United Way of Mumbai

YUVROSHNI PROJECT

Bristol-Myers Squibb Foundation
Delivering Hope
Hepatitis Awareness, Prevention and Care

Report on United Way of Mumbai's Collective Community Impact Program With Targeted Medical Interventions and Citywide Education Campaign Supported by Bristol Myers Squibb Foundation.

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LIST OF ABBREVIATIONS

ALERT India	Association for Leprosy Education, Rehabilitation and Treatment, India
AIDS	Acquired Immunodeficiency Syndrome
BMSF	Bristol Myers Squibb Foundation
FSW	Female Sex Worker
CBO	Community Based Organization
CHV	Community Health Volunteer
EPI	Expanded Program of Immunization
FSW	Female Sex Worker
FGD	Focus Group Discussion
GRB	Green Ribbon Brigade
HP	Health Post
HBV	Hepatitis B Virus
HCV	Hepatitis C Virus
HRG	High Risk Group
HIV	Human Immunodeficiency Virus
IEC	Information-Education-Communication
NIP	National Immunization Program
NSS	National Service Scheme
NGO	Non Governmental Organization
ORW	Outreach Worker
STI	Sexually Transmitted Infection
SPSS	Statistical Package for Social Sciences
UWM	United Way of Mumbai

EXECUTIVE DIRECTOR'S MESSAGE

The United Way movement is well known globally for unique and participatory strategies for creating lasting Community Impact. In our endeavor to build sustainable communities, United Way of Mumbai has been making consistent and collaborative efforts by targeting key health challenges in the community. United Way of Mumbai realized the need to focus on Hepatitis Infections as a priority community health concern, considering the prevalence of Hepatitis B & C infections in communities, which is compounded by the lack of awareness on this disease in the general public.

In December 2010, as part of our Community Impact initiative, we conceptualized and initiated the ***Yuvroshni project for Prevention of Hepatitis B & C Infections through Information-Education-Communication, Community Participation and Targeted Immunization*** across identified high risk locations in the city of Mumbai. This project has been able to achieve greater scale of outreach and impact among the vulnerable sections of the population in the cities of Mumbai and Navi Mumbai. I take this opportunity to express my gratitude to the Bristol Myers Squibb Foundation for the trust bestowed in United Way of Mumbai and the valuable support extended for this project.

Under the Yuvroshni project, United Way of Mumbai has been able to address the challenge of increasing prevalence of Hepatitis B & C infections by targeting the High Risk communities as well as the general population. The strategy adopted was: medical interventions among the High Risk groups for controlling the infections, (with testing, medical referral, follow up and support for treatment compliance, patient support activities, etc.) and health education among the masses for awareness generation and prevention of spread of infections. Both the interventions were carried out with active community participation in ensuring sustainability.

This report is our attempt to gauge the impact achieved by this project. Both quantitative and qualitative methods of impact assessment were carried out while preparing this report. For this we have availed services of independent professionals specializing in research and analysis of programs in the development sector. The project generated great learnings and insights on the best strategies for tackling health issues and we have documented these in this impact report, which we hope will be of value to stakeholders, both public and private, working in the field of Health issues in the city of Mumbai.

Best wishes
Jayanti Shukla

ACKNOWLEDGMENT

The **Yuvroshni project** is a true example of the collective community impact for addressing key community health challenges. While United Way of Mumbai played the role of catalyst for this project, there were several organizations (public and private) and individuals who played a pivotal role in ensuring maximum efficacy of the project deliverables.

We were privileged to have partnered with **Alert India** and **Anubhav Mumbai** for on-ground implementation of some of the project components, namely Medical Interventions among the High Risk groups for controlling the infections and citywide awareness generation campaign on Hepatitis B and C respectively. Both the partners ensured maximization of limited resources and increased the outreach of the project many times more than what we had initially envisioned. Project team members of both organizations were committed individuals who put in extra efforts for last mile connectivity among high risk populations such as Female Sex Workers, Drug Addicts, and Migrants. **Sankalp Rehabilitation Trust** deserves a special mention for providing much needed support to community members who had tested positive for Hepatitis B or C through Patient Support groups. This added a new dimension to the impact of the project.

A special thanks to the thousands of college students from city colleges who took volunteering to another level by their invaluable contribution as 'Green Ribbon Brigadiers'. College students are an integral part of all our community impact. Here we must acknowledge the proactive support given by the **National Service Scheme Cells of University of Mumbai and SNDT University** for authorizing United Way of Mumbai to enlist students from the NSS units of city colleges to volunteer for this project.

The **Public Health Departments of Municipal Corporation of Greater Mumbai and Navi Mumbai Municipal Corporation** provided necessary permissions and approvals for running the project activities in the communities across the city along with providing strategic inputs for the overall project which proved to be critical for the success of the project. We would like to thank Ms. Anjali Lukose, Correspondent, Indian Express for the refined text editing done for us. Our sincere thanks to all the concerned officials in these two departments.

We sincerely thank **Dr. K Sarath Kumar, former head of the Research Unit of College of Social Work**, Nirmala Niketan and **Prof. Abraham Antony**, College of Social Work, Nirmala Niketan for their valuable contribution in carrying out independent impact assessment methodologies. Through their efforts, we have been able to better appreciate the strengths and limitations of our project, which will help us with similar programs in the future. We are also grateful to **Samarth**, a research organization based out of Tamil Nadu, that was assigned by the BMS Foundation to assess the impact of Yuvroshni project interventions, and who carried out several quantitative and qualitative techniques for impact assessment. In this report, we have incorporated relevant excerpts from the in-person interactions that they carried out with Health Outreach Workers and Focus Group Discussion with Green Ribbon Brigadiers.

We would also like to acknowledge all those individuals, organizations and stakeholders who have participated and contributed in different capacities throughout the course of implementation of Yuvroshni project and carrying out this impact assessment study.

All this has been a result of collective contributions from all these stakeholders as mentioned hereinabove.

OVERVIEW OF THE YUVROSHNI PROJECT

United Way of Mumbai (UWM) is part of the global United Way movement that seeks to leverage corporate, employee and leadership potentials for community development. Through Corporate and Employee Giving Campaigns, UWM seeks to successfully enlist employee participation in collective activities aimed at bringing about a positive change in the communities they work in. UWM connects corporate India with the relevant and deserving programs being run by nonprofit to render greater sustainability and scalability to strategies and approaches deployed in program implementation. Our work is focused on creating greater fund support in the areas of Public Health, Education and Livelihood support.

As part of its community impact initiative, UWM has been making collaborative and consistent efforts for improving the state of environmental issues, community based disaster preparedness and the state of community health in the city of Mumbai. Through these community impact initiatives, UWM endeavors to bring together key stakeholders such as government (local civic authorities), civil society (citizens, youth volunteers, NGOs, etc.) and corporates in order to create positive and collective community impact. Multi-stakeholder partnerships and active community participation for mass awareness generation and sensitization are the salient features of all the community impact initiatives of UWM. The 'Yuvroshni project for Targeted Medical Intervention and Awareness Generation on Hepatitis B and C in Mumbai and select parts of Navi Mumbai' was initiated by UWM in January 2011 and is supported by the Bristol Myers Squibb Foundation (BMSF).

YUVROSHNI PROJECT

Context:

The Yuvroshni campaign was planned by UWM considering the magnitude of Hepatitis infections in India. The overall level of awareness about hepatitis virus infections among people in India is very low and the government's efforts to fight the virus are inadequate, especially in the area of early detection of cases, effective treatment of those already infected and education for prevention of the infections. At the same time, based on the data available from the public health system, the total carrier pool of Hepatitis B Virus (HBV) and Hepatitis C Virus (HCV) in India is estimated at 40 and 15 million respectively (2006). The estimated national prevalence rate is 3.7% for HBV and 1% for HCV primarily due to lack of awareness. While a great emphasis has been placed in India on HIV/AIDS prevention and awareness; HIV prevalence is about 0.3 percent, or just about a tenth of the prevalence of the HBV virus in the country. (Source: National Centre for Disease Control, Ministry of Health & Family Welfare, Government of India)

In India, infectious diseases have been identified as a major cause for the increase in mortality rates and morbidity among socially and economically weaker sections. These infections predominantly include HBV and HCV. Widespread poverty and illiteracy in the country are the root causes contributing to the persistent spread of these infections, even though these infections can be prevented through timely immunization. Every year, one million Indians are at risk for HBV and about 1,00,000 die from HBV infection. (Source: National Centre for Disease Control, Ministry of Health & Family Welfare, Government of India)

India introduced universal immunization against hepatitis B in 10 states in the year 2002, and in 2011, scaled up this operation countrywide (under the National Immunization Program). In urban parts of India, the Community Health Volunteers (CHVs) have also been trained to complete the immunization schedule for HBV among the newborn babies i.e. 0 to 1 year of age.

However, institutional, social and policy-related impediments raised serious challenges to effective coverage of the target population, delivery of services and monitoring the progress of the immunization program. Issues such as poor response to preventive health measures, inadequate public health infrastructure in Low Income Group (LIG) settlements/ slums and the existing poor socio-economic and environmental conditions in the urban centers have affected the overall immunization program adversely. This also impacts the success rate of HBV vaccines.

Further, community health experts have pointed out that while screening and immunization of high-risk groups, such as those with a history of exposure, risky practices, and occupational risk, specific measures for prevention of mother-to-child transmission and promoting safe blood supply, safe injections and safe sex are among the highly recommended preventive measures. The Government of India still needs to work in areas of generating data for evidence based policies, implementing preventive measures, raising awareness and partnerships, and screening and management of viral hepatitis.

Taking all this into account, United Way of Mumbai recognized the urgent need for a concerted awareness campaign along with targeted medical interventions among the high risk populations in the city of Mumbai. The prime focus of the campaign was to provide health education to the public through community participation, thereby reducing the time gap between the onset of HBV and HCV induced infection and its treatment. The Bristol Myers Squibb Foundation's generous support to United Way of Mumbai , enabled the implementation of this unique campaign.

Approach

In order to ensure a sustained and far reaching impact, United Way of Mumbai adopted a multi-stakeholder participatory approach while implementing initiatives for Information-Education-Communication (IEC) with community participation and targeted immunization through its partner NGOs namely ALERT India and Anubhav Mumbai. UWM played the role of a key facilitator between implementing NGO partners, the public healthcare system, municipal corporations, college youth, the National Service Scheme (NSS) Cell of University of Mumbai and the community at large.

This project was aimed at increasing the level of awareness among the citizens and high risk populations about the Hepatitis with a focus on prevention and early detection of cases. It also aimed at helping convincing public health personnel about the urgent need to enhance services to treat/control hepatitis, as well as to ensure that the public healthcare system will carry forward and sustain the impact created by the Yuvroshni project in reducing the number of HBV and HCV-infected persons.

The name 'Yuvroshni' explicitly highlights the campaign's integral stakeholder - the youth. Yuvroshni, a Hindi word,literally translated would means "youth light", where 'Yuv' means youth and 'Roshni' means light. United Way of Mumbai envisaged that the youth of Mumbai and Navi Mumbai would be important stakeholders in this special initiative. They would play the role of trained volunteer health educators who would engage themselves in enlightening high-risk communities on the perils of hepatitis B and C infections, thereby, helping prevent the spread of these diseases.

STRENGTHS OF THE IMPLEMENTING PARTNERS:

ALERT India

For the implementation of 'Targeted Interventions in Mumbai and New Mumbai', United Way of Mumbai partnered with the Association for Leprosy Education, Rehabilitation and Treatment, India (ALERT India), a voluntary charitable organization, which has been actively working for more than three decades on issues related to community health, on diseases such as leprosy, tuberculosis, sexually-transmitted infections (STI) and HIV/AIDS. ALERT India has extensive field experience in executing targeted intervention as they focus on community partnership-based strategies and collaborations with public healthcare systems.

For implementation of the Yuvroshni project, ALERT India had to recruit, train and build a dedicated project team, which implemented the program designed by United Way of Mumbai. It had to develop working linkages with local NGOs and Community Based Organizations (CBOs) in the project area to enable extensive outreach among risk-prone groups. Further, UWM entrusted ALERT India with the task of training and capacity building of healthcare personnel from the partner NGOs, CBOs located in the area and public health department of Municipal Corporation of Greater Mumbai and the New Mumbai Municipal Corporation.

