## Acknowledgement

I wish to take this opportunity to say thanks to one and all who helped, supported and guided me in various ways in my community health learning programme. I am proud to be part of this family. I am also grateful for having the chance to meet so many wonderful people and professionals in the field of community health/public health during my fellowship programme. The exposure which I have received in SOCHARA is unique and is one that no college can offer.

First of all I wanted to thank the two pillars of SOCHARA Dr. Ravi and Thelma, whose wonderful ideas put together the design of this Community Health Learning Programme. This has helped many youngsters, including me. I am very happy that I could successfully complete my 9 months here.

There are people who stand as the backbone of SOCHARA and the CHLP programme Mr. Chander S.J (Programme Coordinator CHLP), Mr. Kumar K.J (Facilitator CHLP), Dr. Rahul (Facilitator CHLP), Dr. Adithya (Facilitator CHLP), Mr. Prassana (Facilitator CHLP), Mr. Prahalad (Facilitator CHLP), Mrs. Janelle (Facilitator CHLP), Mrs. Anusha (Facilitator CHLP). I express my deepest thanks for their great effort in facilitating and guiding me. My mentors - Mr. A s Mohammad and Mr. Ameer Khan; I thank them for their help, guidance and corrections. Their willingness to spare their valuable time to guide me with.

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At last I thank my co - fellows, without whom each day would be unimaginable. Thank you all my friends who made my CHLP journey memorable.

ANU MARIA JACOB

## Introduction

I am Anu Maria Jacob, born and brought up in a village called Udumbanchola in Idukki district Kerala. My village mainly depends on cardamom and pepper cultivations, and small-scale businesses. The overall population includes a mix of Keralits and Tamilians. I have completed my schooling there. My district was one of the backward districts in Kerala. But now the situation has changed over the years. I remember during my schooling years, around 15 years ago there was no bus facility to go to school. Only a few jeeps. I used to walk around 8 Km a day with my other students from my neighborhood. That time there was no electricity; TVs, or other electronic home appliances. All houses used kerosene lamps. Although, most of the houses did have BSNL landline connections.

After finishing high school I went on to pursue my graduate studies in Chennai. My relatives convinced my parents to send me there. I ended up in a college with over 140 years of old tradition. Old buildings, built by the British, surrounded by 360 acres of forest with deer, peacocks, pigs etc. Unfortunately I was the only Keralite in our class who did not speak English and Tamil. I struggled a lot for the first two years. Because I studied in a Malayalam medium school till my 10<sup>th</sup>. I was a silent girl in class because of the language barrier and it earned me the nickname of 'good student' in the class.

After completing my degree I took a break and I worked for the Spices board of India as a Technical Assistant. It was a central government institution. Part of my role was to visit farmers and encourage them to plant pepper and cardamom and to rejuvenate the plants. During the two years that I worked there, I experienced a change in my perspectives. I used to read a magazine called "Health" (Aroghya Maasika in malayalam), wherein I read about various public health issues like epidemics, etc. I also happened to talk to a Doctor who was working in National Rural Health Mission in Kerala. With a new developing outlook, I decided to pursue a Master's of Public Health (MPH) course. I joined in the School Of Medical Education, Mahatma Gandhi University Kottayam, Kerala. But I would say I chose the wrong place to study. I used to experience much regret during my MPH and after as well. I didn't learn much

about public health. The attitude and behavior of teachers was callous and unhelpful; we as students lacked guidance. They would come to class just for assigning presentations and to give assignments. They would sit and read the text books or they would refer their old torn pale yellow color notes. The notes looked like they dated back 10-12 years, as they had probably used them during their own graduation course. The two-year course took two and a half years to complete. After these two years dragged by I began searching for job, but unfortunately, didn't find one suitable. As part of my job search I happened to visit Community Health Cell, Chennai and I got to know about Community Health Learning Programme (CHLP); I applied and got selected. At the same time I got a job offer from a Chennai based NGO. I was confused as to which would be the better choice. Then my husband told me, "you will get a job anytime, but you won't get fellowship opportunities always, I would suggest you do this. If staying away is your problem, it is for a better cause that will help us in our future". These words led me to join the CHLP. Actually he is my inspiration and support!!

After coming here, I felt that I had reached the right place; like heaven! "Knowledge of Heaven!"

