Summer Training at
Child Rights and You, New Delhi
(April 3 to June 2, 2017)

Community Awareness of Dengue and Chikungunya in Bharat Vihar, New Delhi

By
Sourabh Roopchandani

Under the guidance of
Dr. Nutan P. Jain

MBA Hospital & Health Management
2016-2018

Institute of Health Management Research
The IIHMR University, Jaipur
2017

INSTITUTE OF HEALTH
MANAGEMENT RESEARCH
(WHO Collaborating Centre for District Health System Based on Primary Health Care)

IIHMR UNIVERSITY

CERTIFICATE

This is to certify that **Mr. Sourabh Roopchandani** has undergone summer training in **CRY, DELHI** from **1st April to 30th May 2017**.

The candidate himself completed the project assign to him during summer training. His approach to the project was sincere and proactive. This summer training is in partial fulfillment of the course requirement recommended for the award of MBA in Hospital and Health Management.

I wish him success in all his future endeavors.

Col. (Dr.) Ashok Kaushik
Dean (Academic & Student Affair)
The IIHMR University, Jaipur

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CHILD RIGHTS AND YOU

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Ensuring lasting change for children

Date: April, 2017

To
Sourabh Roopchandani,
IIHMR, Jaipur

From,
Volunteer Action, Delhi
CRY - Child Rights and you
632, 2nd Floor, Lane No.3,
Westend Marg, Saiyad-ul-Ajaib,
New Delhi - 110030, India

Dear Sourabh,

Greetings to you from CRY – Child Rights and You!!

This is to confirm your internship with CRY (Delhi). Your internship will start from 1st April – 30th May, 2017 and your work hours will be from 9.30 to 5.30 everyday from Monday to Friday.

As an intern with CRY, you will be required to adhere to the rules and policies of the organization. You are also expected to uphold the CRY values listed below:

- Transparency
- Innovation
- Accountability
- Secularism
- Non Violence
- Working in Partnership

During the internship you will be required to work according to a timetable evolved by you and your mentor (Veronica Xavier – Associate – Volunteer Action, North) at Delhi. Inability to abide by set timelines and task requirements need to be communicated clearly to your mentor.

During the internship period your conveyance (field visits, if any) and stationery costs will be reimbursed on actual by CRY. However, there is no provision for stipends for interns at CRY.

We welcome you on board and look forward to a sustained and productive engagement with you. Please sign and return a copy of this letter to the undersigned within a week of this offer.

Best wishes,

Veronica

Veronica Xavier
Associate - Volunteer Action, North

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June, 2017

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr.Sourabh Roopchandani interned with CRY from 1st April – 30th May, 2017.

During the internship, he worked with the Volunteer Action Team , North at our Public Action Group (PAG) at Dwarka. He worked on the following assignments during his tenure as an intern:

- Collected primary data and did a prelimnary analysis on "Community Awareness Of Dengue and Chikungunya" among 151 households at our community intervention area at Bharat Vihar in Dwarka.
- Questionnaire was prepared to obtain information about socio-demographic profile, dengue and Chikungunya awareness, practices and preventive measures.
- Concluded the research with the result that there still exists the ignorance towards the most common symptoms and some prevention strategies and knowledge gaps are required to be filled and widespread misconceptions that need to be corrected.
- He also actively coordinated and participated in a health camp organized for children at Bharat Vihar. Almost 100 children were provided basic heath referrals in this health camp.
- He was also instumental in starting a football club in Dwarka where children would gather every morning to get coached by volunteer coaches for the month of May- June 2017.

As an intern, Sourabh has been very diligent, communicative and focused. We hope that this experience has helped sharpen his overall understanding on child rights and he will be able to perform well in any similar future assignments and remain an advocate of child rights.

We trust that he will continue to keep in touch with CRY and work towards the building of a Child Rights movement.

We wish him all the Best!

Veronica Xavier
Assistant Manager: Volunteer Action
CRY – Child Rights and You

Child Rights and You Lane No.3 Westend Marg, Saiyad-ul-Ajaib, N.D.-30
NEW DELHI

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CRY is a Public Trust - Registration Number F-5208 (Mumbai)

Acknowledgement

I express my great sense of gratitude to acknowledge the co-operation and support of CRY, Delhi for giving me this unique privilege of completing my project by visiting its premises for 60 days and providing me an opportunity to interact with its various personnel.

My University – Indian Institute of Health Management Research (IIHMR), Jaipur & its Education deserves the foremost appreciation for providing me the opportunity to understand my capabilities. I would like to thank col. (Dr.) Ashok Kaushik (Dean Academics and student Affairs, IIHMR, Jaipur) to provide such a great learning opportunity. This project would not have been a success without the mentoring and guidance of Dr. Nutan P. Jain. She had been a constant support throughout and my sincere gratitude goes out to her.

The collection and my learning would not have been possible without the kind support and help from Ms. Veronica Xavier (CRY, Assistant Manager, Volunteer Action Team) who despite her busy schedule took time to hear, guide and keep me focused by giving her useful advice. I would like to extend my thanks for her support& guidance.

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Child Rights and You, Delhi

Introduction:

"Child Rights and You is a non-profitable organization established by RippanKapur in 1979. Its motto is "EQUALITY NOT CHARITY". Its objective is to exhilarate those children whose parents can't bear the cost of school fees, to make efforts to feed millions of famishing children who can't afford even a single meal of the day, to bring hope for those hopeless parents of 2 million infants who couldn't even survive to celebrate their first birthday."