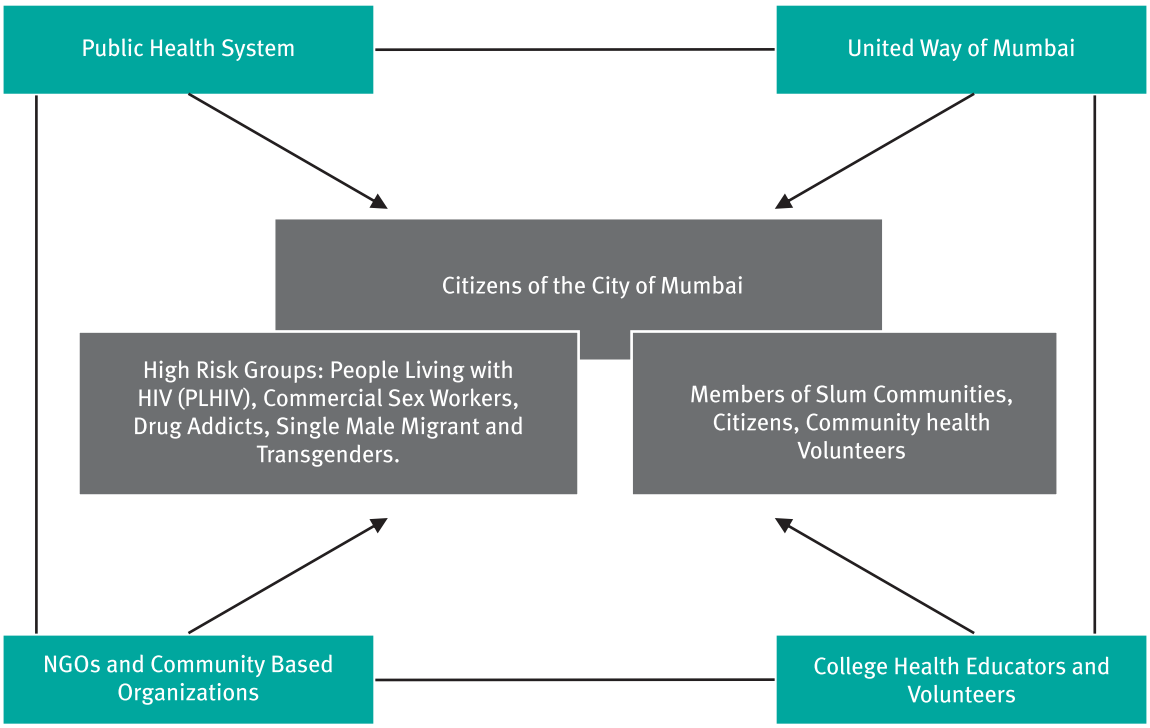
Anubhav Mumbai

United Way of Mumbai partnered with Anubhav Mumbai, a field action project of College of Social Work, Nirmala Niketan, Mumbai, for implementing the second component of Yuvroshni project, namely 'Extensive Awareness Generation campaign'. Anubhav Mumbai is known for its expertise in mobilizing and training volunteers by enhancing their social consciousness and self-confidence. Anubhav Mumbai conducts training programs, exposure visits, camps and exchange programs to meet its objectives and make the youth more responsible. The NGO works with college students from Mumbai and New Mumbai through the National Service Scheme (NSS) program.

In order to conduct awareness campaigns in the designated localities in Mumbai and New Mumbai, UWM entrusted Anubhav Mumbai with recruiting and training a team of master trainers with help from ALERT India's medical officers. The master trainers of Anubhav Mumbai in turn approached colleges in Mumbai and New Mumbai and encouraged NSS students and other students to participate in the campaign. Anubhav Mumbai facilitated the formation of 'Green Ribbon Brigades' in the various colleges visited, comprising of student volunteers trained as health educators on Hepatitis. Anubhav Mumbai was also expected to maintain a database of the trained health educators and provide them with appreciation certificates for their participation in the campaign.
Internationally, the Jade Ribbon represents the campaign for awareness on Hepatitis B. On similar lines, for the Yuvroshni Project, the "Green Ribbon Campaign" focused on involvement of college youth in the program. The groups of college student volunteers became the trained "Green Ribbon Brigades" who then interacted with communities with the objective of sensitizing people on the health hazards related to Hepatitis B and C.

The different stakeholders of the Yuvroshni campaign and their functional linkages are illustrated in the following figure.

Figure 1: Stakeholders in the Yuvroshni project



(Source: Status report on Yuvroshni Campaign, United Way of Mumbai, 2011)

OBJECTIVES OF THE YUVROSHNI PROJECT:

- To strengthen the Expanded Program of Immunization (EPI) in the public healthcare system by promoting maximum coverage of HBV vaccine.
- To increase community awareness on HBV and HCV and the importance of HBV immunization among target groups / communities.
    - To train healthcare providers (both public and private)
    - To improve knowledge
    - To refer / provide vaccine
- To provide information, counselling and referral for testing and treatment.
- To better equip testing facilities for high-risk groups and provide vaccine, if needed, to those not infected yet and identify infected persons who are required to receive health education and refer the infected persons for treatment to the public health posts.
- To sensitize healthcare policy makers on making availability of testing and treatment of HBV and HCV infections an integral part of the public health system.

Figure 2: Components of Yuvroshni

(Source: Status report on Yuvroshni Campaign, United Way of Mumbai, 2011).

YUVROSHNI PROJECT COVERAGE

Keeping in mind the project objectives, United Way of Mumbai proposed a two-dimensional project to prevent the spread of HBV and HCV infections i.e.

- Targeted Interventions with High-Risk Groups and
- Extensive Awareness Generation campaign

Targeted Interventions with High-Risk Groups (HRG)

The targeted interventions covered those identified as High Risk Groups (HRGs) or 'very vulnerable' for HIV infection such as migrant workers, interstate truck drivers and people from the transgender community, who are also considered to be at risk of contracting HBV/ HCV. HRGs also covered women commercial sex workers (CSW) and their clients, especially single male migrants as well as partners/ spouses of the clients of the aforementioned high-risk groups.

This component of the Yuvroshni campaign involved educating people from HRGs with information on Hepatitis infections; provide testing facilities for HBV and HCV infections for timely diagnosis, immunization and referral for treatment in case of infection. UWM felt that infected persons should be empowered with useful information about the virus and the treatment available. Further, those infected need to be helped in completing the full course of prescribed treatment. Most importantly, the project team had to identify and arrange screenings of infected people at community healthcare outlets such as Sexually Transmitted Infection (STI) Clinics and the contact centre of ALERT India. Lastly, this approach provided stakeholders with sensitization training by medical experts on the preventive and curative aspects of HBV and HCV infections.

The intensive intervention part of the project aimed to reach out to more than 5,00,000 people in the project areas and envisaged camps to test at least 5,000 persons from high- risk groups besides setting a target to train around 1,500 healthcare providers.

The Extensive Awareness Generation Campaign

This component of the Yuvroshni campaign was carried out all over Mumbai, in the 24 municipal wards of the city that fall under the jurisdiction of the Municipal Corporation of Greater Mumbai. Select areas of New Mumbai were also covered. The aforementioned categories of beneficiaries from Mumbai and parts of New Mumbai were expected to be impacted by the campaign.

This component of the campaign dealt with mobilization and training of about 5,000 student health educators belonging to NSS units attached to 100 colleges in Mumbai and 20 in New Mumbai. The student volunteer groups from each college were encouraged to form 'Green Ribbon Brigade' (GRBs), and they had then to conduct awareness generation sessions in their own colleges for all NSS volunteers and fellow students. Further, United Way of Mumbai and Anubhav Mumbai encouraged these GRBs to conduct mass awareness drives in the slum communities in their neighborhoods.

According to the campaign strategy, the GRBs were to adopt localities/ vulnerable pockets in their neighborhoods' in coordination with local public healthcare personnel to carry out awareness drives/ campaign throughout the year. The GRBs had to use Information –Education –Communication (IEC) material for organizing community awareness drives. The student volunteers also were encouraged to create innovative awareness collaterals such as banners, placards, posters, flip charts and pamphlets for these mass awareness campaigns. The GRBs had to also organize rallies, street plays, poster exhibitions and group meetings, apart from engaging in door-to-door campaigns and one-to-one interactions for spreading awareness about Hepatitis infections among the community members.

In order to sustain the interest and involvement of the GRBs in the campaign, UWM and Anubhav Mumbai organized inter-collegiate competitions for poster making, slogan writing, essay writing and street plays. The winners were felicitated with prizes and certificates during ceremonies, for which senior officials from the Public Health Department were invited. This also served the purpose of ensuring closer involvement of public healthcare officials in the campaign as well.
Also, it was expected that these GRBs will continue to serve as ambassadors for Hepatitis prevention efforts in their future lives too.

Geographical coverage in Mumbai
Mumbai is the capital of Maharashtra and is also the commercial capital of India. The metropolis has an estimated population of over 20 million and is administered by the Municipal Corporation of Greater Mumbai. For effective administration and provision of civic amenities and services to its vast population, Mumbai is divided into 24 civic wards.

The targeted interventions for prevention of HBV and HCV infections under the Yuvroshni campaign were focused in three civic wards in the eastern suburbs namely, N, S and T ward, covering vast areas of Vidyavihar, Ghatkopar, Vikhroli, Bhandup and Mulund. Slums with high risk and vulnerable groups were identified in these three wards; large concentration of slums being located in Ghatkopar, Bhandup and Mulund. Further, the awareness campaigns by GRBs were focused on those slums with poor immunization status and high rates of HIV infection, with close involvement of the public healthcare system in the respective Health Post (HP) areas.

Geographical Coverage in New Mumbai
Navi Mumbai is a satellite city of Mumbai, developed with the view to decongest the latter and ease the increasing burden on Mumbai's infrastructure and services. Thus, Navi Mumbai was built with a focus on relocating and accommodating many major commercial activities and establishments that were congesting Mumbai. As a result, New Mumbai witnessed a sudden growth in commercial activities and consequently attracted a large pool of migrant workers and other high-risk groups to its fast developing suburbs. The Navi Mumbai Municipal Corporation administers the Navi Mumbai region.

The suburbs of Navi Mumbai, namely, Vashi, Turbhe, Koparkhairane, Rabale, Nerul and Belapur were selected for targeted interventions.

Monitoring and Evaluation of the Project
United Way of Mumbai also provided for proper monitoring of project implementation and evaluation of project outcomes by working on reliable indicators for both monitoring and evaluation. Periodical meetings and field visits were planned for close monitoring of the project activities. Further, UWM had also prepared a detailed 'sustainability plan' for continued impact of the project among the target population.

In an effort to ascertain the impact of the Yuvroshni intervention, United Way of Mumbai decided to conduct an impact assessment study with assistance from professional research consultants. The next part of this report presents the scope, methodology and the findings of the same.

THE YUVROSHNI IMPACT STUDY

This impact study encompassed a twofold approach to assess the overall impact and effectiveness of the Yuvroshni project.

Quantitative Comparative Assessment of the impact of Yuvroshni Project Interventions: This was carried out with two groups.

- ***Intervention Group:*** This included members of the communities in which the project interventions were executed.
- ***Non Intervention Group:*** This included members of the communities where Yuvroshni interventions were not carried out.

This comparative assessment was carried out with following objective:

- ☞ To ascertain levels of awareness about Hepatitis B and C and their mode of transmission and prevention among respondents, selected from the intervention and non-intervention areas.

Qualitative Assessment of interventions of the Yuvroshni project: For this, college student who have been trained as Green Ribbon Brigadiers by Anubhav Mumbai, and the outreach workers mobilized and trained by Alert India, were engaged in deliberations to understand their perceptions on the community impact strategies employed by the respective NGO partners. This research component had the following objective:

- ☞ To ascertain the perception of outreach workers and college student volunteers towards their involvement as peer health educators in the intensive awareness campaign.

For the qualitative component, firstly, the report of the Focus Group Discussion conducted among the Green Ribbon Brigade members by Samarth, the social research organization, was reviewed and suitably integrated. Part of Samarth's report describing the data generated through in-depth interviews of outreach health workers was another qualitative component included in the impact study. Overall, the study intended to draw reliable and useful inferences regarding the health intervention project organized by United Way of Mumbai under the Yuvroshni project.

QUANTITATIVE COMPARATIVE ANALYSIS

Methodology

Quantitative comparative analysis of respondents from intervention and non-intervention areas necessitated analysis of responses received from community members to a questionnaire developed by the Yuvroshni team. This questionnaire had pertinent questions related to the awareness of Hepatitis B and C, the symptoms etc.

Quantitative data was collected from respondents living in the intervention areas (n = 50) as well as those living in non-intervention areas (n = 50). This data was analysed and comparisons were made to ascertain the impact of the intervention as far as creating awareness about Hepatitis B and C among the respondents was concerned. Quantitative data were analysed using Excel worksheets and the Statistical Package for Social Sciences (SPSS), a widely-used package by researchers for quantitative analysis.

Results

There were 100 respondents in the quantitative part of the impact study. Fifty respondents were participant beneficiaries of the Hepatitis B and C detection and prevention intervention (hereafter referred to as the 'Intervention Group') as part of Yuvroshni project. The remaining 50 respondents were those who were not beneficiaries of the program (hereafter referred to as the 'Non-Intervention group').

Pearson's Chi-Squared test method has been used to analyse comparative data. This is a statistical test commonly used to compare observed data with data we would expect to obtain according to a specific hypothesis. In this case this test has been used to determine whether the awareness level of intervention group is significantly different or not.

The following section consists of the analysis of the respondents' demographic profile, their healthcare practices, knowledge about Hepatitis B and C, the virus' mode of infection, prevent etc.

Demographic Profile

The respondents' demographic profile in terms of their age, gender, education, monthly family income and occupation was studied.