## **Community Health Learning Programme**

My growth, development and learning at SOCHARA is something similar to the life cycle of a butterfly. Any life cycle is the same. But I found something interesting in a butterfly's life cycle. The butterfly passes through different phases to reach a fully developed adult butterfly. First it is like an egg, after some days it hatches, a small caterpillar emerges. It starts to walk and to eat. Eating the leaves, thus, it grows faster. Then it moves into the next "pupa" stage. This time it needs the support of any plant or branch. In this stage the caterpillar has done all of its forming and changing inside the pupa. Finally it emerges as a healthy energetic butterfly. For me the development was gradual, taking one step at a time, through collective learning, recap sessions, field visits, other NGOs visits, Journal clubs, debate, panel discussion, role plays, celebrations, dancing, singing etc.

I remember my first day at SOCHARA. Other fellows just finished their field posting and they were all sharing their field experiences, asking each other questions, doubts and appreciations. Listening to all 17 fellows took me to 17 different field areas and into different lives. I can

openly say that I was ignorant about many issues related to community health or public health when I joined CHLP, I was very poor in reading. After reaching here I realized that without knowing the simple issues or without reading I cannot survive in this group! I started following the news, journals etc. While sitting with Dr. Thelma for discussions, I tried to watch her and tried to note the new words she would use. Her talks inspired me much. While being with her or other facilitators I used to tell myself that I want to speak like them, with more knowledge. Young chaps like Rahul, Rajeev, Anusha, Samar and Dala have influenced me lot. When an issue arises, discussions, or presentations take place, how they speak about it, criticize or comment on it, was inspiring. The way they react always encouraged me to rethink about myself and reflect on why I didn't approach the same thing in that way or like that or why such thoughts didn't occur to me. I could learn something from each and every person in SOCHARA.

This nine-month programme has really molded me into a better public health professional. It has helped me to improve myself with knowledge and awareness about many things. It has created in me a personal realization, that I need to read lot, work lot, keep myself aware of different issues etc. Also, it reminds me that I have long way to go. It has opened a door for bigger dream.

I wish that the CHLP programme should continue and a lot of youngsters should get the chance to taste the CHLP. The exposure and experience received here through meetings, panel discussions, field visits, conferences, etc. will never get anywhere. At the end of this ninemonth training I can confidently say I have learned many things! I can stand confidently in front of people. I can see that the butterfly is ready to fly with full of confidence, courage to face anything and with much enthusiasm to work.

# My Learning Objectives

Since I come from a public health background, my public health knowledge was very poor. I know many concepts in words but I was unable to explain these to others. My main aim was to get very good understanding about community health and improve myself with good skills.

#### Specific Objectives included

- To understand community health
- To learn about the Community health approach to solve community health/ public health problems
- To learn more about Research qualitative and quantitative techniques and to improve my writing skills.
- To learn statistical techniques and software's for research.
- To understand the socio economic health status of the backward states such as Orissa, Bihar, Madhya Pradesh and Uttar Pradesh, as I wish to visit these states.

After coming here people used to ask me what my area of interest is, I was totally confused about what to tell them. I had heard that SOCHARA mainly works towards the social determinants of health. From some of the sessions, what struck me was, "work for the most miserable person that you have met in your life". As a community health or public health worker we should be ready to work with any area, based on the current need. But it is also good to build a particular area of interest. I haven't yet identified my area of interest. My mind tells me, after understanding the reality of the community I may find my area of interest. I am not in a hurry to fix upon a specific area just yet.

When I look back at my objectives, I find that I have fulfilled some of my objectives and have greatly improved on others.

## CHAPTER - I

# **Classroom Learnings**

## Egg to Larvae.... Growth begins

Before I joined SOCHARA, I didn't have a clear idea about Community Health. I remember Dr. Thelma asked me during my interview, about what is the difference between public health and community health and I replied that both are same. After participating in the CHLP I have come to understand the exact difference between public health and community health. In a general way of speaking, public health uses a top to bottom approach, while community health uses a bottom to top approach. In a simple way of understanding, I would explain it with an example: If a community is facing a malaria epidemic, a public health approach would be to diagnose the cases and distribute drugs etc. But with a community health approach, health activists will go to the community and find the source of the epidemic and they will disrupt the source and educate the community to clean their surroundings, disrupt the water logging, and protect themselves from mosquito bites by wearing full sleeved clothing and using mosquito nets, etc.

