



OCTOBER 2023 | [WWW.FHTS.AC.IN](http://WWW.FHTS.AC.IN)



## The growing burden of “Syndrome X”, the metabolic syndrome

**FHTS Contribution:** Digital health intervention to enhance self management of metabolic syndrome among adults in Urban Poor settings of India, a study funded by Indian Council of Medical Research.

Regardless of the socioeconomic index of the countries, the [global prevalence of metabolic disorders](#) has risen over the past two decades. The unchanging mortality rates attributed to metabolic diseases needs urgent attention. [No single treatment](#) exists and hence present pharmacotherapy requires



consistent dosage of multiple drugs which becomes challenging for the patients. The risk of mortality with MetS and MetS like characteristics can be mitigated with [improved adherence to healthy lifestyle](#). The protective effect increases with increased adherence score. Such non-pharmacological approaches need more generalization.

Urban Poor population is at more risk of developing metabolic syndrome due to urbanized lifestyle, poor access to healthcare, and financial limitations. They are also exposed to poor environmental conditions, such as, overcrowding, insecure tenure, and/or poor access to infrastructure, such as sanitary facilities. Ignorance and difficult conditions in the slums are likely to result in improper food habits, low health care use and hygiene awareness, lack of knowledge of the origin of sickness and proper measures for cure. Limited studies are available on understanding the relation between various risky

## ONGOING ICMR FUNDED STUDY IN URBAN SLUMS OF DELHI

variables associated with MetS among urban slum setting and the need of multifaceted interventions for enhancing self management. In order to fill this existing gap, [FHTS has been funded by ICMR](#) to develop a model to examines cardio-metabolic risk factors such as diet and physical activity, stress and sleep and its interplay with living environment in facilitating self-management of MetS among adults living in urban poor settings of New Delhi. It also proposes to design, develop and pilot test an interactive, tailored internet and mobile enabled digital health intervention platform relevant to enhance self-management.



OCTOBER 2023 | [WWW.FHTS.AC.IN](http://WWW.FHTS.AC.IN)

## Let's chase the potential silent killer, Hypertension

**FHTS Contribution: [Swasthya Pahal, Health for All](#)**

According to the recent [Global Report on Hypertension](#) by WHO, 4 out of every 5 people with hypertension are not adequately treated. High blood pressure was found to be the single most important risk factors for early deaths worldwide out of 87 behavioral, environmental, occupational and metabolic risk factors in a [study conducted in 204 countries](#).

There is a great economic cost on patients, families, health systems and on national economy due to Hypertension and its associated complications. The WHO acknowledges the capability of digital health interventions for ensuring high-quality care to people.

Information and Communication Technologies (ICTs) have the potential to offer affordable and high-quality services. FHTS is contributing in chasing this potential silent killer by its Initiative called Swasthya Pahal, Health for All launched in April 2012. It is an innovative community-based program, facilitated through an interactive, multi-lingual, standalone, and internet-enabled touch screen computer-based program that aims to



enhance self-management of NCDs among individuals living across diverse community settings. It is implemented using the [SMAART Informatics Framework](#) and is used to screen obesity, high blood pressure and high blood sugar for improved disease prevention, monitoring, and self-management of NCDs in a geographically inaccessible, underserved, under resourced environments in a cost-effective manner.

## Emerging big data, research avenues and the workforce needs

**FHTS Contribution –[Training Programs](#)**

To achieve universal health coverage, targeted Sustainable development goals and advance health outcomes, WHO has lauded and acknowledged that digital health technologies and innovations are a proven accelerator for the attainment of health and well being globally. The COVID-19 pandemic aroused the need for establishing digital health infrastructure with appropriate framework,

governance and policy and not just limited pilot product focused digital health technologies. The WHO's recent launch of [Global Initiative on Digital Health](#) aims to bring together countries for strengthening the implementation of Global strategy on Digital Health by convergence and convening of Global standards, knowledge exchange and collaborations, improved reporting and transparency of resources for digital health system transformation .

[Ayushman Bharat Digital Mission](#) has completed its 2 years and continuing to build efficient ecosystem of interoperable digital health system with active participation from all stakeholders both public and private. [India's National Data Governance Framework Policy](#), [Digital Personal Data Protection Bill](#), India's recognition of the potential that Artificial Intelligence brings with the launch of [National Program on AI](#), establishment of [India Portal on Artificial Intelligence](#), recently launched [National Policy on Research and Development and Innovation in PharmaMedTech Sector in India](#) and the upcoming Digital India bill all together along with the emerging big data in all sectors, rapidly advancing fields require more competent workforce with skills to tackle challenges of the 21st century which can be addressed by the intersection of industry and academia.