Age distribution

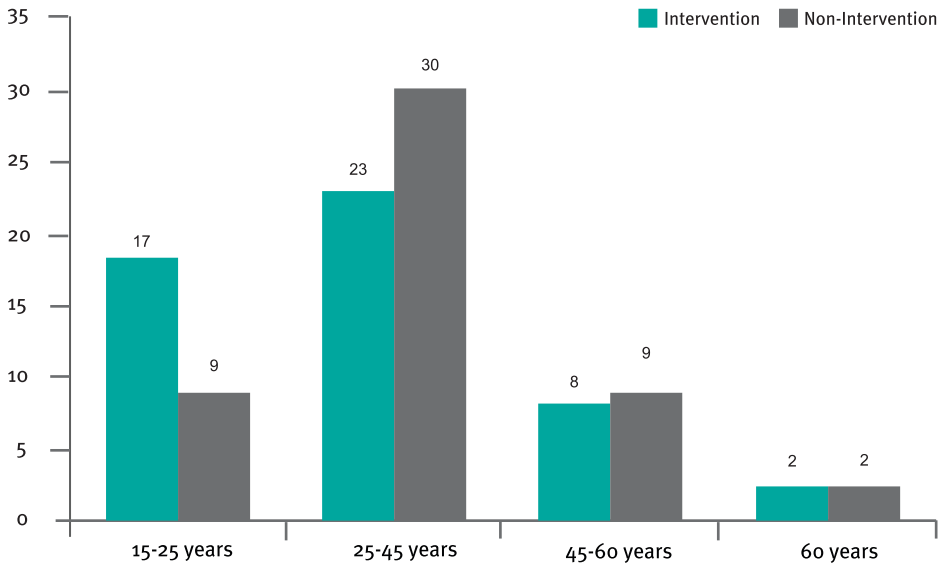


Figure 3: Age Distribution

Figure 3 represents the respondents' age distribution. A large number of respondents from both groups were within the age range of 25 to 45 years (46 percent belonged to the intervention group and 60 percent belonged to the non-intervention group). The intervention group had a higher number of younger respondents, aged between 15 and 25 years (34 percent), than the non-intervention group (18 percent).

Gender

There were more female participants in the study (86 percent in the intervention group and 56 percent in the non-intervention group) as compared to male participants.

Educational profile

Figure 4 indicates that the respondents in the intervention and non-intervention groups belonged to primary and secondary school levels, though their percentages varied (54 percent in intervention group and 62 percent in non-intervention group).

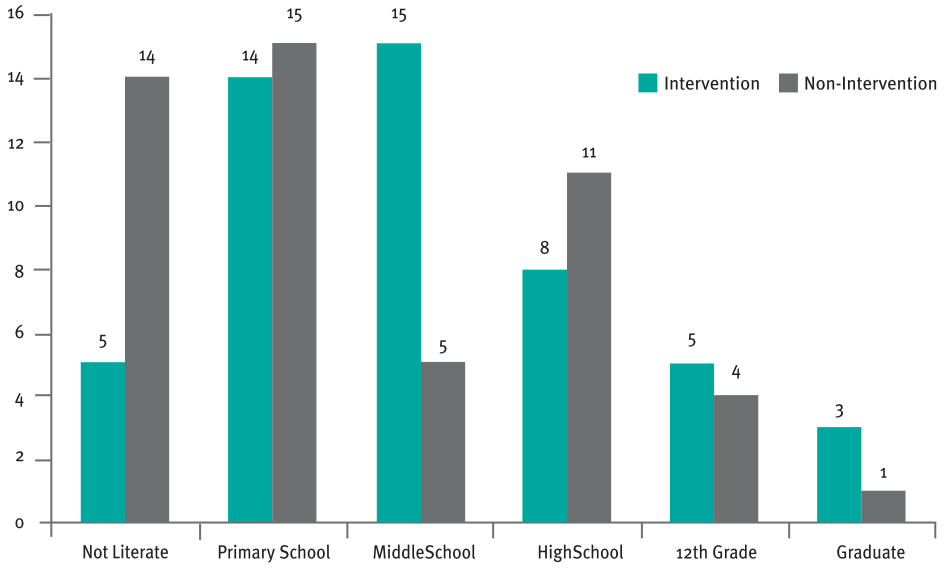


Figure 4: Educational Profile

Monthly Family Income

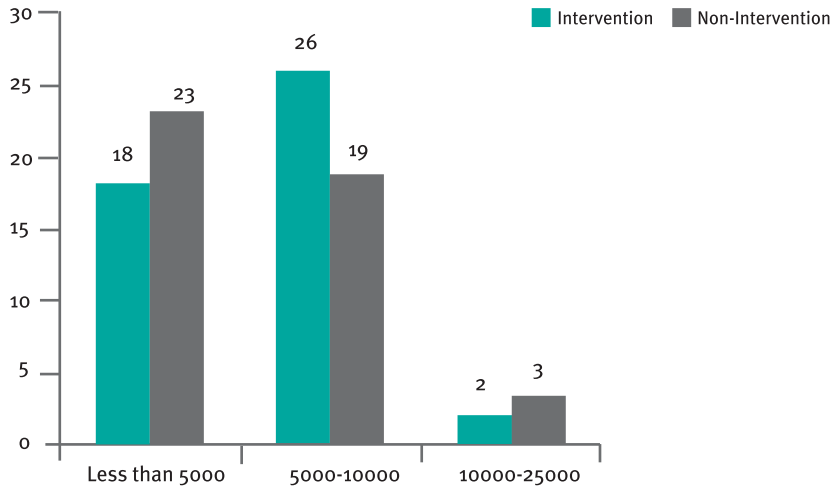


Figure 5: Monthly family income

Figure 5 gives the distribution of the respondents' family income. The majority of the non-intervention group respondents (46 percent) had a monthly family income of less than Rs 5,000, whereas a large number of respondents among the intervention group (56 percent) had incomes ranging between Rs 5,000 and 10,000. This shows that the effort of Yuvroshni project was to reach out to socially and economically weaker sections of the society.

Occupation

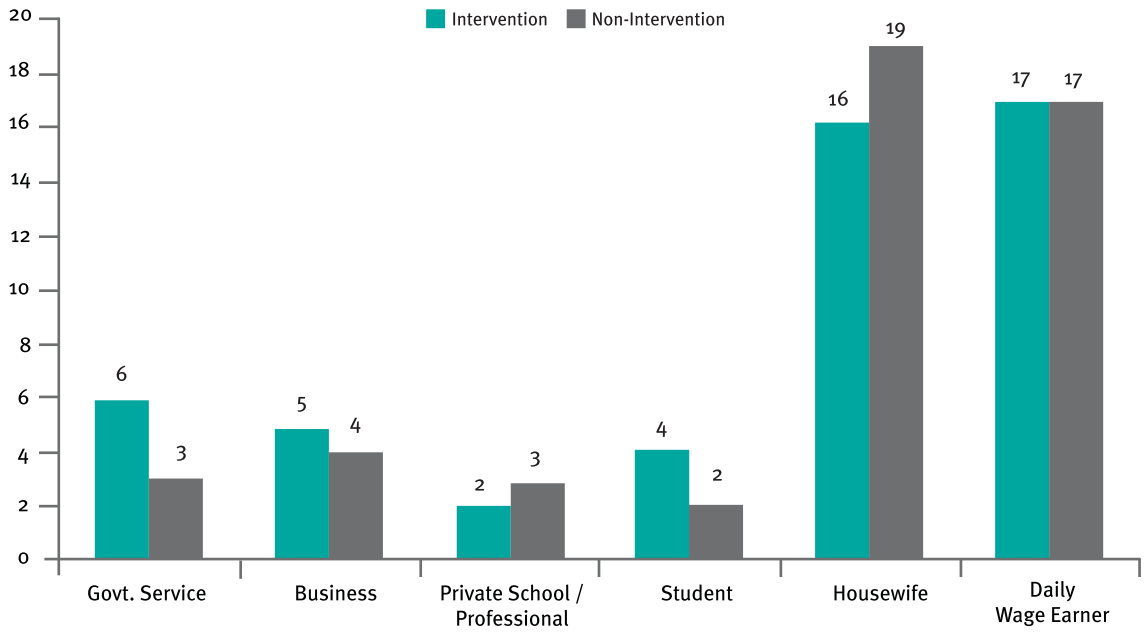


Figure 6: Occupation

Figure 6 represents the occupational status of respondents from the intervention and non-intervention areas. A large number of respondents from both areas were confined to their households as homemakers (32 percent from intervention and 38 percent from non-intervention areas). About 34 percent each from both groups worked in the unorganized sector, which included daily wage earning occupations, and self-employment like selling goods on the roadside and in local trains. A small number, 12 percent of respondents, from the intervention area worked in government establishments, however, only six percent from the non-intervention group worked in the government sector. A relatively small number from both groups was involved in business or/ and working in private sector enterprises. There were students also in the sample, but only eight and four percentages respectively from the intervention and non-intervention groups.

HEALTHCARE PRACTICES

This part of the study is to ascertain the healthcare practices of the respondents. The intention was to understand their prevention and treatment seeking behavior.

In case of medical assistance whom do the participants visit?

Figure 7 indicates that a majority of respondents from the intervention group preferred to visit a government hospital (40 percent) or a private doctor (34 percent). In contrast, a large number of respondents from the non-intervention group preferred to approach a private doctor (60 percent) and only 22 percent from this group visited government hospitals for medical assistance.

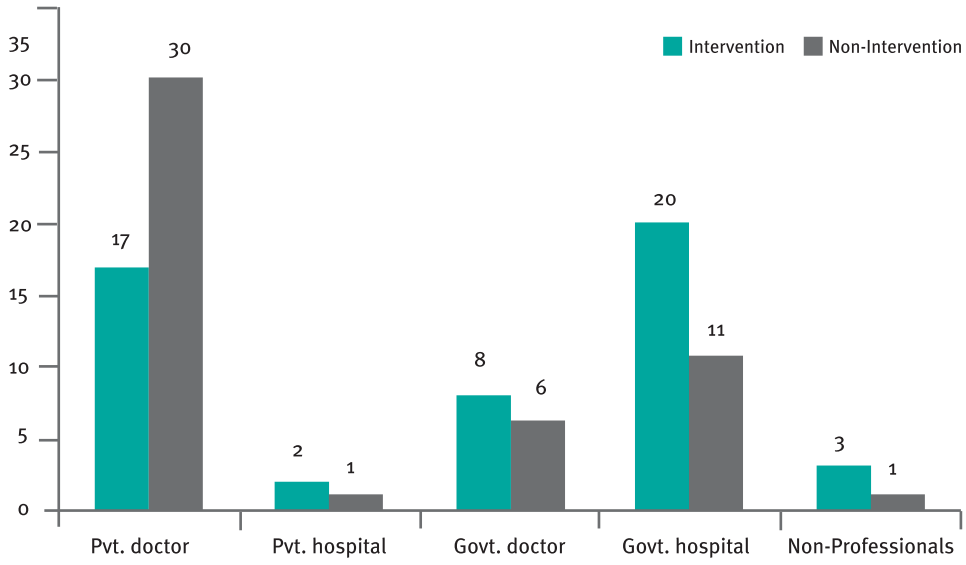


Figure 7: In case of medical assistance whom do the participants visit?

This graph reveals that the urban middle and poorer classes have easier access to private medical practitioners, though it could be expensive. It is possible that respondents are familiar with such practitioners in their localities and are confident to approach them in cases of need without inhibitions; their previous experiences might have created a sense of efficacy with respect to the treatment prescribed by such practitioners.

There are many who prefer to approach government-run hospitals in both groups. At government-run hospitals, the cost of treatment could be less than what a private hospital or even a private doctor seeks. Besides that, diagnosis through relevant medical examinations, including pathological lab tests, could be less costly at government hospitals as compared to private healthcare centres. A very small number patronizing the services of private hospitals is a significant indicator of their treatment-seeking behavior. In fact, what is evident from the data is that the respondents look for more personalized care, but also in an affordable manner. It was a very small number who visited non-medical professionals such as quacks or 'faith healers' for treatment. As part of the outreach efforts most of the Health workers imparted information on services provided by public hospitals to those who cannot afford private medical services which is reflected in the treatment seeking behaviour of the respondents.

Knowledge of Hepatitis Virus B and C

The respondents were further asked whether they had heard of Hepatitis.

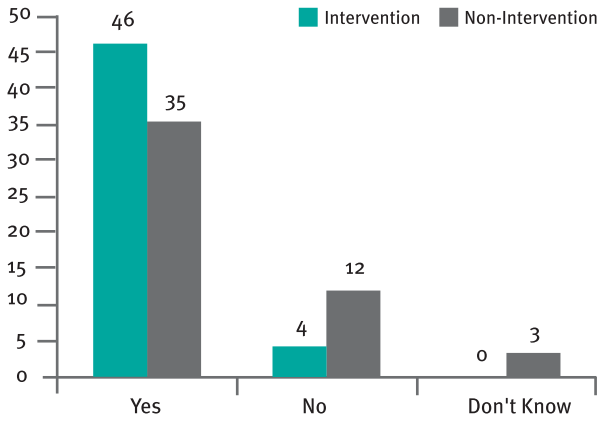


Figure 8: Awareness about Hepatitis

Figure 8 indicates the number of participants who were aware of Hepatitis. Almost 92 percent of those from the intervention area had heard about Hepatitis while only 70 percent from the non-intervention area had heard about the same.

