Toronto, Canada
17. WHO, SEARO, New Delhi, India
18. World Lung Foundation, USA
19. Institute for Community Research Hartford, CT.

National Collaborators

● April 2021 - March 2022

1. Ministry of Health and Family Welfare, Government of India
2. Indian Council of Medical Research
3. Office of Registrar General of India.
4. The Government of Maharashtra
5. Tata Memorial Hospital (TMH)
6. Advanced Center for Treatment, Research and Education in Cancer, (ACTREC)Navi Mumbai
7. Action Council against Tobacco – India (ACT- India)
8. Municipal Corporation of Greater Mumbai, Mumbai
9. Narotam Sekhsaria Foundation (NSF)
10. Salaam Bombay Foundation (SBF)
11. Voluntary Health Association of India (MP)

National Collaborators

- I2. Hriday, New Delhi
- I2. National Cancer Registry Programme (ICMR)
- I3. Mumbai Cancer Registry, Mumbai
- I4. Birla Institute of Science and Technology
- I5. Vital Strategies, India



Recent Collaborations

- Recognition of Healix as training institute affiliated with 'WHO Collaboration Centre for Research in Surgical Care Delivery in LMICs
- Established Collaboration MIT World Peace University, Pune

Project Updates

● New projects

I. Scaling up tobacco control in India: Comparing smartphone to in-person training for implementing an evidence-based intervention to reduce tobacco use among school teachers

Objective:

- To tailor the Tobacco Free Teachers – Tobacco Free Society (TFT-TFS) program to the MP context and develop a smartphone-based training model (including headmaster training, digital content for teachers, and program tracking capabilities) that is feasible for the MP Department of Education.
- To determine the implementation fidelity, effectiveness, and cost of in-person training (using a paper manual and materials) vs. smartphone-based training for training headmasters to deliver the TFT-TFS program in their schools.
- To examine determinants of successful implementation of TFT-TFS via in-person and smartphone-based training models, ways to overcome barriers, and improvements for future implementation.

Type of Study: Behavioural Mixed Methods

Project Timeline: 2021—2025

Research Design: We will randomly select 180 schools from selected district(s) and randomly assign 90 schools (45 rural/45 urban) to each arm that meet eligibility criteria. We opted for stratified sampling because we expect that tobacco use prevalence, program training and implementation may be different in rural versus urban schools.

This project has opted for stratified sampling because we expect that tobacco use prevalence, program training and implementation may be different in rural versus urban schools.

Expected Outcome:

- 1) Program Implementation – Implementation of four program components will be measured through the evaluation visit, including the Observation Checklist and surveys of headmasters and teachers and Phone-based process tracking data, including headmasters' monthly checklist documenting implementation components completed and teacher participation
- 2) Tobacco Use Cessation - To assess smoking and smokeless tobacco use cessation, we will conduct a self-administered survey of all teachers present during the Evaluation Visit (Teacher/Headmaster self-report).
- 3) Cost - Costs related to program implementation in each arm will be collected and analyzed to understand the financial impact of training; research costs associated with the study itself will not be included.
- 4) Program Reach – Program reach will be measured as the mean proportion of teachers who attended the group discussions based on process tracking, and as self-reported participation on the Survey. We will also measure with whom and where teachers shared program information
- 5) Factors affecting program implementation – This study expect to have identified contextual factors that explain variations in TFT-TFS implementation for each training model. This will provide DOE stakeholders with a real-world understanding of their effect on TFT-TFS implementation in schools.

Current Updates: The proposal has been submitted to the ICMR for HMSC clearance. We are currently working on developing tools and survey instruments for the study.

1. One week visit to Madhya Pradesh for meeting with various officials of the Education department and National Informatics

Centre (NIC) from Indore, Dhar, Khandwa and Khargone districts of MP

2. Discussed tested intervention (BSTS) posters, booklets and manuals with Headmasters and Teachers in schools to understand their relevance in MP context
3. Identified potential districts for project study
4. Translation check of manuals, posters and quit booklets by MPVHA in order to crosscheck them in the MP context
5. Followed up with Bhopal officials of NIC regarding app development, and found that they do not work for any agency/NGO other than government bodies
6. Mobile App related discussions with multiple Mumbai/Pune based app agencies is made
7. 3 hours workshop related to app development was held at Healix along with one representative from Cape Gemini which resulted in development of a rough skeleton of the app
8. Tool formation for formative study is under process

2.To study the Effectiveness of National Quitline number (1800 112 356) India.

Objective:

Our first objective would be to study Tobacco users who receives adherence calls are more likely to complete online quitline program than tobacco users who only receive information of quitline program. Our second objective would be to study tobacco users in intervention group are more likely to successfully quit than control group.

Type of Study: Behavioural Mixed Methods

Project Timeline: July 22—March 2023

Research Design: In this study, tobacco users from the cohort 2018-19 will be divided into two groups: one is intervention and another is control group. Adherence/motivation calls will be provided only to the intervention group.

Expected Outcome:

1)An adherence call providing extra motivation might help users to stay in the complete quit line programme

2) We will get barriers and facilitators faced by people to using the quitline program.