When I compare my growth and development at SOCHARA with the life cycle of a butterfly, I can see the progress in me. To become a mature, fully developed butterfly, it has to go through the embryonic stage, then larvae, pupa and at last it become a fully matured butterfly called 'imago'. In the developing stage it needs nourishment and I liken this to the same way I gained knowledge from the class room sessions, field experiences, stories from the facilitators, experiences from co fellows, attending seminars, discussions etc. in the CHLP.

#### From public health to Community health

As we know Public health is defined by C.E.A Winslow as "the science and art of preventing disease, prolonging life and promoting health and efficiency through organized community effort".

Public health is a top down approach, seeing the issue as a whole at the population level. Immunization is an example of a public health approach. If we take an example of TB control, public health approach will be control the TB by BCG vaccine. In community health, we are making the community aware of their health rights, enabling them to demand for their rights. According to CHAI 1983, community health is defined as "the process of enabling people to exercise collectively their responsibilities to maintain their health and demand health as human right."

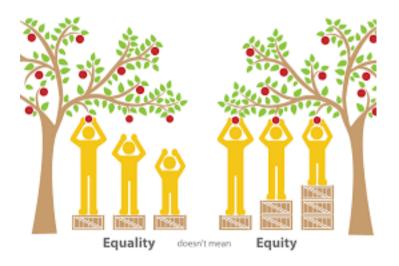
We should give education to the community on their health rights. So that they can demand better health services from the providers. I happened to meet one of the Panchayat President of Kanyakumari district Tamil Nadu during the 25th anniversary of SOCHARA, when we had a talk on community participation, she was giving me an example explaining that after empowering and educating the community about their health right, now people are able to question the health services provided to them if it is not adequate. And if they get any expired medicines they are able to report it and address the issue. If there is any health issue in the community we should solve it using the community health approach, discuss with community how to solve the problem as a group, we should ask their opinion, there may have their own solution to solve it. For everything there is active participation from the community. A community approach is to educate people on how to protect themselves from getting Tuberculosis like overcrowding, malnourished people and people living with HIV are more prone to TB,. Educate the community against stigma, and then people affected with TB are able to seek treatment freely without any barriers of social exclusion. If the community has enough awareness and knowledge about the disease they themselves can identify the people who are affected. This will help to maximise case finding and allow for early treatment and cure. People should have the mind to accept the TB or AIDS as other common diseases.

According to the World Bank report (2014), 68% of the Indian population lives in rural areas. When we look at the barrier of community health, when I reflect back to my field experience, transportation, accessibility and language were the main liming factors to achieve better community health. In Munnar, majority are Tamil specking population. Doctors and other staffs works in government service are Malayalam speaking people, what one of the worker told me that, going to the primary health center we won't feel any language barrier, but accessing is difficulty since our CHC is located in the hill area, no bus will go there, we have

to depend on the autos. In terms of language we feel difficulty in secondary or tertiary level to follow the hospital boards, interacting with staffs, without any native person we are not able access the health care, that cases we prefer to go to our native hospitals in Tamil Nadu. Rural areas are still facing transportation problems, especially inside plantation; they don't have any transportation facilities since the plantation is large in area. So people have difficulty to access the CHC or PHC.

## Equity and Equality.. Are they the same?

These two words I have used several times in my answer sheets during my MPH, but I didn't know they have different meanings. I thought that equitable distribution is another word for equal distribution. I got a deeper understanding about these two words in SOCHARA. This simple picture is enough to differentiate equity and equality.



Source: Google

One of the plus points of SOCHARA's ways of teaching is once we have been introduced to a topic, it remains in our memory. Because the method of teaching is through stories, photographs, videos, short films etc. Also we have to create situations and do role plays, skits etc. I feel these kinds of teaching helps us to understand the issue well and keep it in our memory for a long time. If we follow equal distribution of health care delivery than equitable distribution we may achieve health for all in the nearer future. I think we should give more attention to poor people. Rich people are always in the front, availing free benefits from the government. For example after the recent flood in Chennai, chief minister of Tamil Nadu

Jayalalitha distributed 5000 rupees for each household in flood affected areas. It was a kind of equal distribution, where all who was actually affected and even those unaffected received this compensation. We can safely assume that it failed to reach those in actual need.