Pearson Chi-Square results indicated that there was a significant difference between respondents from intervention and non-intervention groups as far as their awareness about Hepatitis as a disease was concerned ($\chi 2\,(1) = 7.86$, $p > 0.01$). The intervention group had more respondents who were aware of Hepatitis, in comparison to the non-intervention group.

Whether respondents are aware of the different types of Hepatitis

Respondents were then asked whether they were aware that Hepatitis could be of different types. The intention was to ascertain whether they had heard about different forms of infection caused by the Hepatitis virus. Figure 9 shows the pattern of responses from those studied.

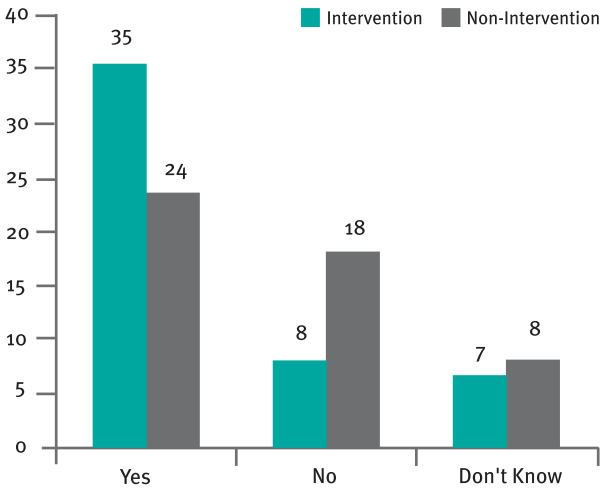


Figure 9: Whether aware of different types of Hepatitis

A significant 70 percent from the intervention group answered that they were aware, while only 48 percent from the non-intervention group were aware of different types of Hepatitis. The intervention and non-intervention groups differed significantly in their awareness about different types of Hepatitis ($\chi 2\,(1) = 5.00$, $p > 0.05$). This meant that higher number of respondents from the intervention group were aware about the different types of Hepatitis as compared to respondents from the non-intervention group.

Source of information about Hepatitis B and C

The respondents were now asked about the source of their information on Hepatitis B and C

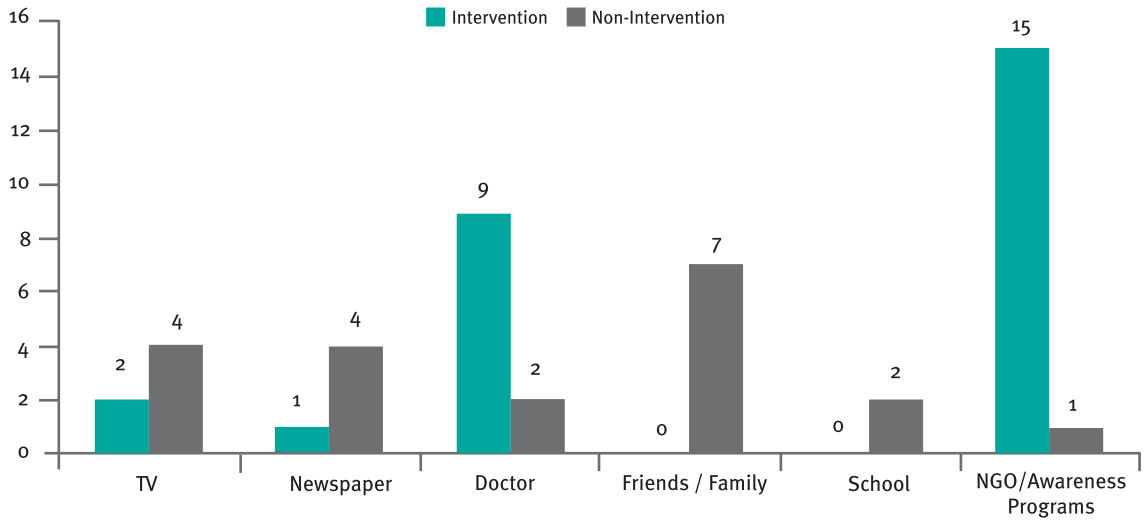


Figure 10: Source of information about Hepatitis B/C

Respondents from both groups said they had gained information about the Hepatitis from different sources. The largest group of respondents from the intervention area, 30 percent, received information about the virus from sources such as NGOs and the awareness programs previously attended. About 18 percent from the intervention area gained this information from the doctor/s, whereas a large number (14 percent) of respondents from the non-intervention area heard about Hepatitis from friends and family members. The print and visual media also helped a few respondents from both groups to learn about the Hepatitis virus.

The intervention and non-intervention groups differed significantly in their source of information about Hepatitis B/C $(\chi 2\,(5) = 27.74, p > 0.01)$.

The respondents' awareness about the virus was further explored. They were asked whether they knew if Hepatitis affects the liver.

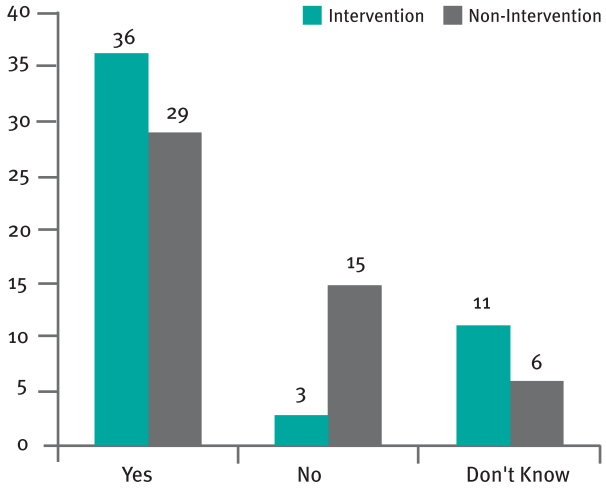


Figure 11: Whether Hepatitis affects the liver

A large number of members from both groups, the intervention (72 percent) and non-intervention (58 percent) groups indicated that they were aware that Hepatitis affects the liver. Yet, a significant 30 percent from the non-intervention area did not think that Hepatitis could affect the liver, while another 22 percent from the intervention area were unable to specify whether the virus affected the liver or not.

The intervention and non-intervention groups differed significantly in their answers in this part $(\chi 2\,(2) = 10.22, p > 0.01)$.

Whether Hepatitis B and C a serious health-related challenge

In an effort to understand the respondents' perception towards Hepatitis B and C, they were asked whether they thought that the prevalence of these two infections was a serious health- related challenge for the population of India.

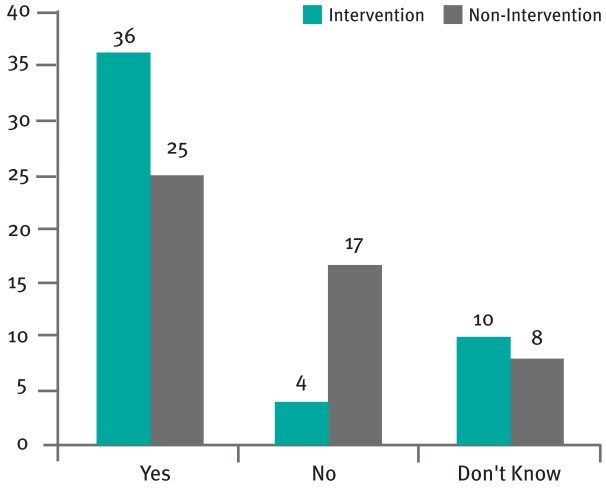


Figure 12: Whether Hepatitis B and C are serious health-related challenges

As shown in Figure 12, about 73 percent of participants from the intervention area and 50 percent participants from the non-intervention area perceived the spread of Hepatitis B and C as a serious community health issue. Yet, 34 percent of those from the non-intervention area did not perceive so, while almost one fifth of the members from both the groups were unable to provide an answer to this question.

The intervention and the non-intervention groups significantly differed in their perception about the topic ($\chi 2\,(2) = 10.25$, $p > 0.01$). More respondents from the intervention group perceived the spread of the virus as a serious challenge than the other group.

MODE OF TRANSMISSION OF THE HEPATITIS B AND C VIRUS

The next question pertained to awareness of mode of transmission of the Hepatitis B and C viruses. Possible modes of transmission were read out to the participants by the investigators, who then asked the participants to indicate whether they agreed that those were the means through which the Hepatitis virus can spread. Participants were asked to give an answer by saying 'yes', 'no' or 'don't know'. The participants were asked about six known modes of transmission for the Hepatitis B and C Virus.

Through unsafe blood transfusion

The first mode of transmission ,the participants were asked about ,was unsafe blood transfusion. Blood transfusion is generally the process of receiving blood products into one's circulation intravenously. Transfusions are used for various medical conditions to replace lost components of the blood. A large number of respondents from both, the intervention (62 percent) and non-intervention (50 percent), the groups agreed that it was a mode of spreading the Hepatitis virus. A sizeable section of both groups did not know about the subject at all (22 percent from intervention and 16 percent from non-intervention groups).

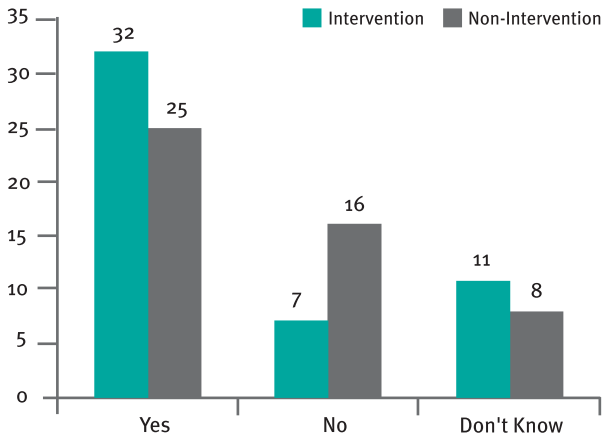


Figure 13: Transmission through unsafe blood transfusion

The variation in responses observed between the two groups on the question of transmission through unsafe blood transfusion was not found statistically significant ($\chi 2\,(2) = 4.85$, $p<0.05$).

Sharing equipment for injection of drugs

Another medically proven mode of transmission of Hepatitis B and C viruses is sharing of equipment, especially needles, for injecting drugs. Through this process, the virus can be passed on from an infected to a non-infected person. Hence, the practice of a single use of injecting needle is recommended all over the world. It is in this context that respondents of this study were asked about the same.

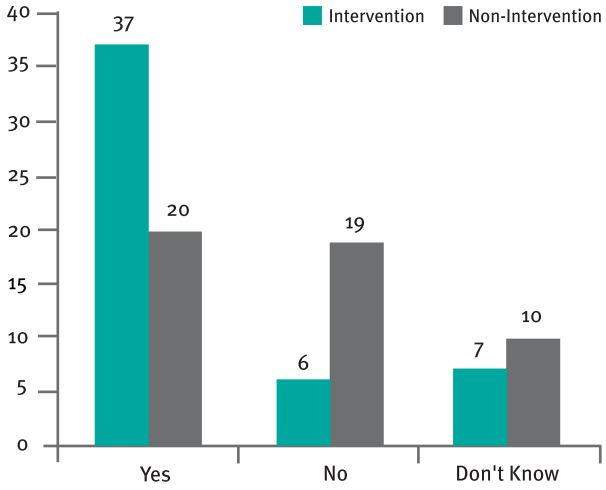


Figure 14: Sharing equipment for injecting drugs

The data analysis revealed that most (74 percent) of the participants from the intervention area knew about the possibility of contracting the disease by sharing injection needles and related equipment, in contrast to a mere 40 percent of those studied from the non-intervention areas who endorsed the same. The two groups, thus differed significantly (Figure 15) in their awareness about transmission of Hepatitis by sharing equipment for injecting drugs ($\chi 2\,(2) = 12.35$, $p>0.01$).

Sharing straws, notes for snorting drugs

Can Hepatitis B and C viruses be contracted by sharing straws, notes for snorting drugs? This was the next question which the respondents answered.

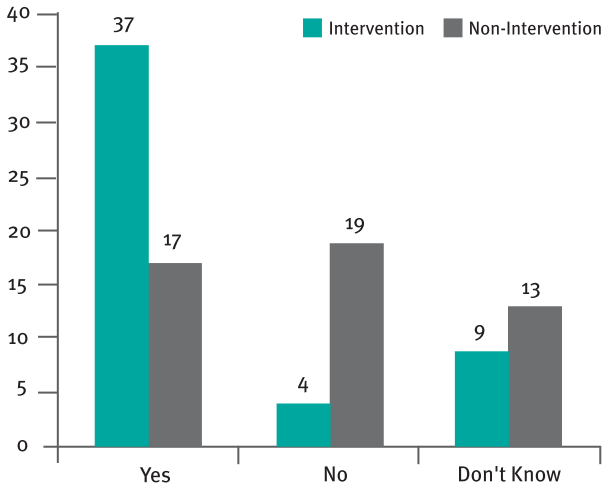


Figure 15: straws, notes for snorting drugs

About 74 percent of respondents from the intervention area felt that it was possible to contract the disease by sharing straws and notes for snorting drugs. In contrast, only 34 percent among those studied from the non-intervention area shared this response. Almost 39 percent of this group did not think this behaviour could help the spread of the Hepatitis virus. The intervention and non-intervention groups differed significantly in their awareness about the possibility of transmission of Hepatitis virus by sharing straws, notes for snorting drugs ($\chi 2\,(2) = 17.91$, $p>0.01$).