3) We are expecting at least 5% quit rate among the intervention group as compared to control group.

Current Updates: The proposal is submitted to Healix.

3.To evaluate the effectiveness of text warnings on areca nut products compared to pictorial warnings on smokeless tobacco products

Objective: The main objective of the study is to examine the perceived effectiveness of the text warning on areca nut products and compare them with mandated pictorial warning labels on smokeless tobacco products.

Type of Study: Cross-sectional study

Project Timeline: Jan 22—Dec 2022

Research Design: A multi-stage sampling design will be used to obtain a representative sample of households and then of individuals in Mumbai city. We will select urban areas which are geographically dispersed that will reflect Mumbai's urban variation in the prevalence of tobacco use, tobacco control policy implementation, socioeconomic development, infrastructure and cultural factors. Respondents will be shown actual pictures of areca nut and smokeless tobacco products and will be asked for their understanding of the warnings, on these products.

Expected Outcome: The project will collect much needed data warnings on the packs, about the availability, marketing and use of areca nut as flavoured product with or without tobacco and smokeless tobacco products. In addition, the findings about how specific tobacco control laws are associated with tobacco use initiation can also be used to compare the relative value of different tobacco control policies within the Indian context

Current Updates:

- The study is technically approved and fund has been received.
- Currently working on finalization of methodology and planning of the study.
- Field data collection will start in the June, 2022.

4.Knowledge, attitude, and factors for COVID 19 vaccination hesitancy among adult population in Maharashtra

Objective:

To study the knowledge, attitude, beliefs and factors related to COVID-19 vaccination hesitancy across Maharashtra.

Type of Study: Behavioural Mixed Methods

Project Timeline: July 22—March 2023

Research Design: In this study, the quantitative data collection will be carried out using online mode for the 1400 participants. A cross-sectional survey data collection tool will be used to collect the quantitative data. The Healix team will use WhatsApp, Facebook, LinkedIn, Instagram, Healix website, and via email to advertise and circulate the survey link to their network members. To ensure the recruitment of at least 1400 target study participants, each of the 19 Healix employees are estimated to recruit a minimum of 74 participants from their network of friends and family.

Expected Outcome:

1. Understanding of the targeted population's beliefs/hesitancy factors towards the COVID-19 vaccination.
2. Identification of the key challenges and barriers in the current COVID-19 vaccination policy.
3. Understanding the reach of public and private health facilities for COVID-19 vaccination and targeted population's perception towards these facilities.

Current Updates:

1. We have worked on the preparation and finalization of the survey tools.
2. The survey questionnaire was translated into Hindi and Marathi.
3. The redcap programme was developed for three languages, English, Hindi and Marathi.
4. The online survey was launched on March 18, 2022 through WhatsApp initially and further through other social media, emails and Healix website.
5. Currently the survey link is active for data collection.

Project in Ongoing stage

5. Longitudinal Study of Adolescent Tobacco Use and Tobacco Control Policy in India (IPACTS)

Background:

Study of Community Tobacco Environmental Factors and Adolescent Tobacco Use: Mumbai Student Tobacco Survey. Cross sectional study conducted in Mumbai using population based survey of students and GIS data collection of schools, tobacco vendors and advertisements.

Provides foundation for research as students reported high exposure to tobacco advertisements, and half of the tobacco users reported obtaining tobacco from vendors

Type of Study: Cohort study

Project Timeline: August 2016- December 2021

Research Design: The research will be conducted in two geographically dispersed Indian cities Mumbai and Kolkata to reflect the diversity in tobacco use, tobacco control policy implementation, socioeconomic status and cultural factors. The main aim of this study is to prospectively measure Community Tobacco Environmental (CTE) factors (i.e., objective assessments of community level compliance with tobacco control laws, availability of all forms of tobacco products including gutkha and e- cigarettes,

and the presence of tobacco vendors and advertisements). Also, to study the CTE factor is longitudinally associated with adolescent tobacco use initiation and trajectories. This study will contribute substantially to research on tobacco control policy implementation and the influence of policies on adolescent tobacco use, a behavioral cancer risk of immense concern globally.

Expected Outcome and measure:

To identify the social determinants of tobacco, use that include the analysis of policy, community and family factors and the GIS data on the location of tobacco vendors and POS policy compliance

Current Updates:

A. Community Environment mapping (CTE)

- Training and Independent field practice with Field investigators in Mumbai and Kolkata was completed.
- Community mapping has been completed in all the 26 IVs in both the cities. Here we have mapped tobacco vendor, public places, educational institute, bus stops, non-vendors ads.

	Tobacco vendors	Non vendor Ads	Public places	Educational institute	Bus stop	Total
Mumbai	3070	0	659	222	553	4504
Kolkata	5145	26	403	301	111	5986

- We have also conducted the training of community mapping for junk food vendors in Mumbai and completed junk food mapping 12 IVs.