History:

"In 1979 Rippan and 6 friends started CRY with Rs. 50 around his mother's dining table. They felt that something needed to be done to improve the situation of the underprivileged Indian child. Uncharacteristically, given their backgrounds and motivations, they chose not to start a grassroots-level implementing organization working directly with and for underprivileged children.They opted instead to make CRY a link between the millions of Indians who could provide resources and thousands of dedicated people and organizations at the grassroots-level who are struggling to function for lack of them. Although Rippan passed away in 1994, his vision for underprivileged children ensures that CRY continues to grow".

Vision and Mission:

1. **"Vision:** A happy, healthy and creative child whose rights are protected and honored in a society that is built on respect for dignity, justice and equity for all"**.**
2. **"Mission:** To enable people to take responsibility for the situation of the deprived Indian child and so motivate them to seek resolution through individual and collective action thereby enabling children to realize their full potential".

Organizational structure at CRY:

1)**Volunteer Action**: CRY began as an endeavor of seven young volunteers and ever since, the spirit of volunteerism has been associate degree underlying lifeline of the organization. Volunteerism for United States doesn't mean the mere utilization of further human resource to assist our work. To us, our volunteers square measure a repository of energy, power and commitment. At CRY, we have aaffinity to encourage and support our volunteers to empower folks and communities to motivate positive modification – by encouraging them to initiate action in their setting. The mutual commitment that exists between United States and our volunteers provides a free house for reaching out and a mutual learning.

2) **Communication Team:**Brand CRY is that the product of just about 3 decades of constant innovation and nurturing. Due to innovative awareness building methods achieved at a minuscule monetary price. To donors, individual and company, development professionals, bureaucrats and politicians, purchasers and retailers, CRY has come back to represent trait, sincerity and commitment.

CRY works to confirm the very best quality each in content and appearance in its junk, advertising, media and supportcampaigns to effectively communicate and have interaction its stakeholders. Supporting CRY in each side of communications are specialist organizations WHO as their contribution to the cause charge CRY considerably reduced rates. These are vital and inevitable investments that CRY makes to attain wider reach, mobilize action and build a network of individuals and teams committed to children's rights.

3) **HR & Administration:**Accomplishing milestones at CRY has solely been potential because of the organization's ability to continually attract, retain and develop a cadre of gifted, committed professionals. These full-time workers type the core of this autochthonic Bharat movement that nowadays involves lakhs of people and organizations in India and overseas. A number of coated at CRY Human Resources are achievement, folk's development, worker governance, performance management, establishment building initiatives and policies.

4) **Information technology:**CRY perpetually endeavors to optimize its resources be it in sexual union their partners, donors or in building internal capacities for kid rights. Info technology infrastructure and management permits for a spread of tools that support CRY's donor sexual

union, info sharing, increase operations effectuality and supply for strategic inputs in systems and method across CRY.

5) **Grant Risk Management:**Financial risk is inherent in any grant creating call. CRY initial initiated the method of monetary Risk Management (FRM) in 1994 whereby it absolutely was distributed with the assistance of associate external auditor. once the introduction of the event Support Head workplace (DSHO) Systems team in 2001, CRY set to line up an inside FRM team among this unit in 2003. In July 2013, the FRM team abstracted of DSHO associated is since acting as a freelance unit underneath the CEO's workplace. The fresh shaped unit is termed Grant Risk Management or GRM Unit

6) **The Child Center**: The aim of kid Centre is to confirm children's voices square measure recognized as important and distinctive, on problems and policies that have an effect on them. The operate aims at building experience on kids – their development, views, reality of their situations; establish principles of engagement, particularly within the context of the children's collectives. The collective's square measure associate integral a part of CRY's development programs.

About Summer Training

Summer training is an integral part of theMBA Hospital and Health Management/MBA Pharmaceutical Management/MBA Rural Management program. As a part of the curriculum, each student of the first year is required to undergo two months field training known as "Summer Training". Summer training is undertaken with reputed organizations as assigned by the IIHMR University.

The main objectives of summer training are:

(a) To understand and learn day to day micro-level operations management of a hospital/ health care /pharma/rural organizations.

(b) To study identified issues/problems associated with some specific operational area/programmes.

Summer Training at CRY

With the widespread emergence of dengue, CRYDelhi took an initiative to assess the awareness of the community about the disease and provide knowledge regarding its spread and symptoms through this study. The objective of the programme was to cater to the basic problems and shortcomings faced by the community through the tools of education, sports, health camps etc. The programme yielded a great response from the childrens who took part voluntarily with full zest.

Distribution of assigned work for summer training

Week	Key Activity	Objective	Key Learning	Remarks
1st Week	Overview of the Organization	To get acquainted with the work culture	CRY's role in uplifting the childrens.	
2nd Week	To impart basic education to the childrens	To change the lives of the underprivilegedc hildrens through education	The problems and strength of the childrens and how to overcome it.	
3rd&4th Week	To involve childrens in recreational activities	To build team spirit and the joy of sharing.	The underlying potential of the childrens which remains unexplored due to the challenges they go through.	
5th, 6th&7th Week	Survey conducted for awareness of Dengue and Chikungunya	To analyse the awareness amongst childrens.	It was found that almost half of the surveyed population were unaware of the symptoms.	
8th Week	Health Camp Conducted	To go through the thorough health check of the childrens	Health promotion and prevention as well as curative measures is a must.	

Community awareness of Dengue and Chikungunya in Bharat Vihar, Dwarka New Delhi

Abstract:

Dengue Fever and Chikungunya, transmitted by *Aedesaegypti*, is an arboviral disease endemic in the Asian subcontinent. It has emerged as a notable public health problem in recent decades.According to the data, 111880 cases of dengue were reported till October2016 and the number of chikungunya cases stood at58136— one of the worst outbreak of the disease till now. Rapid urbanization, environmental changes and neglected (rural and slums) areas results in vector breeding causes rise in dengue outbreaks. Primary prevention is the most effective measure in dengue prevention and control. The objectives were to determine the level of knowledge and practice of dengue and chikungunya control amongst the study community.