## Communitization – People's health in people's hand

Communitisation was launched in the Department of Health and Family Welfare, after the bill was passed by the State Assembly with the enactment of "Nagaland Communitisation of Public Institutions and Services Act, 2002.

National Rural Health Mission (NRHM) was the milestone towards communitization. The two important tools used by NRHM towards communitisation was implementation of Community Health Worker (ASHA) programme and community action through the formation of Village Health, sanitation and Nutrition committee (VHSNC)

The objectives of communitization are to make the community aware about health as the responsibility of both the Government and the community and enable the community to confess health centers so as to plan and execute their own health needs with the staff for both preventive and curative measures, create awareness for the community to contribute in the form of support morally and to donate cash and kind to meet the gaps when there are shortages, and encourage or popularize the locally available indigenous herbs or practices as an alternative health care. (http://sochara.org/)

We can see the best example for communitisation is the ASHA worker programme in our own villages. When I was posted in Munnar for my Field exposure, I used to go with the ASHA worker to the field. On our way, every day we would meet at least one cancer patient who had already undergone chemotherapy and all. Cancer prevalence is high among plantation workers, as per the data from the community health center. 33 cases of cancer were detected and in that 75% were breast cancer. In Kerala there is a scheme (Karunya) for getting free cancer treatment for the Below Poverty Line families. But many of the plantation workers don't know where to go and whom to go and ask about the procedures to avail these benefits. Whichever patients I have seen, they all had undergone treatment already. During our visits the ASHA worker was able to guide the patients. Also they are taking part in mobilizing the community to access health and health services available at anganwadis, subcenters, primary

health centers such as immunization, ante natal checkup, post natal checkup, supplementatry nutrition, sanitation and other services provided by the government.

Community participation is something which is involving the community to take part in planning, implementation and decision making processes. Other programmes which are part of the communitization are VHSNC, PHC Planning and Monitoring Committee (PHC PMC) Block Planning and Monitoring Committee (BPMC), Patient Welfare Committee and District Planning Monitoring Committee (DPMC) etc. The main functions of VHNSC is to monitor and facilitate access to public services and correlating with health outcomes, organizing the action at local level for health promotion, facilitating service delivery at village level, village health planning, monitoring of health facilities, monthly meeting, management and accounting of untied health fund and maintain records.

PHC Planning and Monitoring Committee (PHC PMC), monitors the services at the PHC level and helps to find solutions to issues raised by VHSNCs and sub centers in its coverage area. Block Planning and Monitoring Committee (BPMC), the main role of the committee constitute at the block level will be to monitor the services at the Community Health Centre and find solutions to the issues identified by the PHC planning and monitoring committees. District Planning and Monitoring Committee (DPMC), The DPMC constituted at the district level would contribute to the development of the District Health Plan. It will also review the issues emerging from the BPMC. (http://nrhm.gov.in/communitisation/community-action.html)

In communitisation people are more likely to use and respond positively to health services if they have been involved in decision about how these services are delivered, thus helping to make the services sustainable. The people have individual and collective resources to contribute to activities for health improvements in the community and people are more likely to change risky health behaviors when they have been involved in deciding how that change might take place and people gain information, skills and experience in community involvement that helps them take control over their own lives and challenge social system that have sustained their deprivation.

#### **Ethics in Research**

I got a clear idea about ethics after coming here. Ethics is applicable to every aspect. We have research ethics, work ethics etc. There are some values and standards we should follow during our work and research. When we were late to our classes in SOCHARA, Thelma ma'am used to say this is all part of work ethics, we should be on time. We must obey some rules while doing research as well..

Research ethics are the set of values, standards and institutional schemes that are followed in the research activity. In other words it is a kind of morality we following in good research. If we follow certain values and standards only we can say that the research is ethical. There are some guidelines for clearing the ethics in research.(Ref: Ethical guidelines for social science research)

- Consent It is the first stage of ethical research. Before starting the study we should get the consent from the active participants of the research, without their consent getting information is unethical. It is the right of the informant to get know about the purpose of the research. Consent either we can get it through oral or verbal.
- Confidentiality Next is keeping the confidentiality. Personal information's from the respondents should be keep confidential. That will make respondent more comfortable to disclose the information.
- **Dissemination-** Transferring the knowledge to others
- Plagiarism stealing the materials or data from other sources
- Good reference practice also part of ethics. (Ref: Ethical guidelines for social science research)