Through unprotected sex

Participants of the survey were asked whether they knew that Hepatitis virus could be contracted through unprotected sex. This is an important aspect as far as protection from the virus is concerned. Safe and protected sexual behaviour is advised universally, especially in the context of the growing scourge of HIV/AIDS cases.

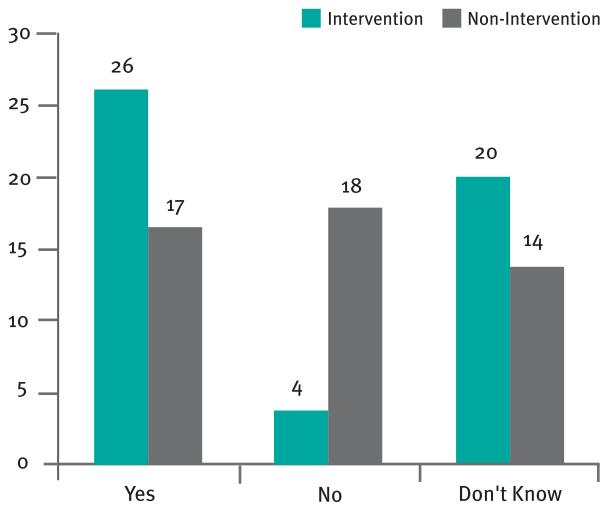


Figure 16: Through unprotected sex

Figure 17 shows that a majority of respondents from the intervention group (56 percent) was aware of the danger of contracting the disease through unprotected sex, while only 34 percent of those interviewed from the non-intervention group were aware of the same. In fact, a large group from the non-intervention area (36 percent) did not think unprotected sex could lead to contracting the disease. Similarly, a very large number of respondents from both groups were unable to give an answer as they, perhaps, did not know whether unprotected sex was a mode of Hepatitis virus transmission.

The statistical test applied showed significant variation in the responses from the two groups of respondents about this mode of transmission of the virus ($\chi 2\,(2) = 11.84$, p›0.01).

Through Oral Sex

It is medically proven that indulging in oral sex can increase the chances of transmitting/ contracting HIV/AIDS as well as Hepatitis B and C viruses. So a question on the same was posed before the respondents to find out about their awareness of oral sex as a mode of transmission.

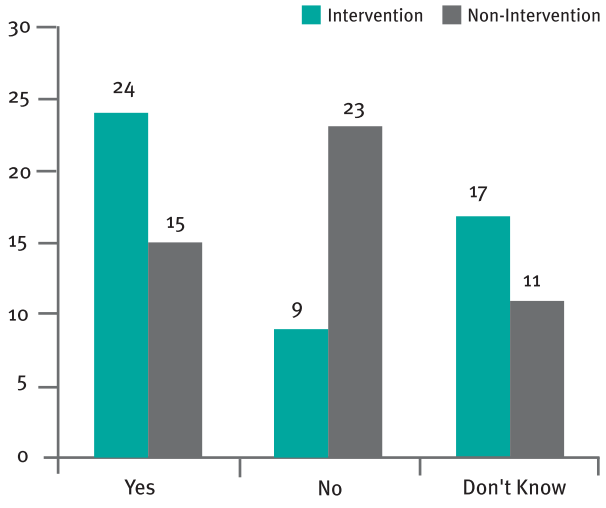


Figure 17: Through oral sex

About 48 percent members from the intervention group knew that oral sex could lead to spreading of the Hepatitis virus, but only 30 percent from the non-intervention group knew of the same. A large number, 56 percent, from the non-intervention group did not think oral sex could spread the disease. Even here, some of the respondents from both groups did not know the answer to whether oral sex could spread the transmission of Hepatitis virus.

The intervention and non-intervention groups differed significantly in their awareness about the chances of transmission of Hepatitis viruses through oral sex ($\chi 2\,(2) = 9.48$, $p > 0.01$).

From an infected pregnant mother to unborn child

Yet another mode of virus transmission in the case of Hepatitis B and C viruses is from an infected expectant mother to her unborn child. Participants were asked about their understanding on whether the Hepatitis virus can spread from an infected pregnant mother to her unborn child and the response is presented in Figure 19.

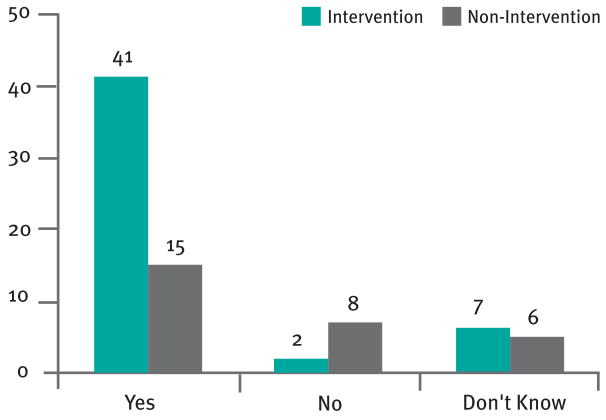


Figure 18: From infected pregnant mother to unborn child

Interestingly, a large number of respondents from both groups agreed that the Hepatitis virus could pass on from an infected expectant mother to the child in her womb (82 percent from intervention group and 70 percent from non-intervention group).

The intervention and non-intervention groups did not differ significantly in their awareness about transmission of Hepatitis from an infected pregnant mother to unborn child ($\chi 2\,(2) = 4.14$, $p < 0.01$).

Sharing razors, blade, using unsterilized needles for a tattoo or piercing

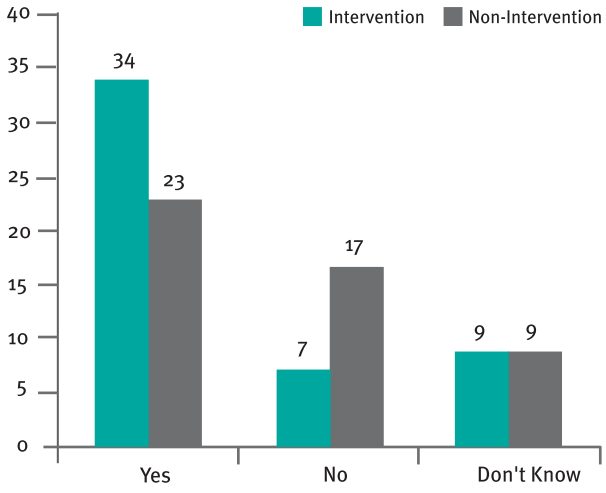


Figure 19: Sharing razors, blade, using unsterilized needles for a tattoo or piercing

When asked about the possibility of contracting Hepatitis B and C infections through sharing of razor, blade or use of unsterilised needles for making tattoos or piercing, 68 percent respondents from the intervention and 48 percent from the non-intervention groups replied in the affirmative, which indicated their correct awareness on the subject. Yet, as evident from Figure 20, the variation in responses from people from the two groups was found statistically significant ($\chi 2\,(2) = 9.48$, $p > 0.01$).

By sharing food, shaking hands, hugging

As observed in Figure 21, many of those interviewed from the intervention group (48 percent) agreed that sharing food and friendly gestures like shaking hands or hugging could lead to contracting the Hepatitis infection; but 44 percent of those studied from the non- intervention group did not think so.

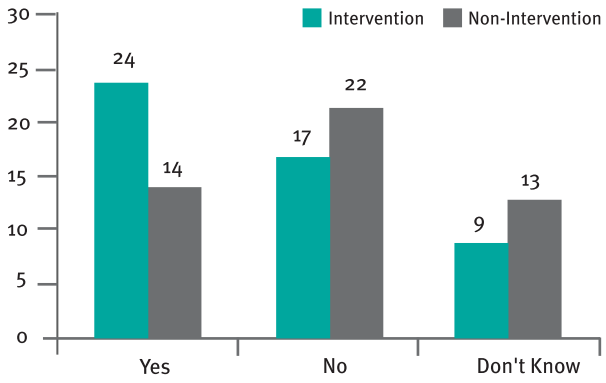


Figure 20: By sharing food, shaking hands and hugging

As 34 percent from the intervention group also did not think sharing food, shaking hands and hugging could be a mode of transmission the disease, the variation in the responses from the two groups was not found to be significant ($\chi 2\,(2) = 3.99$, $p<0.01$).

Among which age group is Hepatitis B and C infection common?

The next question was about the age group in which infection with Hepatitis B and C is commonly observed. Figure 22 represents the responses from the intervention and non-intervention with respect to which age group is infected with Hepatitis B and C virus commonly. Most of the respondents from the intervention group said that Hepatitis could affect any age group.

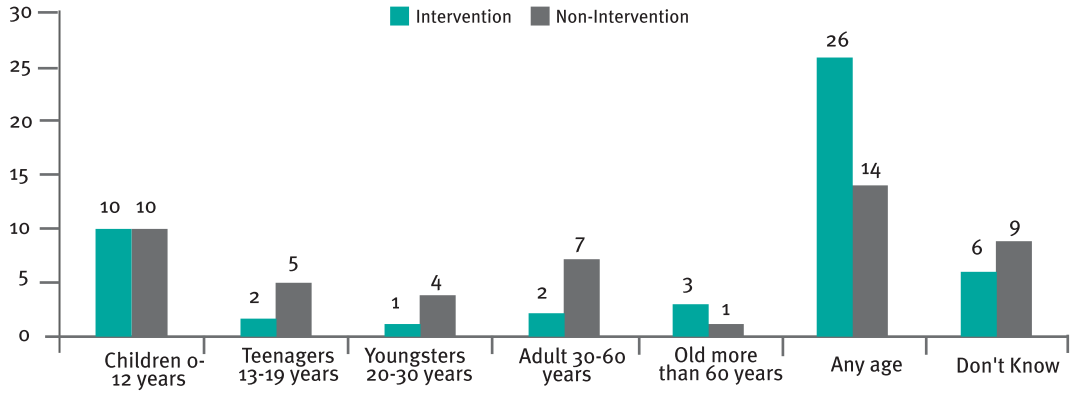


Figure 21: Age group affected by Hepatitis B and C Virus

Many respondents from the intervention group (52 percent) said that Hepatitis can affect any age group; on the contrary, only 28 percent from the other group endorsed the same view. At least 20 percent each from both groups pointed that children from zero to 12 years of age could be affected.

Whether they had heard of the Hepatitis B vaccine

The next two questions were about Hepatitis B and C vaccines. Respondents were asked whether they were aware of any vaccine to fight Hepatitis B. The vaccine to prevent Hepatitis B infection is widely used and hence the significance of this question.

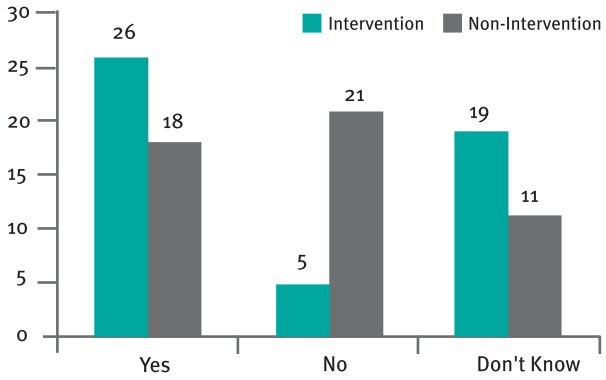


Figure 22: Whether aware about Hepatitis B vaccine

About 52 percent of those from intervention area were aware of the existence of Hepatitis B vaccine, whereas 64 percent from the non-intervention area did not hear about such a vaccine. Even then, the variation between responses from the two groups was not significant to note. In other words, the intervention and non-intervention groups did not differ significantly in their awareness of the availability of a vaccine for Hepatitis B ($\chi 2\,(1) = 2.60$, $p<0.05$).

Whether they were aware that Hepatitis B vaccine can protect against Hepatitis B infection

The question is related to the previous one that sought to ascertain the respondents' awareness on the availability of a vaccine to fight Hepatitis B. The respondents were asked whether they were aware that the available vaccine could protect against Hepatitis B infection.