Key words: Dengue Fever, Chikungunya, Aedesaegypti, community, prevention.

Introduction:

Dengue fever (DF) and Chikungunyais a mosquito-borne viral infection causing a severe flu-like illness and, sometimes causing a potentially lethal bite of *Aedesaegypti* and *Aedesalbopictus* mosquito. It is caused by any of four closely related viruses, or serotypes: DENV 1, DENV 2, DENV 3, and DENV 4. Symptoms of infection is characterized by characterized by a sudden onset of high fever (103-106°F), severe headache, backache, intense pain in joints and muscles, retro-orbital pain, nausea and vomiting and a generalized erythematous rash that usually begin 4-7 days after the mosquito bite and typically last 3-10 days However, infection with a dengue virus serotype can also produce a more complex and severe form of clinical manifestations like hemorrhage and shock which can results into death of a person.

Various studies support lack of data in-depth relating to dengue fever and its medicine that advocate government as major challenge with growing want of hygiene setting by community to impede breeding of mosquitoes. one among the study conducted in Bharat when happening of dengue fever clearly reveals the very fact that there's extreme poor data on dengue fever regarding its supply of transmission, vector dipteran breeding and follow relating to dominant live.

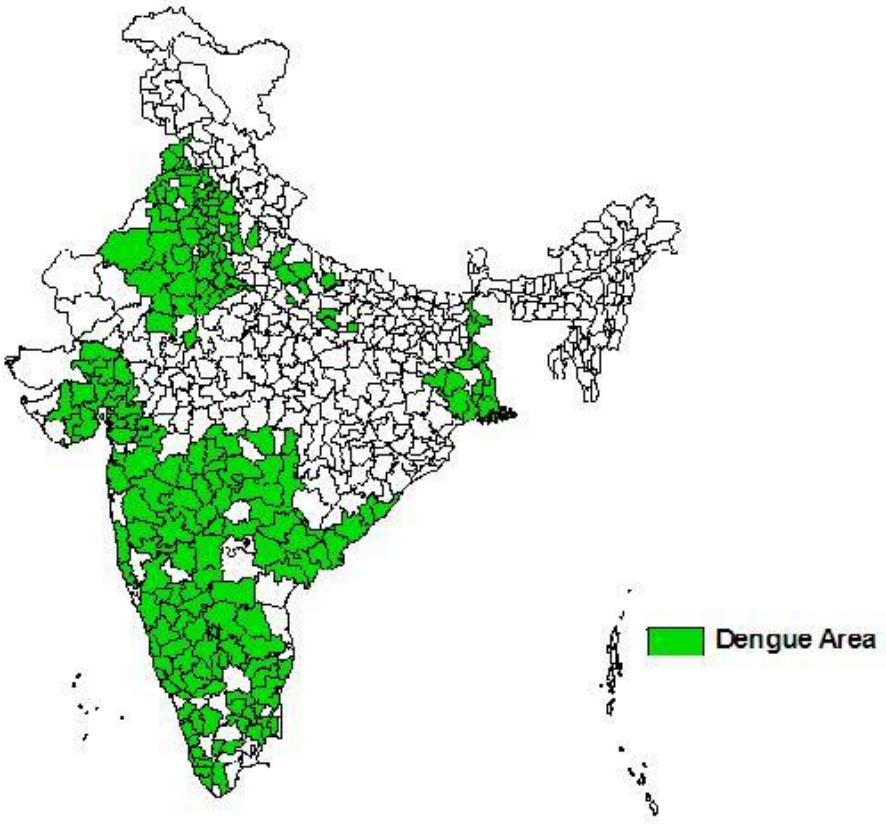


Fig.1 Dengue prone state in India

The World Health Organization aforesaid that in recent years, globalisation of travel and trade, unplanned urbanization and environmental challenges together with global climate change has had a "significant" impact on transmission of vector-borne diseases. police investigation for chikungunya in India presently captures solely those patients that area unit laboratory confirmed at government known watcher hospitals, most of those area unit within the public sector. in step with the National Vector Borne sickness management Program (NVBDCP) underneath the Health Ministry fourteen,656 cases of chikungunya are reported across the country with nine,427 alone in Mysore. within the capital, twelve folks have reportedly died from Chikungunya in 2016.

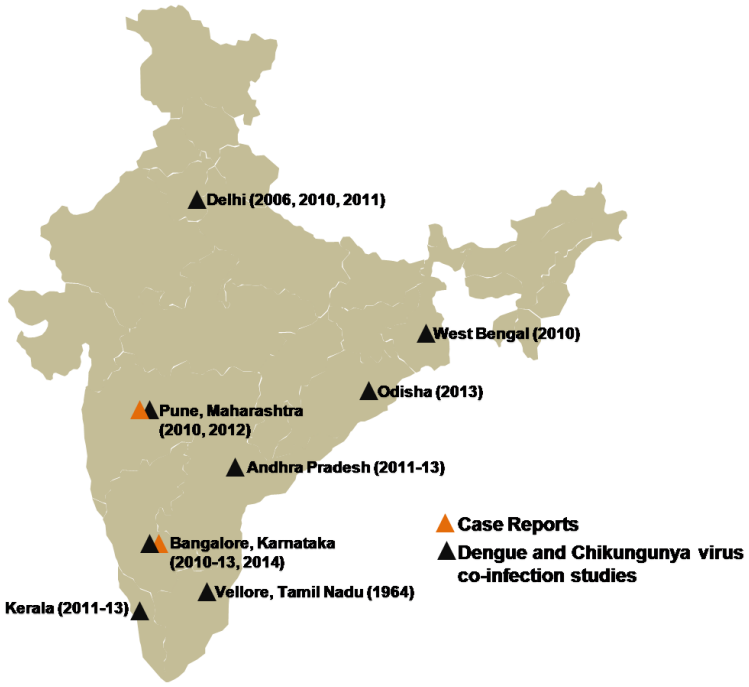


Fig.2 The map of India showing co-infection with Dengue and Chikungunya viruses.