Mumbai	3795
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B. Wave 4 updates

- We are currently working on revising wave 4 survey tools and adding new questions on Diet, Physical activity and Junk food.
- All the tools (consent, scripts and questionnaire) for the wave 4 has been finalized in all the languages (English, Hindi, Marathi and Bengali).
- All the ODK audio recordings have been completed.
- The ODK module is ready for adolescent and parent. Currently the team working in cross checking of the program.

Publication:

Mistry R, Kleinsasser MJ, Puntambekar N, Gupta PC, McCarthy WJ, Raghunathan T, Adhikari K, Narake S, Hsieh HF, Desai M, Assari S, Alberts J, Pednekar MS. Neighbourhood tobacco retail access and tobacco use susceptibility in young adolescents in urban India. *Tob Control*. 2021 Nov 25; tobaccocontrol-2021-056915. doi: 10.1136/tobaccocontrol-2021-056915. Epub ahead of print. PMID: 34824148.

6. Disseminating an evidence-based tobacco control intervention for School Teachers in India

Background:

Dissemination of tobacco control intervention program implemented through Bihar School Teachers Survey (BSTS): “*Tobacco Free Teachers- Tobacco Free Society*”, Tested in Bihar and pilot tested in Mumbai schools, Plan to disseminate in the state of Bihar.

Type of Study: Intervention Dissemination

Project Timeline: December 2016- November 2021

Research design: Determine the feasibility of building the capacity of cluster coordinators to train and support principals in program implementation and maintenance in schools, and for the DoE to

sustain the program. Determine the direct financial costs of program implementation and maintenance.

Expected outcome and measures

Demonstration of the feasibility of implementation and the effectiveness of the TFT-TFS program within the infrastructure of the Bihar DoE. To better understand the implementation process and to identify factors that need to be taken into account as evidence-based interventions are taken to scale.

Current update:

- We are working on the data analysis from the gathered data points throughout the program implementation for the study.
- We are also working on drafting implementation manuscript.
- We are also working transcription of the focus group discussions.

7. Tobacco Control Policy Evaluation India Project (TCP) Wave 3

Background:

The International Tobacco Control (ITC) Project is a multi-country prospective cohort study designed to measure the psychosocial and behavioral impact of key policies of the World Health Organization (WHO) Framework Convention on Tobacco Control (FCTC).

To evaluate the effect of the FCTC, the ITC Project is conducting parallel prospective cohort surveys with adult smokers in 21 other countries— Canada, United States, Australia, United Kingdom, Ireland, Thailand, Malaysia, South Korea, China, New Zealand, Mexico, Uruguay, Germany, France, the Netherlands, Brazil, Bangladesh, Mauritius, Bhutan, Kenya, and Zambia. Half of the ITC countries represent high income countries and the other half low- and middle-income countries.

As a part of the ITC project, the Tobacco Control Policy (TCP) India Survey is being conducted by Healis-Sekhsaria Institute for

Public Health in India in collaboration with the University of Waterloo in Canada and the Roswell Park Cancer Institute, USA.

Type of Study: cohort Study

Project Timeline: Feb 2017- Oct 2019

Objective: The broad objective of TCP India Project is to evaluate and understand the impact of tobacco control policies of the Framework Convention on Tobacco Control (FCTC) as they are implemented in low and middle income countries (LMICs) participating in the International Tobacco Control Policy Evaluation Project (the ITC Project).

The objectives of the TCP India Survey are:

- To examine the change in prevalence and tobacco use behavior in India.
- To examine the impact of specific tobacco control policies implemented in India during the next 5 years.
- To compare smoking behavior and the impact of policies between India and other ITC countries.

Current Status:

- Data based is finalized.
- Technical report for Wave 3 data set is been finalized.
<https://healis.org/pdf/special-report/TCP-India-survey-wave-3-report.pdf>

8. Measurement of the effectiveness of a worksite multi-component canteen and behavioural intervention on cardio metabolic risks in India.

Rational: CVD is the leading cause of morbidity, mortality, and disability in South Asia, where 20% of the world's population resides. Asian Indians have high rates of diabetes, prediabetes and cardio metabolic risk factors which is also affecting India acutely. There is robust evidence that lifestyle change, particularly weight loss, increasing physical activity, and improving diet quality can prevent or

delay diabetes and reduce cardio metabolic risk factors such as elevated glucose, plasma lipids, and blood pressure. Use of lifestyle intervention to prevent hypertension and diabetes and to improve glucose tolerance, their translation in real world settings has been challenging. Worksite-based health interventions have shown positive impacts on employees and worksites. However, the range and scope of the interventions adopted will largely depend on the feasibility and acceptability of the interventions and the ease of the implementation at each worksite, based on resources available and the support thereof.

Research Objective:

AIM 1. To facilitate the adaption and implementation of an existing evidence-based

canteen intervention to increase healthy eating habits at a worksite canteen environment.

AIM 2. To measure the effectiveness of a multi-component worksite intervention to reduce Cardio-metabolic risk.

Type of Study: Behavioral Qualitative cohort study

Project Timeline: June 2019- March 2022

Expected Outcome:

The primary outcome will be the proportion of individuals reaching two or more of their cardio-metabolic risk goals, namely reductions in blood pressure, triglycerides, and HbA1c. Participants will be scored on the number of risk factors they improve (0-3) as defined by decreases in (1) HbA1c $\geq 0.5\%$; (2) systolic blood pressure ≥ 5 mm Hg; or plasma triglycerides ≥ 10 mg/dl.