FHTS training programs provides a unique opportunity to students seeking excellence towards enhancing population health outcomes through the use of multifaceted technology enabled interventions. Students get to participate in innovative technology enabled interventions and innovations to enable data driven, evidence based policy making using data, information and knowledge (DIK) framework. The program integrates knowledge and skills across population health, information and communication technology. It helps in translating research findings into practice using sustainable technological interventions and innovations

## Women in Research and Academia

### FHTS Contribution – 90 % women in team

To solve the world's most pressing challenges, there is a need to bring in all bright minds irrespective of the gender. According to a policy brief by UNESCO, [The Representation of Women in Academia and Higher Education Positions](#), globally women outnumber men being tertiary education students but it has been found that in higher education institutions as the academic ranks progress, a decline in women representation

occurs and very limited number of women reach senior and leadership positions. The subsequent step in education and career is dependent on the Gender Parity Index which is being assessed at all levels. Women representation is above than men at Bachelors and Masters Level but it declines at the PhD level. Accessing senior leadership position in academia requires PhD and hence it is the measurable explanation of why there is low women representation of women in academic positions globally.

FHTS is contributing to this issue by giving employment opportunities to more females irrespective of their limitations and constraints and providing them a platform wherein they can contribute equally to various public health challenges, progress in their career pathways and simultaneously take up their care giving and family responsibilities without compromising either. In addition, FHTS has helped four female team members to pursue their PhD and become more competent and fully equipped to contribute effectively and efficiently to the world of academia. All female participation of FHTS team members in various research projects is also a contribution for enhancing the representation of women in research.

## Towards building a Public Health Ally



**Shravani Rajkhowa**  
Research Assistant, FHTS

*FHTS- A Confidence Boost Like No Other*

When you get these jobs that you have been so brilliantly trained for, just remember that your real job is that if you are free, you need to free somebody else. If you have some power, then your job is to empower somebody else” — Toni Morrison, Novelist.

As I am part of the Team Foundation of Healthcare Technologies Society (FHTS) now, I can relate to these empowering words of one of my beloved novelists, Toni Morrison, and therefore I truly believe that FHTS has helped me gain a newfound sense of empowerment, confidence, and purpose. I am excited to share my experience at FHTS, a remarkable journey that has broadened my horizons and bolstered my self-confidence in ways I never imagined. Working alongside a brilliant mind like



OCTOBER 2023 | [WWW.FHTS.AC.IN](http://WWW.FHTS.AC.IN)

**Dr. Ashish Joshi**, I learned that addressing healthcare challenges requires a multifaceted approach that combines technology, education, and community engagement.

Swasthya Pahal- “Health for All” is an initiative undertaken by FHTS, launched in the year 2012, which aims to improve healthcare access and quality across communities. Being a part of this initiative is an eye-opening experience that redefines my understanding of healthcare and its delivery. Swasthya Pahal is a sustainable, affordable, interactive, multi-lingual, lifestyle modification along with personalized counselling and self-manageable healthcare solution that reaches every corner of society, and I have the privilege of contributing to this noble endeavor. I have had the opportunity to work with a diverse group of professionals, each driven by a shared passion for research in community initiatives and an understanding of Public Health Interventions. Together, we visited urban slums and collaborated with Uttarakhand and Delhi Police,



Delhi Fire Services, Indian Postal Service, Old Age Homes, Residential Colonies, Delhi Transport Corporation, Primary Health Centers, and Corporate Offices to implement self-management of Non-Communicable Diseases (NCDs) and proper nutrition intake through our innovative SMAART Framework that provides individualized lifestyle counselling based on tailored SMAART health cards generated for each beneficiary. Witnessing the positive impact Swasthya Pahal has on the lives of more than 14000 beneficiaries and their families across 8 different states in India namely, Delhi, Haryana, Madhya Pradesh, Odisha, Punjab, Tamil Nadu, West Bengal, and Uttarakhand. Swasthya Pahal's 11 years of success shows that by amalgamation of community initiative with digital health interventions, we can create not only a responsive healthcare ecosystem to address the unique needs of local communities but also leverage the advantages of digital tools for improved access, efficiency, and patient outcomes, paving the way for a healthier and more connected society. Apart from being a part of Swasthya Pahal, the Academic Core here at FHTS has taken a leap of faith as it helped me achieve one of the most significant personal milestones, which was to step into the role of an academic instructor. FHTS believes that research and education is the key to innovation and sustainable

change in healthcare, and I was entrusted with the responsibility of mentoring a group of eager students. It was both an exhilarating and challenging experience. My roles have strengthened my commitment to making a positive impact on healthcare and have given me the confidence to continue exploring new opportunities I am looking forward to the future with renewed vigor, knowing that the lessons and experiences gained at FHTS will continue to shape my path in the healthcare sector.