Review of Literature:

LUYIGA FARIDAH MWANJE had done her research in the topic of **KNWOLEGE, ATTITUDE AND PRACTICES ON DENGUE PREVENTION AND CONTROL IN UGANDA**. The main purpose was to assess the knowledge attitude and practices on dengue prevention in Nsaabwa village, Mukono District, A cross sectional survey was conducted and quantitative data were collected by the structured questionnaire. In her research, she finds that most people had fair knowledge about dengue prevention and control. Most of the respondents see Malaria as threat to their community despite this practices toward dengue control and its prevention were poor. She recommended that since people are aware of the disease there is no need to reinforce good behavior and demystify the myth rather there is a need for information, education and communication material for seeking proper treatment of dengue.

JAI PAL MAJRA and **DAS ACHARYA** published a research paper on the **IMPACT OF KNOWLEDGE AND PRACTICES ON PREVENTION OF CHIKUNGUNYA IN AN EPIDEMIC AREA IN INDIA.**They conducted this research in a coastal district of India, which was experiencing an epidemic of chikungunya during the study period. Patients above 18 years of age, attending out-patient department of three primary health centers, were included in the study. Patients diagnosed as case of chikungunya were taken as cases and those with other morbidity and having none of their relatives or friends suffering or had suffered in the last month from chikungunya were taken as controls. Sample size was 150 and controls were three times the number of cases. A pre-tested, open-ended questionnaire was used to collect information by face to face interview technique. They find out people who had knowledge about the vector and methods of preventing the disease and had put their knowledge into practice are less likely to be affected by chikungunya. Therefore, in the absence of any specific cure or effective vaccine, health education can prove to be an important tool for the control of chikungunya epidemic.

PROJECT REPORT

Methodology

Study Design: A cross sectional study was adopted for this investigation among the different types of descriptive studies. This study design is appropriate as the main objective of this investigation was to assess the knowledge and practices regarding dengue infections among rural residents.

Sample size and study setting: Data were collected over a period of two months from April to May 2017. A convenience sample of one hundred and fifty-one (151) aged 15 years or above who were the residents of that communitywere approached for participation.

Data Collection: A structured interviewer administered questionnaire was used. The questionnaire was administered byNabinPatraand SourabhRoopchandani who were well versed with Dengue and Chikungunyaas a disease and its prevention.Through questionnaire information about socio-demographic profile, dengue and chikungunya awareness,practices and preventive measures was collected. Questions were based on causes, signs and symptoms of dengue and chikungunya, attitude towards both the diseases and its preventive practices covering 20 questions. 10 questions were asked to check the knowledge of respondent regarding dengue and chikungunya. Result of the test was interpreted as follows: 10-9 questions as " Excellent", 9-8 questions as "Good", 8-7questions as "Fair", 6-5 questions as "Poor" knowledge". We have characterize the awareness of Dengue fever and Chikungunya as "Aware People" and "Non-aware People".

Data Analysis: The data from the questionnaire were coded and entered in a computerized data base and analyzed using Microsoft Excel. Frequencies and percentages were used for analyzing the selected socio- demographic data.

Results and Discussion: A total of 151 questionnaires were effective for survey responses in this cross-sectional study. The majority of the respondents of survey were (47.50%) adults aged from 15 to 30 years old. Only 39.5% respondents were of the age of between 30 years to 45 years. The total male and female in the survey is 67 and 84 respectively. Since the survey respondents were mainly females of the households (34.4%) as the male members were out for

performing their day to day tasks as daily wage worker or other activities of the employment. Most of the population is uneducated (52.3%) hence the need of spreading awareness is clearly required, only 10% were having education higher or equivalent to senior secondary rest 89% were uneducated or below senior secondary. The details from these questionnaires are presented in Table:

Table1: Demographic characteristic of population of effective questionnaires

Characteristics	**N= 151**	**%**
Age Group, years		
15-30	**71**	**47.5%**
30-45	**59**	**39.5%**
45-60	**18**	**12%**
>60	**03**	**01%**
Gender		
Male	**67**	**44.3%**
Female	**84**	**55.7%**
Education		
Uneducated	**79**	**52.3%**
<Matric	**40**	**26.4%**
Matric	**17**	**11.2%**
Senior Secondary	**10**	**6.62%**
>Senior Secondary	**05**	**3.31%**

Total Family Members		
<4 members	**19**	**12.5%**
4-9 members	**122**	**80.8%**
>9 members	**10**	**6.70%**
Occupation		
Daily Wage Worker	**31**	**20.6%**
Housewife	**52**	**34.4%**
Self- Employed	**21**	**14.0%**
Service	**10**	**6.70%**
Others	**37**	**24.5%**

Knowledge of Malaria:All respondents' understanding of Dengue knowledge was not the same. Among 151 effective questionnaires, even after being in the news during outbreak 4.7% of the respondent were still didn't hear about this disease. 92% respondent know the cause of disease is mosquito bite. There is serious lack of knowledge regarding the dengue mosquito as they are most active at the daytime however response says otherwise with only 41.7% of correct response. Only 57.6% of the respondent knows the common breeding site of the mosquito

Table: 2 Distribution of knowledge of Dengue in Bharat Vihar Community, Delhi

Items	N=151	
1) Have you heard about Dengue?		
Yes	**144**	**95.3%**
No	**07**	**4.7%**
2) What do you think how it causes?		
Correct	**139**	**92.05%**
Incorrect	**12**	**7.95%**
3) What do you think at which time dengue mosquito generally bite?		
Correct	**63**	**41.7%**
Incorrect	**88**	**58.9%**
4) Are you aware with the symptoms of Dengue?		