These outcomes were selected because blood pressure, HbA1c, and triglycerides are commonly measured in clinical settings, which makes their use clinically-appropriate and translatable, and because other CVD risk scores, for example the Framingham Risk Score, do not perform well in South Asian populations. Moreover, the composite outcome allows for individuals to reduce different factors based on their variable risk profiles at baseline

Current Updates:

- Qualitative Data collection completed 8 FGDs and 4 IDIs
- Quantitative Data collection Status

Location	Data Points	Numbers	Current Status
Pune	Total no of employees	796	NA
	Screening (Baseline Blood Test and Blood Pressure measurements)	555	Completed
	Total no of eligible employees	364	NA
	Baseline Survey	282	Completed
	FFQ	276	Completed
	1 st Follow- up Blood Test	270	Completed
Kolhapur	Total no of employees	315	NA
	Screening (Baseline Blood Test and Blood Pressure measurements)	296	Completed
	Total no of eligible employees	212	NA
	Baseline Survey	197	Completed
	FFQ	199	Completed
	1 st Follow-Up blood Test	184	Completed

Sub Activity-

- DII-Dietary Inflammatory Index is a unique tool developed and patented in developed and developing countries.
- This tool has 9-question survey, which helps assess the inflammatory index of the diet as a numeric score.
- We will pilot test the DII-Screener with the study participants at Kolhapur and Pune worksite.
- We will see the association of the DII Score and the hs-CRP values among the study participants.

9. Analytical capacity building for the study of tobacco carcinogen exposures in India

Research Design: The goal of our proposal is to investigate the relationship between carcinogen content in smokeless tobacco

(SLT) products and relevant exposures as well as oral/head and neck cancer (OHNC) risk in users of these products, while concurrently building capacity for a sustainable tobacco carcinogenesis research program in India. We will focus on the tobacco-specific nitrosamines N'-nitrosonornicotine (NNN) and 4(methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK).

Type of Study: cohort Study

Project Timeline: July 2017- July 2022

Research Objectives:

- (i) To determine the variation of NNN and NNK in SLT products currently available in Mumbai.
- (ii) To examine the relationship between NNN and NNK levels in SLT products and the levels of corresponding biomarkers in users of these products.
- (iii) To compare levels of urinary NNN and NNK biomarkers between SLT users with and without OHNC.

Rationale: (including that for undertaking human subject research in the light of existing knowledge): Indians develop oral/head and neck cancers (OHNC, includes oral cavity, lip, pharynx) at the very high rate of 20 cases per 100,000 per year; this results in an estimated 70,000 deaths per year, making India the worldwide epicenter of OHNC mortality. Therefore, India serves as a unique setting for such studies and more importantly, it is an area of critical need. This study will incorporate capacity building activities that include the development of analytical laboratory resources, training of young investigators from Mumbai in tobacco research and relevant procedures, and establishment of tobacco product and bio specimen repositories for future research.

Subject Recruitment Procedures: The recruitment for Aims 2 and 3 will be carried out in a combined effort at TMH. For Aim 2, the 300 cancer-free SLT users will be recruited among persons accompanying cancer patients to the clinic. We anticipate recruiting at least 100 such SLT users per year. Since OHNC patients in Aim

3 will be included independent of the type of SLT product they use, their recruitment will start in Year 1. Enroll 40-50 patients per year is expected.

Current Updates:

- All the pictures of tobacco have been clicked and Masterfile for the products has been made.
- The web portal has been designed which will display all necessary project information on the Healix website.
- A smokeless tobacco review paper has been drafted and circulated with the full team for review.
- Continued storage of tobacco product samples obtained from recruited patients as well as smokeless products collected as a part of the repository.

Project with ongoing data analysis

10. Asia Cohort Consortium Projects

Background:

The Asia Cohort Consortium (ACC) is a collaborative effort seeking to understand the relationship between genetics, environmental exposures, and the etiology of disease through the establishment of a cohort of at least one million healthy people around the world. The countries involved include China, India, Japan, Korea, Malaysia, Singapore, Taiwan, the United States, and few others. The Investigators from these countries meet on a biannual basis to report on the progress of each country's cohort, to discuss issues relevant to the development of common protocol guidelines, and to prepare for collaborative projects.

The collaboration involves seeking partners among existing cohorts across Asia to facilitate the exploration of specific research questions that need specific answers. Mumbai Cohort study data is a part of this Consortium. The study on BMI was completed and a

paper has been published on relationship between body mass index and pancreatic cancer-No significant association was found.

Current Progress:

Data analysis is going on.

11. Mumbai Cohort Study (MCS)-2nd Follow Up

Background:

The Mumbai Cohort Study is a prospective cohort study following around 1, 48,000 individuals from Mumbai. The study has been conducted in two phases with phase one following 100,000 individuals, both men and women, and phase two following 48,000 men. By 2008, two follow-ups were completed for phase one individuals. For phase two, the first follow-up was completed in 2003 and the second follow-up for 48,000 individuals is currently in process of being completed.