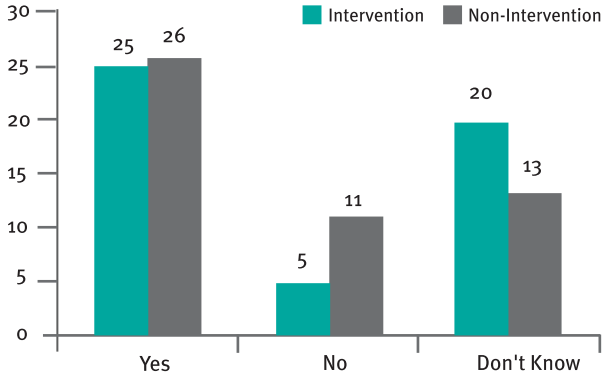


Figure 23: Whether the vaccine can protect against Hepatitis B

Figure 24 shows that almost an equal number of persons from both groups felt the available vaccine was effective to protect against the virus; the same was true in the case of those who felt it would not protect. Thus, the intervention and non-intervention groups did not differ significantly with regard to their awareness on the effectiveness of the vaccine to protect from Hepatitis B ($\chi 2\,(1) = .04$, $p<0.05$).

Whether there is a vaccine for Hepatitis C

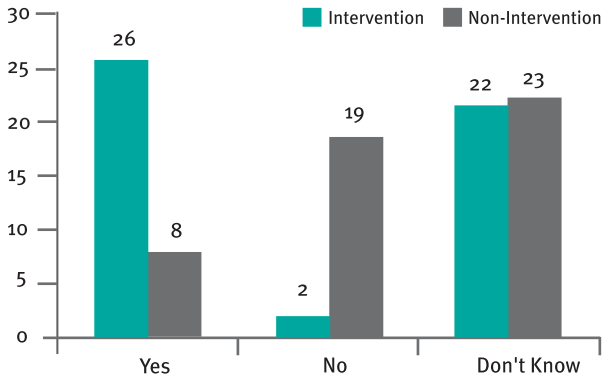


Figure 24: Whether there is a vaccine against Hepatitis C

When asked whether the respondents thought that there is a vaccine for fighting Hepatitis C, a majority of the respondents from the intervention group (60 percent) felt there was one, as against 16 percent from the non-intervention group. Interestingly, many from the non-intervention group thought there were no such vaccine available (38 percent) or did not know the answer. There was a significant difference in the responses from the intervention and non-intervention groups ($\chi 2\,(2) = 23.31$, p›0.01).

INFERENCES

The impact assessment survey was useful in identifying the overall strengths and drawbacks of the Yuvroshni campaign. A very significant observation is the discernible differences between the intervention and non-intervention groups in their understanding of Hepatitis B and C infections as serious infectious diseases. Members from the intervention group are better informed on several aspects related to the disease, yet many among them lacked information on Hepatitis B Vaccine and Hepatitis C treatment. About the mode of transmission, many respondents from both groups believed that the virus could transmit through a mere handshake, hug or sharing of food or water. This shows that even those who participated in the campaign as beneficiaries did not have the knowledge to differentiate the actual from the myth. Here too, awareness campaigners should also focus on the myths that general community members have about diseases such as Hepatitis B and C.

Nevertheless, the results of most of the statistical tests strongly support the inference that the respondents exposed to Yuvroshni campaign are better informed about Hepatitis B and C infections than those who did not receive any information input from the campaign.

The next section presents the analysis of data gathered from Health Outreach Workers through in-depth personal interviews by research organization Samarth.

STUDY OF HEALTH OUTREACH WORKERS FOR HEPATITIS B AND C THROUGH ONE TO ONE INTERACTIONS

Health Outreach Workers (ORW), mobilized by partner NGO ALERT India, played a significant role in the Yuvroshni campaign. They not only helped the project's medical team in locating pockets in Mumbai and parts of Navi Mumbai, where the Hepatitis B affected people and vulnerable population were concentrated but also helped the Green Ribbon Brigade members in their efforts to reach out to the target population through awareness campaigns. Hence, it was important to study their perception towards the campaign and its effectiveness in achieving the proposed goals as well as their own involvement in the Yuvroshni project as outreach volunteers.

Samarth, a social research organization, undertook the task of ascertaining the perception of outreach workers (ORW). Their research team chose a qualitative approach to study the perception of outreach workers towards the Yuvroshni project and thus held in-depth interviews with a sample of outreach workers using an interview guide. Although the sample size was too small to provide any conclusive inferences about the topics studied, it was sufficient to gain some useful insights about the role played by the ORWs. In particular, the research addresses aspects like the ORWs ' perception towards their role in the vaccination program, their understanding of how Female Sex Workers (FSW) perceived them and the ORWs' views about the training they might have received for the campaign from NGO Alert India's medical team involved in the campaign. Further, Samarth intended to find out the challenges the ORWs faced as volunteers of the campaign and to seek their suggestions concerning any improvement required for the Yuvroshni program.

ORWs ROLE IN YUVROSHNI CAMPAIGN

The ORWs spoke about their role in the vaccination program for the FSWs with pride. They felt that many FSWs lacked support and also were exploited and abused. As women, ORWs felt it was important to do whatever they could to help these female sex workers. The ORWs' job primarily involved providing health education to the FSWs, giving them psycho-social support in times of need and also providing the FSWs with other relevant information and advice as required. The ORWs also talked to the FSWs about the symptoms of Hepatitis B infection, its modes of transmission and the importance of vaccination. Through the medium of games and other interactive sessions, ORWs tried to educate FSWs about better health practices. Some of the ORWs had been sex workers previously, but had left the profession some time ago, thereafter; they had been recruited by local NGOs to help the FSWs. These ORWs tried to convince the FSWs about the need to get them tested for Hepatitis B and HIV infections and to undergo periodic check-ups for the same. ORWs also stressed on the importance of the FSWs using condoms while interacting with the FSWs. This, in short, was the educative and confidence-building role of the ORWs involved in the Yuvroshni campaign.

The ORWs were very participative during the interview. They wanted to share their personal experiences as they thought that sharing their experiences would help the campaign organizers to realistically evaluate the project implementation. The ORWs' responses reflected their enthusiasm as functionaries of the Yuvroshni project as well as providers of much-needed information and support to the FSWs. The following excerpts from the ORWs' conversation with the research investigators are very insightful.

We ask them how old they are, how long they have been in this trade. We ask them for symptoms like whether they feel fatigue, yellow eyes, no hunger. We tell them that if an injection is given to a person and the same needle is used for another person, then it spreads. We tell them that it can spread through blood transfusion, by having sex without condoms. Sometimes they are scared...sometimes they remember that they had done a thing like this...like some Doctor who had not sterilized the needle when they had a shot...this they remember ...and then they ask us ``will I be seriously ill?''

Another ORW was very passionate about her role to help the FSWs. She said:
We show them games.That way learning is faster. It is like opening a puzzle and learning from it. Like a mango. From the outside, it looks beautiful. Only if you cut it, you will know what is inside. If it is good, you eat it. Otherwise, you will throw it. Similarly, it is not enough if you dress well. Wear good clothes and wear necklaces around your neck or nose rings. You go to the mirror to see how

beautiful you look? Similarly, your inside must be clean and healthy too. When you have your blood tested, you will know how clean your body is on the inside. Some people agree while a few don't.

HOW FSWs PERCEIVE HEALTH OUTREACH WORKERS

In the beginning, ORWs had difficult time as FSWs treated them with suspicion and hostility and were refused any contact. Many FSWs were reluctant to attend meetings organized by the ORWs. Sometimes, FSWs verbally and physically abused the ORWs. Despite these adversities, the ORWs persisted in their efforts to educate the FWS and this compelled the FSWs to change their attitude towards the ORWs. Now, they look upon ORWs as their friends.

The following responses from the ORWs are very revealing in that sense.
They know we were doing the work of a teacher in the BALWADI (children's day care centre) We are doing Social Work. We have our ID cards. We wear them while we do our work. They know we are doing Healthcare work. Earlier we used to have a lot of problems. They (FSWs) would abuse us, throw water on us and sometimes even beat us, but now there is a change in them. Earlier they also used to be scared of us. They were scared that we would take their photo and hand them over, but we used to go and meet them twice a day, ask them about their children…..we ask about their whole life story…why they are here, what is their problem..etc. We have become friends. Now they listen to us.

CHALLENGES FACED BY ORWs

One of the formidably difficult tasks for the ORWs was to be able to motivate the FSWs to complete all three doses of the Hepatitis B Vaccine. This required the ORWs to be persistent. The ORWs had to repeatedly visit the community and persuade the FSWs; many times their efforts were in vain.

Suggestions
The ORWs felt that it was important to include the spouses and children of the FSWs within the scope of the program and that they also needed to be vaccinated against Hepatitis B. The FSWs suffered from several other health-related problems, yet they do not report them. Hence, the ORWs felt that it is necessary to counsel them and provide medical assistance at locations closer to their communities.

Another suggestion was regarding the possibility of ensuring school education to children of FSWs. The ORWs felt that it is important to ensure that the FSWs' children attended school and whatever support is required towards the same should be provided. The following excerpts are actual responses of the ORWs recorded by the investigators.

Some women have had only two injections. If they were to be given all 3 doses the treatment would be complete. In many cases, the women have taken the injections. Their children and husbands also should be given the injections. Then at least their home is safe.

FSWs have a lot of health problems and we felt that some may need a medical help. Fights are common in this area, and good medicine and local medical facilities are not available and they have to be sent to hospitals. They are under the control of "house mistresses " and it is often difficult to get permission. These girls have been "bought" and they won't let them escape so easily. Their plight is really bad. We would like to help them by providing schools for their children, giving them ration cards etc.

STUDY OF GREEN RIBBON BRIGADIERS THROUGH FOCUS GROUP DISCUSSIONS

About the FGD

Originally, the FGD was conducted by research organization Samarth. The basic objective of this exercise was to ascertain in detail the student participants' perception towards their involvement in the Yuvroshni campaign and the effectiveness of the collective efforts made by different teams of student volunteers. Further, the FGD was expected to point out the challenges faced by members of the Green Ribbon Brigades while undertaking the tasks assigned to them during their fieldwork. NGO Anubhav Mumbai helped mobilize members from NSS cadres of colleges in Mumbai and Navi Mumbai to form Green Ribbon Brigades.

Demographic Characteristics of FGD Participants

Nine students, six girls and three boys, participated in the FGD. All of them were Bachelor of Commerce students, aged between 17 and 20 years. Their months/years of experience as Green Ribbon Brigadiers ranged from a month to three years.

Participants' Role in the Yuvroshni Project

Yuvroshni NGO partner Anubhav Mumbai had established a link with many colleges in Mumbai through the National Service Scheme (NSS). Students who had joined the NSS were required to participate in community development activities and under this, UWM brought in the Hepatitis B awareness program. Several other students who were not in the NSS also joined the program out of personal interest. In this manner, the Yuvroshni team harnessed a large workforce of students to carry out Hepatitis B awareness campaigns in the intervention areas of Mumbai and Navi Mumbai. The students who participated in the FGDs described their role as one which going to various slums in Mumbai, visiting residents and distributing pamphlets on Hepatitis B. In addition to this, student volunteers were required to talk to people about the Hepatitis, explain how it spreads and impress upon them the need to get vaccinated against the Hepatitis virus. A certain number of slums would be allotted to a batch of students who would then awareness programs in the allocated localities.

Students would usually go in pairs, a boy and a girl, to the slums. While the girls would target women in the households, the boys would talk to the men. The student volunteers said that women in the slum households were more comfortable talking to the female volunteers, adding that the response was far better from middle-aged adults who would usually listen to the student volunteers.

The following excerpts from the discussion will reveal the perspectives s of the student volunteers towards the campaign.

For us this project is connected with the NSS. We need 120 hours for the NSS and we have volunteered the United Way for this. In order to complete the 120 hours we will have to go out in the community a lot. So we went out once a week for around six months to a particular slum that we picked as our volunteering target and after that it was on Saturdays after college from 12pm to 5pm.

The Yuvroshni team does not have any time expectation from us. They just want the target audience to be made aware of the program objectives. They just want the particular target audience to be covered and educated. We had 4 slums that we used to target, for us there is no saturation point. The next batch will come and they will do the same thing. Our work is continuous. There is no way to judge that the awareness is complete. Yuvroshni has a list of slums that we had to visit and create awareness and they directed us where to go so we went there and did our work of spreading the word and creating awareness. We used to do it repetitively.

When we were targeting the women it was easier for the girls to talk to the ladies. In fact the boys felt awkward to talk to the ladies. We went in pairs a boy and a girl so if we came across a lady the girls would talk and the guys would talk to any of the men. And since we mostly went on weekdays the men were out to work and the women were at home. So it was the girls who had to talk most of the time. I used to see where there is a group of men standing like outside shops or some place and go and talk to them. We used to also speak to the children from schools and tell them to tell their parents. The main idea behind talking to the children was that they could then pass on the message to their parents.

We always felt more comfortable to talk to people in the age group of our parents. People of our age never pay attention. But when we used to go to the slums the best thing was the kids who used to follow us around and keep calling out to everyone saying come see what they are teaching. That used to be helpful for us.

SUPPORT PROVIDED BY THE YUVROSHNI TEAM FOR AWARENESS GENERATION ACTIVITIES

The next topic of the FGD was regarding the participants' (student volunteers) perception of the support provided by Yuvroshni to them during the awareness campaigns. This was an important area as far as the participants' satisfaction with their role in the campaign was concerned.