Yes	**63**	**41.7%**
No	**88**	**58.9%**
5) What is the common breeding site of Dengue mosquito?		
Correct	**87**	**57.6%**
Incorrect	**64**	**42.4%**

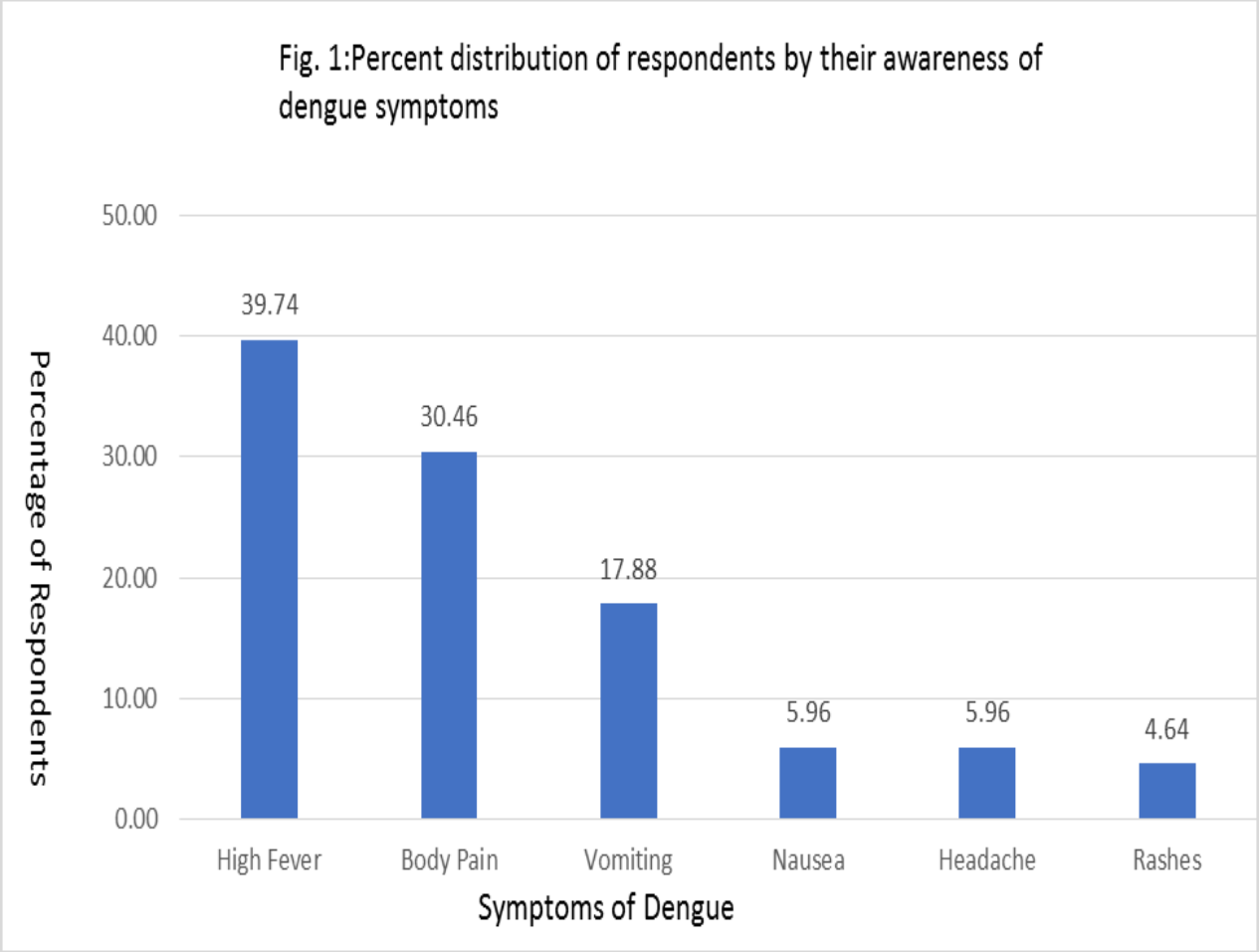
Knowledge of Chikungunya:All respondents' understanding of Dengue knowledge was not the same. Among 151 effective questionnaires, even after being in the news during outbreak 19.2% of the respondent were still didn't hear about this disease. 77.5% respondent know the cause of disease is mosquito bite. There is serious lack of knowledge regarding the dengue mosquito as they are most active at the daytime however response says otherwise with only 27% of correct response. Only 42.3% of the respondent knows the common breeding site of the mosquito.