Objectives:

The objective of this study is to study mortality associated with tobacco and alcohol use.

Current Progress:

Data analysis is going on

12. Role of Genetic and Dietary Factors in Breast Cancer Risk: Study of a Population in Demographic Transition

Background:

The objective of the proposed case-control study is to examine various genetic, environmental and lifestyle factors in sporadic and familial breast cancer risk. The Specific Aims of this project are to: 1) genotype 1000 sporadic and 200 familial breast cancer cases and 1200 healthy matched controls (200 with family history of breast cancer) for candidate single nucleotide polymorphisms (SNPs) associated with inflammation, carcinogen metabolism, and circadian rhythm/DNA repair pathways; 2) perform a case-control analysis to

test the hypothesis that candidate SNPs are associated with increased breast cancer risk, and that subjects with both poor (pro-inflammatory, high-fat) diets and candidate risk genotypes have even greater breast cancer risks compared to those without a risk allele and with more healthy diets. This study will provide a valuable resource for evaluating diet and genetic susceptibility as they relate to breast cancer risk; and 3) assessing the role of reproductive factors, chronotype, personality and religiosity in influencing breast cancer risk in sporadic and familial breast cancer cases

Current Progress:

- 5% random check and partial re-entry of the data has been performed by Healis team.
- We are in process to finalize the data set.

Projects submitted to various funding agencies

- I. Atmospheric and household air pollution and its impact on cause-specific morbidity-mortality: A cross-sectional study from Mumbai, India" submitted to HEI.**



Peer reviewed Publications

1. Welding K, Iacobelli M, Saraf S, Smith KC, Puntambekar N, Gupta PC, Cohen JE. The Market for Bidis, Smokeless Tobacco, and Cigarettes in India: Evidence From Semi-Urban and Rural Areas in Five States. *Int J Public Health*. 2021 May 12;66:1604005. doi: 10.3389/ijph.2021.1604005. PMID: 34335142; PMCID: PMC8284861.
2. GBD 2019 Chewing Tobacco Collaborators. Spatial, temporal, and demographic patterns in prevalence of chewing tobacco use in 204 countries and territories, 1990-2019: a systematic analysis from the Global Burden of Disease Study 2019. *Lancet Public Health*. 2021 Jul;6(7):e482-e499. doi: 10.1016/S2468-2667(21)00065-7. Epub 2021 May 28. Erratum in: *Lancet Public Health*. 2021 Jul;6(7):e449. PMID: 34051920; PMCID: PMC8251505.
3. Mira Aghi and Rakesh Gupta. "Why the Issue of Women and Tobacco Needs a Focused, Multi-Sectoral, Consultative, Community Level Interventions?". *EC Clinical and Medical Case Reports* 4.6 (2021): 44-46.
4. Yang JJ, Yu D, Shu XO, Wen W, Rahman S, Abe S, Saito E, Gupta PC, He J, Tsugane S, Gao YT, Yuan JM, Koh WP, Sadakane A, Tomata Y, Tsuji I, Sugawara Y, Matsuo K, Ahn YO, Park SK, Chen Y, Inoue M, Kang D, Zheng W. Reduction in total and major cause-specific mortality from tobacco smoking cessation: a pooled analysis of 16 population-based cohort studies in Asia. *Int J Epidemiol*. 2021 Feb 5:dyab087. doi: 10.1093/ije/dyab087. Epub ahead of print. PMID: 34009320.
5. GBD 2019 Stroke Collaborators. Global, regional, and national burden of stroke and its risk factors, 1990-2019: a systematic analysis for the Global Burden of Disease

- Study 2019. *Lancet Neurol.* 2021 Oct;20(10):795-820. doi: 10.1016/S1474-4422(21)00252-0. Epub 2021 Sep 3. PMID: 34487721; PMCID: PMC8443449.
6. El-Ashker S, Pednekar MS, Narake SS, Albaker W, Al-Hariri M. Blood Pressure and Cardio-Metabolic Risk Profile in Young Saudi Males in a University Setting. *Medicina (Kaunas).* 2021 Jul 26;57(8):755. doi: 10.3390/medicina57080755. PMID: 34440961; PMCID: PMC8399387.
 7. Gupta R et al., Tobacco cessation in India - Current status, challenges, barriers and solutions, *Indian Journal of Tuberculosis*, <https://doi.org/10.1016/j.ijtb.2021.08.027>.
 8. Gupta R, Bhatt G, Narake S, Udawat H, Goel S. Outcomes of integrating quitline methodology in tobacco cessation delivered through a model tobacco treatment clinic of a private sector hospital at Rajasthan, India. *Indian J Public Health.* 2021 Jul-Sep;65(3):287-290. doi: 10.4103/ijph.IJPH_151_21. PMID: 34558492.
 9. Sharma, K., & Pednekar, M. S. . (2021). Adolescent Tobacco Use Estimates from The Global Youth Tobacco Survey, India: Tobacco a risk factor for future spread of COVID 19. *Asia Pacific Journal of Health Management*, 16(3), 121-126. <https://doi.org/10.24083/apjhm.v16i3.953>.
 10. Puntambekar, N. ., Desai, M. B. ., Kanade, A. ., & Pednekar, M. S. . (2021). Dual Impact of Comorbidities and Symptoms of Coronavirus on Mental Health during COVID-19 Pandemic among Males and Females in India: Online cross sectional study. *Asia Pacific Journal of Health Management*, 16(3), 111-120. <https://doi.org/10.24083/apjhm.v16i3.949>.
 11. Saraf S, Welding K, Iacobelli M, Cohen JE, Gupta PC, Smith KC. Health Warning Label Compliance for