Actually, a Yuvroshni team member comes to our college to educate us, 3-4 times in a year, for malaria and for Hepatitis B. We keep this as an open forum where anyone who wants to join can come and if they want to work at a personal level in their locality they can do this too.

Every time, before the day of any rally, the team would receive us at the rally venue. They brief us on the rally objective and the do's and don't's. They also share their contact numbers and make themselves very accessible.

ABOUT TRAINING RECEIVED

A very important component of the campaign was the training of youth volunteers. Hence, the next subject dealt with in the discussion was the students' views on the training received. The students mentioned undergoing a two-day program as part of the preparation to participate in the awareness campaign. On the first day, students were taught about the infection, its modes of transmission and the importance of vaccination as a preventive measure. Information regarding Hepatitis-infected persons' treatment was also communicated to them. After the training, students were able to differentiate between features of Hepatitis B infection and symptoms of Hepatitis. Earlier, students were aware about Hepatitis, but they knew nothing about Hepatitis B infection and found that the information provided by Yuvroshni team as detailed and easy to comprehend. As part of the training, students were also asked to make pamphlets and posters that could be used during the awareness campaigns.

We did not know about this disease before the training. We had the 2 day programme. On the first day we got the training and on the second day, we went out into the communities and created awareness. We were taught about all the types of hepatitis. How to prevent it and what sort of treatment is needed and we then had to go to the slums and educate people about it. Even if we are unable to explain the whole thing to them, we were able to explain why they should go to the municipal hospital and get vaccinated. So our focus was basic hepatitis awareness and vaccination.

Perception towards Work Done

Participants of the FGD were asked about their perception towards the work they did in the community as Green Ribbon Brigadiers. In response, all the student volunteers said they felt good about being a part of the Green Ribbon Brigade. A feeling of doing something useful to society infused in them a sense of pride. Initially, when the student volunteers went out into the community, they had a difficult time getting people to listen to them, which made them feel a little disillusioned. However, as they continued their efforts, they noticed a change in the attitude of the community members and soon, more and more community members were willing to listen to them. This inspired and encouraged the student volunteers to continue their work. Further, they also gained a lot of self-confidence and knowledge about Hepatitis- its prevention and cures, teamwork and community dynamics from their involvement in the Yuvroshni campaign. The following are some of the responses from the participants:

It's nice to be in the Green Ribbon Brigade. We feel that we are doing something different. We feel proud of ourselves. We tell our classmates how we are enjoying ourselves and sometimes they feel envious. We realize this is a responsibility on us. I never used to speak out earlier, but after going out into the community and talking to people my confidence level has increased. There were diseases we just knew existed and did not know any details. We did not know how to go talk to someone about it. But with this training and we are now confident. We learn to handle situations. I got the experience of creating awareness and I love doing social work as I feel I am doing something useful and the information that we get is useful at home too

Challenges Faced

The greatest challenge the Green Ribbon Brigade members faced was in gaining acceptance from the community. Very often people did not show any interest in what these student volunteers were doing or would even slam the door on their faces, refusing to interact with them. The volunteers also faced some resistance from the elderly as well as the youth, with the former indicating that it was of no relevance to them and the latter taunting and teasing the student volunteers. The student volunteers, however, persisted and the girls in the team predominantly targeted the women in households, most of whom were willing to listen to them.

The boys would approach men gathered at tea shops. The student volunteers also faced some ridicule from some of their classmates. Another challenge faced by the student participants was in getting people to complete the three doses of Hepatitis vaccination. A very small percentage (10-15%) had completed all their doses, said one of the volunteers. Sometimes, the pain and swelling following the first injection posed as a deterrent for completing all three doses. The participants shared their experiences in the following manner:

At first we felt very demoralized, we felt that if they don't want a better life, why should we bother, and then we realized that it is because they are not aware of the problem and once we make them aware they will understand. We realized that we have to educate them and make them aware of such diseases.

When we meet people of the age group as our parents, they always listened to us. But the senior citizens never paid attention, they always said that we are old, what is there for us. We also said that you have to think of your kids and grandkids and they kept saying nothing will happen. Then there were the younger group of people who were like the vagrants who kept taunting us and that was very irritating and we totally ignored them. We were targeting the women of the house because in the slums the women are the main persons. I once went out into the community and met an old lady, I spoke to her about Hepatitis B & C and then she said that "I have Diabetes tell me about that". So I told her to get the same checked from the doctor but at the same time get this checked too.

A lot of people have actually taken information on where the vaccinations are given and the fees. 60-70 % of the people whom we have spoken to have taken further details from us and we think 20-30% would have certainly taken the vaccination. The Hepatitis vaccination causes swelling at the point where the injection is given. So they avoid the second dose because of the pain. So most of the people would have taken the first dose, while only a few would have taken the second dose too. Most of them would not have taken the third dose and about 10- 15% only would have taken this. We have done our bit now, they have to do their bit. We have spread the word and our work is done. Now they have to take the initiative to make the change.

We were told that we had to go to the slums distribute pamphlets and give them as much information as possible. We go in teams. The slums have small lanes so 2 of us go together so that we don't get lost. We complete one street where we go door to door and ask them if they have two minutes to spare. If they do, they come out and we explain to them. Some of them close the door on our face. Or they ask us to come some other time. Sometimes they get irritated. Then there are dogs in the slums and that is scary. We have recently been to 2 slums and both were fairly ok. The people were decent and we did not face any problems. It is just that it is a slum area and the houses are like that I did not have any problem going to the slum areas. And since it was vacation, lots of people were not home and the houses were locked, so we used to leave a pamphlet on the door.

SUGGESTIONS BY GREEN RIBBON BRIGADIERS

Many of the students felt that visual media, especially television channels, could be involved in the campaign to disseminate information on Hepatitis B and C virus/infection, similar to the one provided on HIV/AIDS. The student volunteers said that such media campaigns should be telecast on television channels commonly watched by the people during prime time. Volunteers also felt that local doctors should be more proactive in providing information about the Hepatitis virus and should display posters on Hepatitis B in their clinics besides talking to their patients about the need to get themselves tested and vaccinated against the virus. Another suggestion was to gather people at a common place for some cultural program and use the occasion to spread awareness about Hepatitis among the audience gathered.

Ads on TV, like the HIV advertisements would also help, but not on Channels like DD, but on channels that they tend to watch during prime time and also printed ads. Local area doctors should take the interest to check on people at least once a month to see if there is any new disease or if people are taking their vaccinations on time and is the course on track. We cannot go and vaccinate people or do anything like that as it is a doctor's responsibility. The doctors should put up at least one poster in their clinics. People who are waiting can read it

Instead of going door to door, it will be better to invite all the people to a single place and have something like a cultural program so that we can talk to a group of people at the same time and practically advise them. People would come, but not all of them would come at the same time. Even if one person from one family comes it is good. They have only Sunday to relax they would like to be close to home. I am suggesting that it be held close to their homes.

CONCLUSION

A careful analysis and interpretation of evidences collected by the quantitative and qualitative components of the impact assessment study lead to the conclusion that Yuvroshni intervention project was a well-conceived strategy to develop community-based Hepatitis B and C detection and mitigation program in Mumbai and New Mumbai.

However there is scope of improvement in strategies for citywide community awareness generation. Concentrated efforts for awareness generation in selected localities are required. Notwithstanding this, the study concludes that any intervention through community outreach is successful when the target population is well informed about its purpose and motivated by the implementing team to become active participants. Yuvroshni campaign has been able to achieve notable success for the same reasons. The campaign has demonstrated that it is possible to mobilize the youth and other stakeholders for a sustained effort to fight a disease, with long-term commitment. Yuvroshni is an imitable model of successful community health initiative in partnership with multiple stakeholders. United Way of Mumbai has to carry forward the momentum created through these collective efforts and that surely will snowball into a major collaborative intervention with several more stakeholders and have an impact on a larger scale.

SOCIAL RETURN ON INVESTMENT (SROI) ANALYSIS OF THE YUVROSHNI PROJECT

Enterprises create different types of impacts, only some of which are measured using conventional financial accounting. Social Return on Investment (SROI) Analysis is a method for understanding the (environmental, social and public economic) value being created by organizations in addition to the financial value that accrues to the owners. It enables all outcomes to be considered jointly, expressing all relevant costs, benefits and their relative significance. SROI analysis can be used by investors, foundation program officers and policy makers to determine their capital allocation strategies and decisions, and by managers to determine their projections, strategic planning and performance assessment.

Calculating the financial return on investment (FROI) is quite straightforward and commonplace in many organizations. The ROI is the number of times an investment is earned back by the investor. The ROI, however, fails to incorporate other returns like the social, environmental or cultural values (or social impact) that have been created for different stakeholders. The method of SROI is designed to ascertain these values. SROI measures change in ways that are relevant to the people or organisations that experience or contribute to it. It tells the story of how change is being created by measuring social, environmental and economic outcomes and uses monetary values to represent them. 1 This enables a ratio of benefits to costs to be calculated. For example, a ratio of 3:1 indicates that an investment of Re.1 delivers Rs.3 of social value.

The Yuvroshni project was initiated by United Way of Mumbai (UWM) in January 2011 supported by Bristol Myers Squibb Foundation (BMSF) for Targeted Medical Intervention and Awareness Generation on Hepatitis B and C for which this SROI study has been conducted. It does not make policy recommendations. Rather, the purpose of the study is to better understand the impact of YUVROSHNI campaign and make an attempt to quantify the impact.

The SROI Framework, drafted by Sara Olsen and Jeremy Nicholls; A Guide to SROI Analysis by Peter Scholten, Jeremy Nicholls, Sara Olsen and Brett Galimidi; and Measuring Social Value, by Eva Neitzert, Eilis Lawlor and Jeremy Nicholls (new economics foundation).

- ***Monetization***

SROI expresses social value in monetary terms. This process is called monetization. The advantage of monetization is that it allows a relative impact assessment to be made. Since the investment in social enterprise is monetary, social value should be monetized as well. This makes it possible to say something about just how large the impact has been, relative to investments.

Notably SROI is about value, rather than money. Money is simply a common unit and as such is a useful and widely accepted way of conveying value. The value that we get will be different for different people in different situations. Social benefits are not easily monetized, which creates problems for SROI accountants. One common technique to monetize social benefits is to use comparison costs - how much money would it cost to create the same benefit.

- ***Steps used to calculate SROI for YUVROSHNI Project***

Developing outcome indicators: A crucial part of SROI analysis is making the impact of project measurable. The first step towards making the impact measurable is to determine the indicators for impact. A basic principle of SROI is to measure and value the things that matter. Based on these indicators used in this study are:

- Amount saved by citizens for medical testing of Hepatitis B and C in General Market
- Amount saved by citizens for vaccination in General market
- Training of volunteers as peer health educators
- Amount saved by citizens in consultation of medical practitioners in general market
- Fewer hospital admissions

These five indicators have been divided into market comparisons and social benefit. Market comparison is what it would cost to achieve the same outcome while social benefit is the benefit achieved by the stakeholders as a result of the intervention. Following are the impact figures for the YUVROSHNI project for which Social Return on Investment has been calculated.

IMPACT OF YUVROSHNI PROJECT

	PERIOD	PROJECT TARGET	TOTAL PROJECT OUTREACH
Project Focus I	Medical Interventions		
	Total number of citizens tested from vulnerable sections and geographies of the city	5000 Citizens to be tested	8941 Persons
	Number of Vaccination provided to citizens		8922 Persons
Project Focus II	Training of public and private health care personnel in vital aspects related to Hepatitis B & C	1500 public and private health care personnel	617 Health Care Providers
Project Focus III	Information-Education-Communication (IEC) Campaigns	Reach out to 5000 citizens	
	No. of people reached out through IEC Campaigns		227595 Citizens
	No. of college youth trained as Peer Health Educators		4200 Citizens

MONETISING IMPACT OF YUVROSHNI

The outcome incidences were estimated during community consultation and discussions with support workers from two partner organisations, namely **Alert India** and **Anubhav Mumbai** for various community target groups. Cross checking of these incidences were done through field visits and written reports.

The outcome incidence was calculated for both identified stakeholders against each outcome, using target and actual populations reached, and in cases where no data existed stakeholders in the community consultation (Community members and NGO support staff independently) were asked to provide an estimate of percentage of stakeholder population who experienced this outcome. Where there was an estimated range the study team always adopted the lowest percentage.
Each outcome was monetised using a financial proxy or direct cost. The financial proxies were developed during the community and NGO consultations. It must be noted that several different financial proxies were listed for each outcome area; the study team took the conservative view of valuing only a maximum of three key financial proxies. In effect the total stakeholder value has not been fully reflected.