Table: 2 Distribution of knowledge of Dengue in Bharat Vihar Community, Delhi

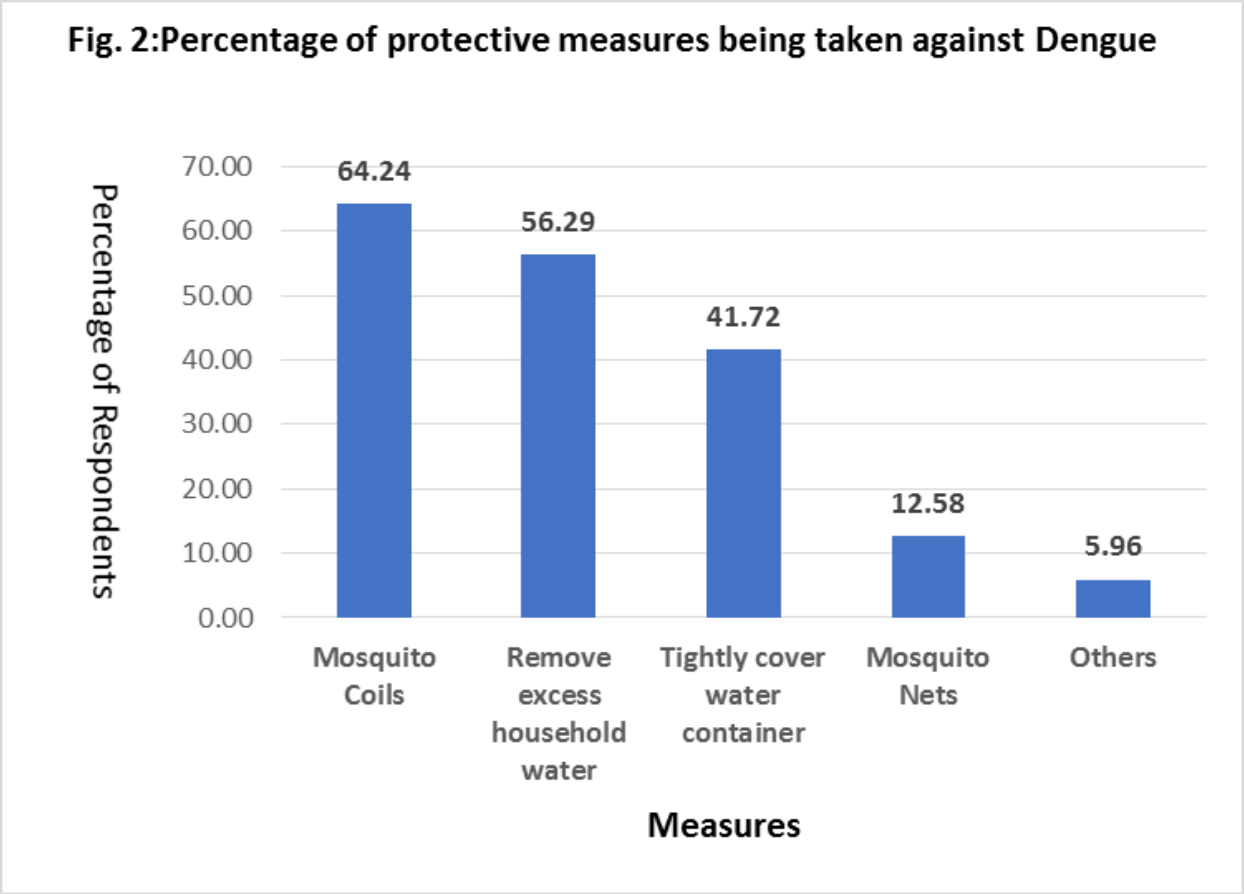
Items	N=151	
1) Have you heard about Chikungunya?		
Yes	**122**	**80.8%**
No	**29**	**19.2%**
2) What do you think how it causes?		
Correct	**117**	**77.5%**
Incorrect	**34**	**22.5%**
3) What do you think at which time these mosquitos generally bite?		
Correct	**32**	**27%**
Incorrect	**119**	**73%**
4) Are you aware with the symptoms of Chikungunya?		
Yes	**73**	**48.3%**
No	**78**	**51.6%**
5) What is the common breeding site of chikungunya mosquito?		
Correct	**64**	**42.3%**
Incorrect	**87**	**57.6%**

Awareness of Dengue:

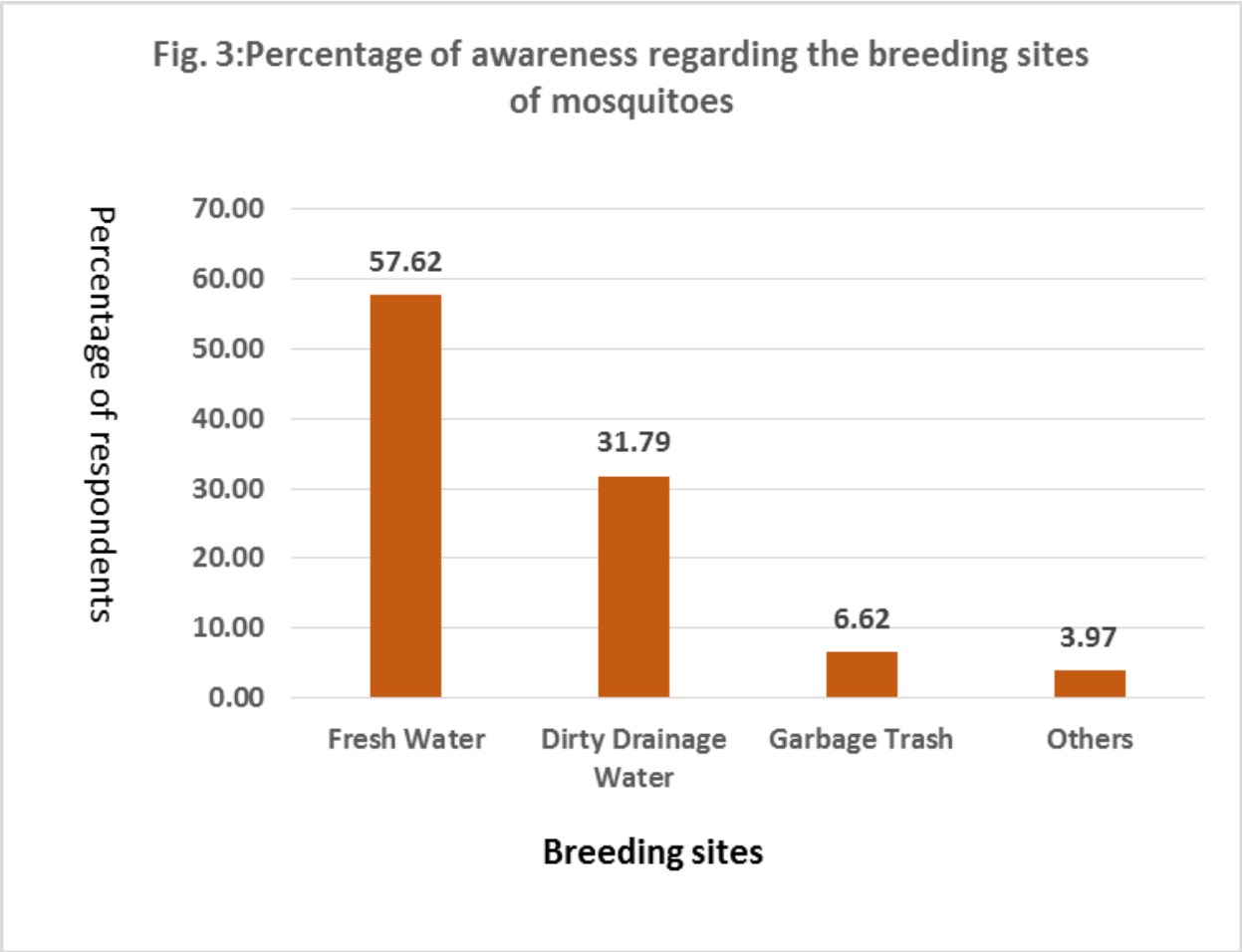
It was found that almost 40% of the respondents were aware that High fever was a symptom of dengue while 30% took Body Pain as the same but few had an awareness regarding vomiting, nausea, headache and rashes as the symptoms of dengue.



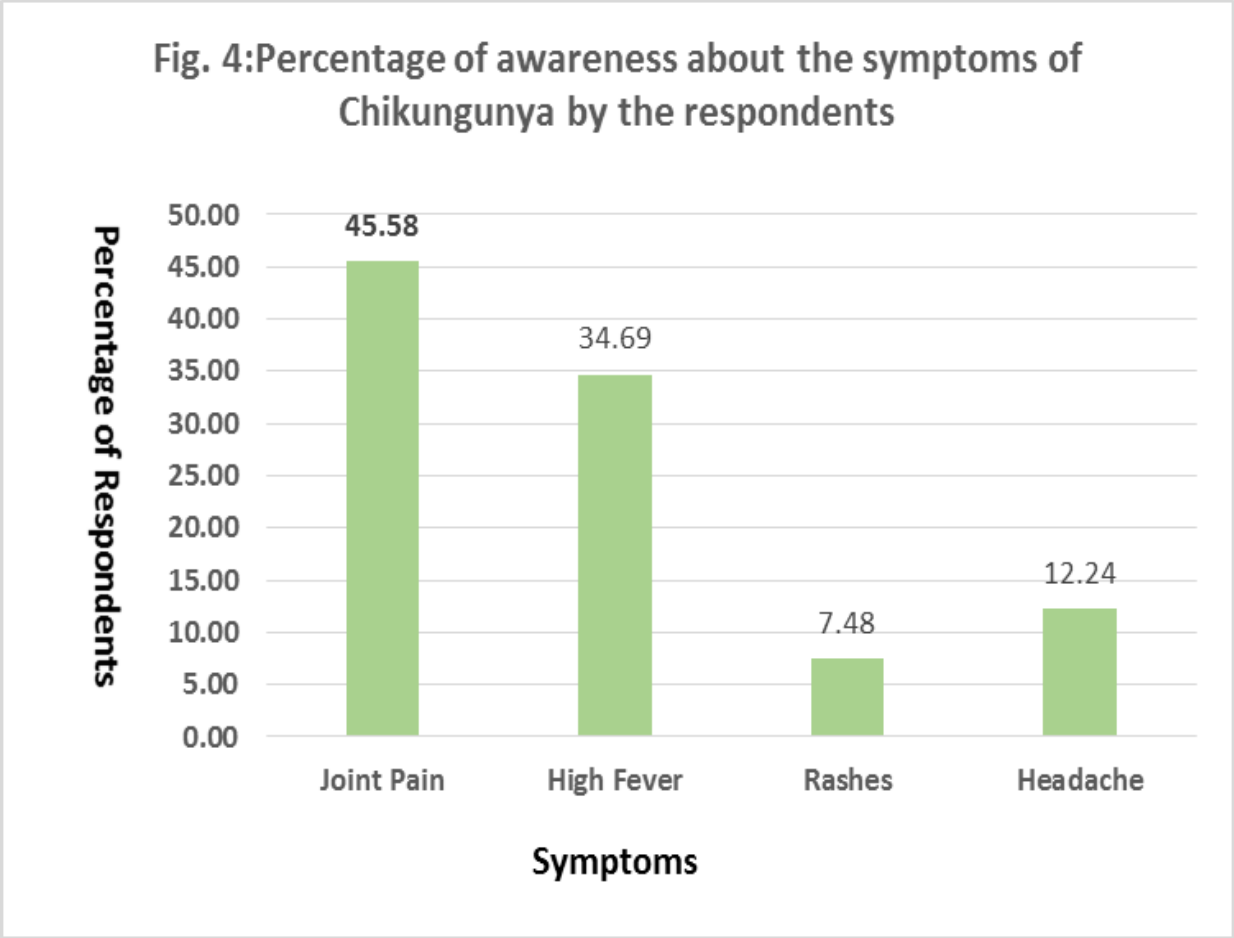
According to the data, 64% of the people use mosquito coils, 56% remove excess water from their households, 41% cover the water container, 13% use mosquito nets while 6% use other protective measures against Dengue.