- Smokeless Tobacco Products and Bidis in Five Indian States. *Asian Pac J Cancer Prev*. 2021 Nov 1;22(S2):59-64. doi: 10.31557/APJCP.2021.22.S2.59. PMID: 34780139.
12. Mistry R, Kleinsasser MJ, Puntambekar N, Gupta PC, McCarthy WJ, Raghunathan T, Adhikari K, Narake S, Hsieh HF, Desai M, Assari S, Alberts J, Pednekar MS. Neighbourhood tobacco retail access and tobacco use susceptibility in young adolescents in urban India. *Tob Control*. 2021 Nov 25:tobaccocontrol-2021-056915. doi: 10.1136/tobaccocontrol-2021-056915. Epub ahead of print. PMID: 34824148; PMCID: PMC9130340.
 13. Welding K, Saraf S, Iacobelli M, Smith KC, Puntambekar N, Gupta PC, Cohen JE. Beyond Gutka: Evidence of Illegal Smokeless Tobacco in Rural and Semi-urban Areas in India. *Nicotine Tob Res*. 2022 Apr 28;24(6):929-932. doi: 10.1093/ntr/ntab251. PMID: 34893893; PMCID: PMC9048865.
 14. Gupta PC, Puntambekar N, Assunta M. South Asia's evolving tobacco hydra: moving from quandary to hope. *Tob Control*. 2022 Mar;31(2):142-145. doi: 10.1136/tobaccocontrol-2021-057013. PMID: 35241578.



Healis Activities

Foundation Day:

Healis foundation day was celebrated on August 01, 2021.













Visitors:

- ✚ K J Somaiya Institute of Management team has visited Healix on Feb 25, 2022.
- ✚ Dr. James Hebert, Arnold School of Public Health, US has visited Healix for 2 months. He gave us talk on using “Endnote software”(March 07, 2022) and Dietary Inflammatory Index (DII) and e-DII (March 14, 2022).

Activities from the period April 01, 2021- March 31, 2022

-  Dr. Gupta was invited as a guest for being Guest of Honor in the official launch of 3-month online “Basic Course on Tobacco Control” on 3rd May 2021 organized by E-RCTC, PGIMER Chandigarh.
-  Dr. Gupta attended webinar held on 29th May 2021 on the occasion of WNTD 2021 on the topic “Tobacco Cessation in India: Policies, Practices and Challenges” organized by Salaam Bombay Foundation.
-  Dr. Gupta was invited as a special Invitee to the event of the release of Tobacco Related Cancer report on World No Tobacco Day: 31st May 2021 organized by Indian Council of Medical Research.
-  Dr. Gupta was invited as a Guest of Honour on World No Tobacco 2021 by CHIP Foundation's.
-  Dr. Gupta attended the “National Training Workshop on Strengthening Monitoring & Evaluation of NTCP/MPOWER in the country- prioritizing and reorienting Public Health Institutes and National Institutes of Eminence” held on 10 to 12 June, 2021 organized by Tobacco and NCD Control.
-  Dr. Pednekar was reappointment as Visiting Scientist in the Department of Social and Behavioral Sciences at the Harvard T.H. Chan School of Public Health. This non-faculty academic appointment is for the period July 1, 2021, through June 30, 2022, with the potential for renewal.
-  Dr. Gupta attended Constitution of Committee meeting to review the Evidences of COVID-19 outcome and tobacco use and Meeting of the Review Committee on 3rd July, 2021.
-  Dr. Gupta participated in online Research Area Panel (RAP) for cancer meeting, which took place on 27th July 2021 from 10.30 AM to 1.30 PM organized by ICMR-NCDIR.