**Sanskriti Chibber**  
**v-INSPIRE Intern at FHTS**

My experience as a Public Health Intern at FHTS has been learning and fulfilling for me so far. I have been supervised by a team of not only knowledgeable but considerate and motivating individuals. I have been able to complete all the tasks assigned to me effectively due to the support provided by the mentors. They understood both my caliber and limitations. I have learned persuasive communication, health camp setting, creation of



OCTOBER 2023 | [WWW.FHTS.AC.IN](http://WWW.FHTS.AC.IN)

easy and culturally relevant content for self-management of NCDs, consumer health informatics and real-time applications of research using technological solutions. The field trips helped me understand people from all walks of life better and taught me ways to spread awareness in a way that can be perceived by all of them. I have been able to connect with the community better as a Public Health Educator. Teamwork has also taught me patience, cooperation and mutual understanding. I have learned to handle constructive criticism and improved the areas of work where I lacked adequate skills.



My favorite aspect about doing an internship with FHTS has been the fact that every member of the organization is available to clarify any doubts and give their time to listen to the interns' concerns or confusion about any particular task. Additionally, the work environment is motivating and encouraging. I have been provided with a clear opportunity to suggest ideas for any project I receive. They are extremely open and willing to listen to my work-

related opinions and discuss the vision ahead. This has made me confident to express my creativity and use my full potential in work.

## Highlights of the Quarter



### We Are For Public Health

Launch of an initiative “We Are For Public Health” to provide information on what’s happening globally to locally in the field, latest updates on FHTS contribution by its various initiatives and research projects. [Read more](#)

### Inaugural batch of Certificate in Fundamentals of Operational Research in Public Health

Commencement of the “Inaugural batch of Certificate in Fundamentals of Operational Research in Public Health” under the joint collaboration with Sudha Rustagi College of Dental Sciences, Haryana

### Commencement of class of year two of Foundations of Research Methodology for Nursing students

Commencement of classes for Nursing third batch of PMCHRI for the second year of Foundations of Research Methodology

## National Nutrition Month

To commemorate National Nutrition Month, two activities were conducted

1. Nutrition related activities focusing on the Importance of Millets for students of Andhra Education Society, Delhi.
2. Webinar: Holistic Nutrition for overall well being

## Launch of In-Journal Club

Launch of an in House Journal club for team members to give them an opportunity to present their ongoing research work and get it critically reviewed by other members. It was launched in the month of August. In total five activities have been conducted -

- Unraveling key insights from the SP-Health for All initiative data, gathered during Self-Management camps at Police Stations, Delhi
- Scoping review and methodology involved.
- Field lessons learned from shine initiative and scope of improvement
- Inferences from the Data of Community of Population Health Informatics Platform
- Design, develop, and pilot test a digital platform to enhance student well-being: Protocol for a mixed-methods study.





OCTOBER 2023 | WWW.FHTS.AC.IN

## FHTS in numbers since the inception

**8** ICMR Funded Projects with **2** National Task Force Projects

**8** Technologies developed

**100+** Non-funded completed and ongoing research projects completed

**62+** Publications in International Peer reviewed Journals

**4** Multi-centric ongoing studies

**14000+** individuals screened under Swasthya Pahal from **8** states

**3600+** enrolled in SHINE with Nutrition Education messages in **8** languages

**307** RISE exhibits with **2700+** products created making **13** Women self-reliant

**90 %** of women in team

**10+** PhD Fellows

**1000+** students under various academic programs

**650+** students from **13** different countries representing **182** institutes

**23** students completed dissertation under the mentorship from FHTS

**5** events under CAMP (Career and Mentorship Program) with **120 +** participants

**3** IMPACT challenge Awards conducted

**738** Members under the discussion Board, COPHI with **7** categories **100** topics under **35** forums and **1200+** posts from members

**21** collaborators/partners across **11** states/UTs of India  
SMAART Centers in **4** states

## Updates of the Quarter

### July - September 2023

- **2** ongoing ICMR funded Projects
- **450** Medical and **300** Nursing students of PMCHRI undergoing training to be Physician researchers and Nursing Scientists
- **12** students of St Ann's College Pursuing Certificate in Nutrition Informatics course
- **34** students of Sudha Rustagi College of Dental Sciences Pursuing Certificate in Fundamentals of Operational Research in Public Health
- **28** students were part of v-INSPIRE internship program
- **600+** individuals screened in Swasthya Pahal Initiative through **27** Camps
- **340+** enrolled in SHINE
- **35** classes conducted under various academic programs
- **6** topics posted on the discussion board, COPHI