It was evident from the data that more than half of the people are aware that mosquitoes can breed in fresh water while rest of the other people take other sites as the breeding sites for mosquitoes.

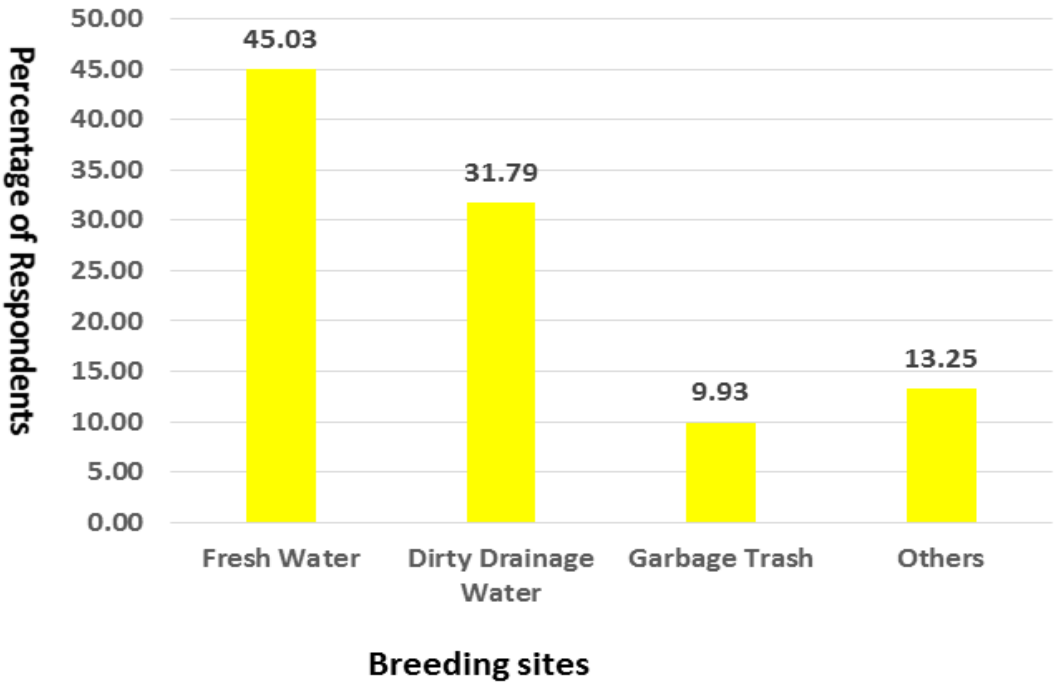


Awareness of Chikungunya: It is seen that maximum respondents are aware that the joint pain and high fever are the major symptoms of Chikungunya. Rest other respondents are aware that rashes and headache is also associated with the same.



It is inferred from the above graph that maximum number of respondents are aware that fresh water and dirty drainage water are the breeding sites for the mosquitoes which causes Chikungunya while rest of the respondents consider garbage trash and other sites as the breeding areas for the same.

Fig. 5:Percentage of awareness about the breeding sites of mosquitoes causing Chikungunya



Characteristics of Knowledge of Dengue Fever and Chikungunya in the community

Characteristics	Excellent	Good	Fair	Poor
Age Group	N= (9)	N= (14)	N= (117)	N= (11)
15-30	2	5	54	7
30-45	6	8	46	3
45-60	1	1	16	1
>60	0	0	1	0
Gender				
Male	4	7	47	7
Female	5	7	70	4
Education				
Uneducated	4	6	58	5
<Matric	2	3	30	3
Matric	1	3	18	2
Sr. Secondary	1	1	9	1
>Sr. Secondary	1	1	2	0
Total Family Member				
<4	2	3	14	1
4-9	6	10	90	10
>9	1	1	7	0
Occupation				
Daily wage Worker	1	2	24	2
Housewife	2	3	43	2
Self Employed	4	5	15	2
Servicemen	1	1	7	2
Others	1	4	28	3

Conclusion and Recommendations

A difference in Dengue Fever and Chikungunya related knowledge and prevention practices amoung the respondents is apparent. While most individuals are aware of the disease and how it is caused there still exists the ignorance towards the most common symptoms and some prevention strategies, there are also knowledge gaps that need to be filled and widespread misconceptions that need to be corrected. Education regarding both the diseases is especially needed in the villages, whereas minor proportion of residents seem unaware of the disease, and where knowledge is also poorer. Dengue and Chikungunya prevention campaigns should be tailored according to knowledge gaps, practices, environment, resources, and preferences. Strengthening of surveillance along with health education to the community and proper training of health personnel can go long way in control of Dengue and Chikungunyainfection.

The campaigns in local language presented by some of the influential people in the local areas have widespread effect and the need of proper water disposal and cleanliness in the surrounding is required.

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