- ✚ Dr. Gupta was invited as Guest of Honour and Faculty for the “9th National Workshop on Implementation of MPOWER Policy in India” on 28 to 30 July 2021 organized by The Union South-East Asia.
- ✚ Dr. Pednekar was invited as keynote speaking at Prajatantra 2021 held on August 11, 2021.
- ✚ Dr. Gupta attended a brain storming meeting to discuss the feasibility of the concept “Development of Registry of indigenous and locally prepared tobacco and nicotine products in India ” , as an ICMR National Task Force Project held on August 01, 2021.
- ✚ Dr. Gupta was invited as Guest of Honor and Chair (Panel Discussion) for “National Webinar on Sustainable Development Goals and Tobacco Control scheduled” on 12th August 2021 organized by RCTC PGIMER Chandigarh.
- ✚ Dr. Gupta attended International Conference on Tobacco Control and Smoking Cessation" to be held virtually on Fri 20th Aug - Sat 21st Aug 2021 organized by Indian Society of Clinical Oncology.
- ✚ Dr. Gupta chaired a session “Countering the Emerging Threats and Challenges to Tobacco Control” in a Consultation on Promotion, Adoption and Implementation of New Initiatives for Combating Emerging Trends and Threats in Tobacco Control on 17 August organized by Generation Saviour Association.
- ✚ Dr. Gupta attended the International Agency for Research on Cancer (IARC) Handbook Vol. 19. Subgroup sessions from Sep 13 to Fri Sep 24 , 2021
- ✚ Dr. Gupta and Dr. Pednekar attended three day 5th National Conference on Tobacco Or Health (NCTOH), September 25-27, 2021 organized by School of Public Health PGIMER.
- ✚ Dr. Gupta was invited as Guest of Honour at valedictory ceremony for announcing the Declaration of NCTOH 2021

from 4:30 PM to 6:00 PM on September 27, 2021 of 5th National Conference on Tobacco or Health (NCTOH- virtual) held at PGIMER, Chandigarh”

- ✚ Dr. Gupta accepted the invitation as a panelist of international experts who will serve as peer reviewers for abstracts submitted for the 52nd Union World Conference on Lung Health to be held virtually this year on 19-22 October 2021.
- ✚ Dr. Pednekar attended the launch of the report on the “State of Health in Mumbai” on Tuesday, October 5, 2021 by the Praja Foundation. The report analyses the status of healthcare services in Mumbai, benchmarked with existing policy targets and SDG targets to better understand ground realities of service provision.
- ✚ Dr. Gupta attended the inauguration of Cancer Epidemiology and Surveillance Training (CanEST) Program on 22nd October 2021 organized by National Centre for Disease Informatics and Research Indian Council of Medical Research (ICMR).
- ✚ Dr. Gupta attended Technical Advisory and Monitoring Committee (TAMC) for Third Round of Global Adult Tobacco Survey (GATS-3), India under the Chairpersonship of Smt. Sandhya Krishnamurthy, Director General (Statistics), Ministry of Health & Family Welfare and Dr. L Swasticharan, Addl. DDG, Dte. GHS, MoHFW as Co-Chair of the Committee on Oct 18, 2021.
- ✚ Dr. Pednekar accepted the invited as a Resource Person at “National Conclave on Best Practices under National Tobacco Control Programme in India”- from 27th-29th October 2021 at Chandigarh by E-RCTC, PGIMER Chandigarh.
- ✚ Dr. Pednekar accepted the invitation for DoCC social projects evaluation 2021| PGDM batch 2020-22 at SPJIMR.

- ✚ Dr. Gupta attended expert group meeting on “Development of Mortality Audit Framework for hospitals in India” on 12th November’21, at ICMR-NCDIR, Bengaluru.
- ✚ As part of our regular "Daily Experts" announcements Dr. Gupta was recognised as, Expert by Expertscape.
- ✚ Healix served as Knowledge partners at 2nd International Healthcare Management Conference 2022 held on Jan 29, 2022. Dr. Pednekar and Dr. Puntambekar reviewed several paper and provided feedback. Dr. Puntambekar also served as Chair in on the session in the conference.
- ✚ Dr. Pednekar attended the Consultation Meeting for Mumbai Public Health Manifesto on Nov 30, 2021.
- ✚ Dr. Pednekar taught “Sustainable Healthcare (WHO)” to the MBA (HCM) trimester III students of Somaiya Vidhyavihar University.
- ✚ Dr. Pednekar presented “Monitoring and Evaluation – a case study on International Tobacco Control Policy, India - since COTPA 2003” for Advance Course on Tobacco Control organized by Resource Center for Tobacco Control located at PGIMER Chandigarh on Jan 17, 2022.
- ✚ Dr. Gupta was invited to the Meeting of the Scientific Advisory Committee (SAC) of ICMR-National Centre for Disease Informatics and Research, Bengaluru on 1st December 2021 via web conferencing.
- ✚ Dr. Gupta attended the Alliance For Tobacco Control (AFTC) is organizing a National Consultation on Augmenting Civil Society Organisation (CSO) Action in Tobacco Control (Virtual) on December 3, 2021.
- ✚ Dr. Gupta attended the National Training Workshop On Strengthening Monitoring and Evaluation of NTCP/MPOWER in the country- prioritizing and reorienting Public Health Institutes and National Institutes of Eminence, 14-17 December 2021, Bengaluru.