OUTCOME	INDICATOR DESCRIPTION	FINANCIAL PROXY DESCRIPTION
Prevention and early detection of Hepatitis B and C among vulnerable community member groups	• Total number of citizens tested from vulnerable sections and geographies of the city • Number of Vaccination provided to citizens	• Amount saved by citizens for medical testing of Hepatitis B and C in General Market • Amount saved by citizens for vaccination in General market • Opportunity Costs: Loss of wages on daily basis if a citizen gets affected by Hepatitis multiplied by number of citizens provided with vaccination • Amount saved by citizens in consultation of medical practitioners in general market
Increased awareness and education on Hepatitis B and C among general community members	• Public and private health care personnel in vital aspects related to Hepatitis B & C • No. of college youth trained as Peer Health Educators	• Reduction in public expenditure by government on interventions for awareness generation on Hepatitis B and C • Amount saved by government in training public and private health care personnel in vital aspects of Hepatitis B and C • Amount saved by government in making college youth awareness of vital aspects related to Hepatitis B and C

SROI CALCULATIONS FOR YUVROSHNI PROJECT

		Cost in INR	Number of people reached	Total amount in INR	Total amount in USD	Outcomes Indicators
	Financial Proxies					
A	**Amount saved by citizens for medical testing of Hepatitis B and C in General Market**	INR 3,500	8941	INR 3,12,93,500	USD 6,87,014	Total number of citizens tested from vulnerable sections and geographies of the city
B	**Amount saved by citizens for vaccination in General market**	INR 1,095	8922	INR 97,71,632	USD 2,14,525	Number of Vaccinations provided to citizens
C	**Opportunity Costs: Loss of wages on daily basis if a citizen gets affected by Hepatitis multiplied by No. of citizens provided with vaccination**	INR 115	8922	INR 1,02,60,300	USD 2,25,254	
D	**Opportunity Costs: Fewer GPs Visits (Cost per visit X 6 visits in a year) - Amount saved on it**	INR 10	8922	INR 5,35,320	USD 11,752	Incidences of visiting a general medical practitioner being reduced due to testing and vaccination
E	**Training of volunteers**					
	Public and private health care personnel in vital aspects related to Hepatitis B & C	INR 200	1577	INR 3,15,400	USD 6,924	• Reduction in public expenditure by government on interventions for awareness generation on Hepatitis B and C • Amount saved by government in training public and private health care personnel in vital aspects of Hepatitis B and C
	No. of college youth trained as Peer Health Educators	INR 200	5044	INR 10,08,800	USD 22,147	• Amount saved by government in making college youth awareness of vital aspects related to Hepatitis B and C
Total Social Value Created (A+B+C+D+E)				**INR 5,31,84,952**	**USD 11,67,617**	
	Total Value created to be discounted at 8 percent			INR 42,54,796	**USD 93,409**	

Total Social Value Created after Discounting Factor	INR 4,89,30,156	USD 10,74,208

Social Return on Investment for YUVROSHNI Project		
Total Investment	INR	USD
	INR 51,98,688	USD 1,15,526
Total Social Value Created	INR 4,89,30,156	USD 10,74,208
SROI for One INR / USD invested	**9**	**9**

Sensitivity analysis of the model
A number of factors were varied to test the sensitivity of the model.

Financial proxies: Halving the financial proxy for avoided costs of visits to General Medical Practitioners. It is imperative to note that most of such visits may not be attributed to symptoms related to Hepatitis B and C. Patients may go there because of other ailments not necessarily related to Hepatitis B and C.

Attribution to YUVROSHNI: YUVROSHNI project provided direct targeted medical interventions to some target community groups. In addition beneficiaries were clear that without YUVROSHNI they would simply not have known anything about Hepatitis B and C or avail public health services, or been referred/linked to any Government support, hence the estimate of 50% attribution.

FINDINGS AND LIMITATIONS

- The social value created through YUVROSHNI Project for an investment of INR 51, 98, 688/- is INR 4,89,30,156/-. The SROI ratio of 9:1 implies that for every Re.1 invested, Rs. 9 of social value is created for society in terms of reduced health care costs
- SROI analysis demonstrates YUVROSHNI creates value in two key ways
    - Money saved by citizens for testing and vaccination in the general market
    - Saving government expenditure on training of volunteers and awareness generation and improved public health
- The study is based on projected as well as actual assessments of social impact. To determine the true value of SROI it will be necessary to collect data necessary to create SROI analyses based on actual performance. i.e. Determining value of all interventions in consultation of community stakeholders first hand.
- One of the critical impacts of these interventions could be saving of treatment costs of those community members who could have been infected with Hepatitis B virus (based on the prevalence rate of Hepatitis B in city of Mumbai). However, market denominator for treatment prices for this disease varies drastically. Moreover level of disease prevalence in an individual will determine the costs of treatment and hence we could not arrive at an average treatment cost, which could have increase the SROI significantly.

Limitations of this SROI study
- In the absence of standards and a robust method of auditing an organisation's 'claims' to the value it creates, ratios of return can be easily dismissed
- Limited Timeframe: Ideally the study should have been conducted over a long period of time as opposed to just 1 year as is the case for YUVROSHNI
- With SROI being a new concept in India, secondary data sources were not available

- Stakeholders may be interested in benefits that cannot be monetized
    - Some outcomes are more challenging than others to monetize (e.g. self esteem) and proxies for these values may be required
- Not all value created is reflected
- Concepts of attribution, deadweight, displacement have not been taken into account owing to lack of long term data. However mention of these indicators have been made in the study
- SROI cannot be used as the sole indicator of performance

References for Market Comparisons

- Average rate of inflation in 2010-2011: http://www.tradingeconomics.com/india/inflation-cpi
- Extent of Hepatitis Prevalence: http://timesofindia.indiatimes.com/city/mumbai/45-million-Indians-carry-hepatitis-B-virus/articleshow/4185395.cms
- Per unit hospitalization cost for 10 days: http://www.aiims.edu/aiims/hosp-serv/revised-rate-list.htm
- Incidence of hospitalization: http://www.indmedica.com/journals.php?journalid=7&issueid=83&articleid=1109&action=article
- Market Comparisons: (what it would cost to achieve the same outcome) or working assumptions that will need to be related to proposed future improvements: http://www.socialevaluator.eu/ip/uploads/tblDownload/SROI%20Guide.pdf

RESEARCH CONSULTANTS

DR. K. SHARATH KUMAR, *Principal Research Consultant*

Dr. Sharath Kumar has retired as Associate Professor from College of Social Work, Nirmala Niketan, an affiliate of the University of Mumbai, after 28 years of post graduate teaching and research guidance. He has been a guide to over 150 student research projects in Social Work and allied Social Sciences. He is a university appointed guide for the Doctoral study in Social Work and some of the scholars under his supervision have already received their Doctorates. He was also a member of the Board of Studies in Social Work of the university.

Presently, he works as a freelance Social Research Consultant, offering professional guidance and assistance to research scholars and institutions seeking help in research.

Dr. Sharath Kumar has completed a Master of Philosophy in Social Sciences in 1979 with specialization in Research Methodology from Tata Institute of Social Sciences, Mumbai after his post graduation in Politics. He received the Doctoral Degree in 2000 from University of Mumbai.

PROF. ABRAHAM ANTONY, *Co-Researcher*

Prof. Abraham Antony is an Associate professor of College of Social Work, Nirmalal Niketan, an affiliate of University of Mumbai who has been actively involved in post graduate teaching and field work guidance of over 25 years. As a member of the faculty, he has initiated various intervention programs for victims of disasters at the state and national levels in India. He was also a member of Board of Studies in Social Work of the university.

Prof Abraham has been a Co Researcher to some of the research studies conducted by Dr. Sharath Kumar in the past.

YUVROSHNI NGO PARTNERS

Alert India for Targeted Medical Interventions with High Risk Groups

ALERT-INDIA (Association for Leprosy Education, Rehabilitation and Treatment-India), a voluntary charitable organization, started its work over 3 decades ago (October 1978) with a vision to eradicate leprosy from our country to ensure the rights of leprosy affected persons through community partnership strategies and make leprosy control a reality for people. Following are other initiatives of Alert India apart from Leprosy.

- T.B. Control Project: In alliance with Navi Mumbai and Thane Corporations, serves in over 10 urban health post areas with majority slum population. ALERT-INDIA supervises DOTS (Directly Observed Treatment, Short course) and helps retrieve patients, promotes greater compliance and hence improves cure rate since 1988.
- Aastha Project: Aims to reduce STDs / HIV prevalence amongst vulnerable community groups in Navi Mumbai. The project gives special counseling, conducts group education programs and public campaigns on HIV / AIDS since 2005.
- Community Education Unit: To emphasize on issues like reproductive health and community group activities, especially for women and adolescent girls and boys. ALERT has been training community health workers to build their capacity and improve the quality of outreach services since 1995.
- Family Development Project: A special program to help families with socio-economic problems. The families are assisted to find avenues and be self independent since 2005.

Anubhav Mumbai for Extensive Awareness generation Campaign

Anubhav Mumbai was initiated in June 1997 by the College of Social Work, Nirmala Niketan, as a project of its Extension Centre at Goregaon, Mumbai. It is a part of the all India network of SMILE (Students Mobilization initiative in learning through Exposures) now recognized as a National Youth Foundation. It works with the student and non-student youth in Mumbai city with the aim of enabling youth to discover themselves and contribute positively to the development of Society as concerned, responsible citizens. Anubhav Mumbai works mainly with colleges in the suburbs of Mumbai i.e. Bandra to Vasai.

Anubhav Mumbai works for the holistic development of young people in Mumbai. Its strategy is to build a forum of young people who commit themselves to the values of human rights, gender equity, respect for diversity, plurality, integrity and democratic values in society.

COMMUNITY HEALTH INITIATIVES OF UNITED WAY OF MUMBAI

United Way of Mumbai

United Way of Mumbai, as part of its community impact initiatievs has been working closely with the Municipal Corporation of Greater Mumbai, National Service Scheme and Corporates to collectively adopt a strategy for addressing the key health issues in the city of Mumbai. This includes programs on diseases/ infections that affect large number of persons in the city including monsoon ailments, such as Malaria, Dengue, Diarrhea, Leptospirosis, Gastroenteritis, Jaundice, Typhoid and few other severe diseases such as; Diabetes, Hepatitis B & C infections. These diseases are severe in nature, highly prevalent among the city population and yet there is lack of awareness among the people about the diseases. Key features of our community health initiatives are:

- ✓ Active community participation ensures maximum community outreach with minimal resources
- ✓ Mobilization of youth as volunteers for community welfare
- ✓ Wide spread and sustainable impact through trained health educators
- ✓ Public private partnership

SUCCESS STORIES AND ONGOING CAMPAIGNS

Youth for A Healthy Mumbai- 2010:

A citywide campaign was implemented in response to the Malaria outbreak during monsoon 2010. The campaign was conceptualized and spearheaded by United Way of Mumbai in partnership with the municipal public health department and the National Service Scheme (NSS) of the University of Mumbai. Over 3000 youth were trained as Health Educators from 75 city colleges with the help of municipal doctors at municipal ward level. These trained health educators in turn carried out 750 awareness drives over the span of two months and imparted critical messages on prevention of Malaria to over 7 Lakh citizens from vulnerable pockets of Mumbai.

IMPACT:

75 Colleges | 3000 Youth | 750 Awareness Drives | 7 Lakh People Educated

Pahal: Towards Hepatitis Free Next Generation (November 2012 to June 2015)

This project is being implemented in partnership with AmeriCares India Foundation and the National Liver Foundation, with special emphasis on prevention of mother-to-child transmission of Hepatitis infections in Mumbai city. Key components of this project include; providing education, testing and vaccination to pregnant women and women at child bearing age. Under this project, we have been working with college youth under the NSS scheme as well as NGOs working with women, to train them as Peer Health Educators. Further, three slum communities (one each from eastern suburbs, western suburbs and the southern suburbs of Mumbai) have been adopted for targetted interventions being executed by our partner AmeriCares India. The project is supported by the Bristol Myers Squibb Foundation.

IMPACT:

Training of Health Educators:

5,077 Youth from 59 Colleges, 1,600 female members from 29 NGOs,

133 Aanganwadi workers

Community Awareness:

77 Awareness Drives 77,000 Population educated

Targeted Interventions in 3 slums:

8,868 Households visited for health education, 7,495 women at childbearing age counseled,

461 pregnant women registered & being monitored, 364 New born babies vaccinated

Together on Diabetes: Education and prevention of Diabetes (June 2013 to May 2015)

Through this project United Way of Mumbai promotes educaiton, early diagnosis and healthy lifestyle practices among the target groups including; 10,000 adult workers from unorganized sector, 2,000 public school teachers and 2,000 public health workers under the ICDS scheme of Government of Maharashtra. These target populations are provided with preventive education on diabetes, free of cost testing of random blood glucse levels. Counselling is provided for management of diabetes to persons found with high blood glucose levels, who are also refered to the nearest public health centres for further investigations and treatment. United Way of Mumbai ha salso partnered with Nirman, an NGO for executing the interventions with adult workers of unorganized sector. The project has been supported by the Bristol Myers Squibb Foundation.

IMPACT AS ON DATE:

Baseline study conducted to understand level of awareness on:

50 Anganwadi workers 50 school teachers 200 unorganized labourers

Health Education imparted to:

250 students from 7 colleges trained as Health Educators,

40 Construction workers, 35 public school teachers, 298 Aanganwadi workers

COMMITTED TO MAKING MUMBAI CITY A HEALTHIER AND BETTER PLACE TO LIVE IN!

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