- ✚ Dr. Gupta participated as experts for the Project Review Committee (PRC) meeting, to review the extramural projects Ad-Hoc (14) and fellowships (02) in the area of Tobacco Control, scheduled virtually on 11.01.22.
- ✚ Dr. Gupta was Guest of Honour in a National Webinar on “Tobacco Free Generation: A Step Towards Tobacco Endgame” on 16th February, 2022.
- ✚ Dr. Pednekar joined the official launch of 6-month online “Advance Course on Tobacco Control” established by Resource Centre for Tobacco Control under Department of Community Medicine and School of Public Health PGIMER Chandigarh on 28th February, 2022.
- ✚ Dr. Gupta attended Expert Committee constituted under the Chairpersonship of Additional Secretary & Mission Director, Ministry of Health & Family Welfare for Development of New Specified Health Warnings Feb 04, 2022.
- ✚ Dr. Pednekar helped in selection process of aspirants of KJ Somaiya Institute of Management for MBA 2022-24.
- ✚ Dr. Gupta attended the Division of NCD, ICMR Hq requests experts and investigators meeting on 24th February 2022 from 2.30 PM - 3.30 PM to finalise the project and budget of the ICMR- National Task force (NTF) on Oral Potentially Malignant Disorders (OPMDs).
- ✚ Dr. Gupta served as Key Panellist for Live Interactive Session scheduled on 04-03-2022 under Advanced Course on Tobacco Control.
- ✚ Dr. Gupta served as speaker in Stakeholder Engagement Meeting on Tobacco Control | 15-16 March 2022.
- ✚ From Healix Ms. Shraddha was Nominate a Woman of Excellence from your organization for IACC's Awards in March'22.

Healis Team

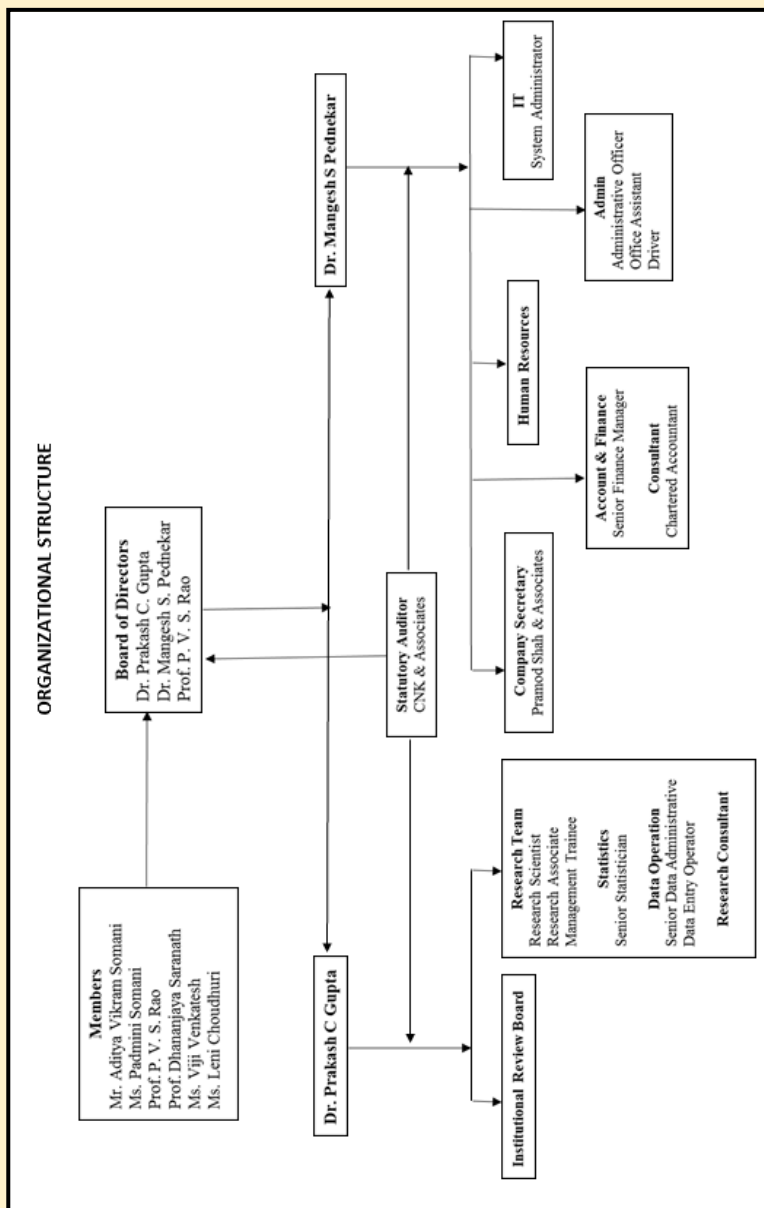
Our Research Team comprises of Masters and Doctoral from diverse background with expertise in areas like

- Epidemiological Research
- Applied Statistics and Statistical tools
- Public Health Dentistry,
- Nutritionist and to name a few...

Our field staff comprises of trained field investigators with an experience of 15+ years with expertise in conducting House to house, Worksite, Community, School based surveys and many more...

We also have highly trained and qualified support staff for smooth day to day functioning.

ORGANIZATIONAL STRUCTURE



Statutory Compliance

A policy on Sexual Harassment Prevention and Redressal Guidelines is in place to ensure that the governance standards are met.

No complaints in the given category were received during the Financial Year 2021-22.

Thank You

HEALIS-SEKHSARIA INSTITUTE FOR PUBLIC HEALTH

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