#### Planning a research study

If we are planning a field study, before starting the study we should understand the community well, history of the village, community leaders, existing institutions and groups in the community, culture of the community, occupation, politics etc. we should make very good rapport with community in order to get the community support. Make discussion with community from that we can understand the problems of the community. Go to the field with

open mind, without any predetermined thoughts. Our study should be based on the felt needs of the community. The Cuenca Declaration says that 'Research for people's health'. Also there is a Chinese poem that says,

"Go to the people
Live among them
Learn from them
Love them
Start with what they know
Build on what they have"

#### Alma Ata... Health for All Now!!!

Alma Ata declaration is the first international conference on Primary Health Care (PHC). It happened in USSR in 6 - 12 September of 1978. Main goal of this declaration was to achieve Health for All by 2000 AD through primary health care.

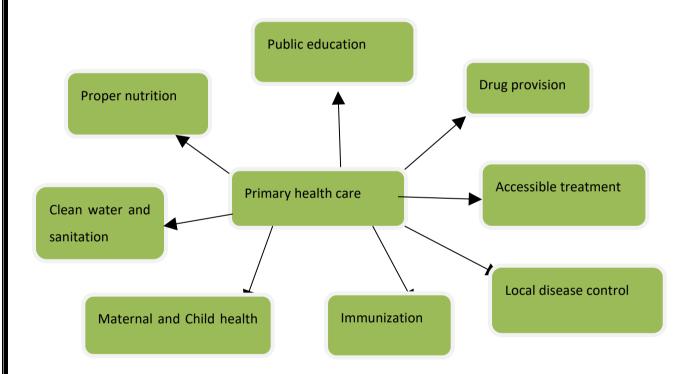
In declaration it says that By 2000 AD everyone in the world attain the highest level of health. Health is a human right, people have the right to seek for better health, treatment etc. Then equitable distribution of health- health should be distributed to the people without any disparities like wealth, power or prestige. It should be reach to unreached. Health is not only privilege of urban rich, it should reach the most vulnerable populations such as slum dwellers, people with HIV/AIDS, TB etc. and Adivasi community etc. (www.unicef.org/about/history/files/Alma)

After 2000 AD, We have almost crossed 16 years and still it's a dream of all the community health and public health activists. There are people who oppose this dream; due to which health for all is not yet as reality. But some people are actively working towards this goal. What my opinion is if we work together with government on these principles such as equitable distribution, community participation, intersectoral coordination, appropriate technology etc we can achieve this dream. But these principles were already set in 1978, they are not new principles. So in reality what is lacking and preventing us from achieving health for all? Are our health services equitably distributed? Do we have good community participation in

planning, implementing and decision making processes. These are all politically influenced or handled by some category of people.

When we look at the premises of Alma Ata, main logic of Alma Ata are economic and social development, by achieving highest level of health it will have positive effect on economic and social development of the country. Next is the responsibility of the Government to provide better health facilities to the people. Government should spend less on armaments and military conflicts and more on health and heath care of the people. What is happening actually, according to the latest report, government is using only 4.7% of its GDP to health sector, 2.5% for military expenditure (World Bank Report 2014)

The Alma Ata declaration has outlined 8 essential components of primary health care.



What is the real situation in India? I won't say it's totally poor, in many cases it is much improved such as Immunization, maternal and child health etc. In terms of nutrition, drug provision we didn't achieve the standards. When it comes to nutrition, over 47% of the under-5 children are malnourished in India (Unicef report). Drug provision and local disease control;

in how many government hospitals is the Rabies vaccine available? WHO says, 3.2% Indians will fall below the poverty line because of high medical bills. About 70% of Indians spend their entire income on healthcare and purchasing drugs, In India a diabetic or hypertension patient has to spend 20 percent of their family income. Studies in India estimate that, for a low income Indian family with an adult with diabetes, 20 percent of family income may be devoted to diabetes care. For families with a diabetic child, up to 35 percent of income is spent on diabetes care. If you have Diabetes for five years you would have spent around Rs 1,50,000 on diabetes treatment only. After 10 years you would have spent Rs 4,00,000 and after 20 years you would have spent Rs 15,00,000(Times of India, Nov15, 2015 report). What about cancer treatment in India? People have to sell their land or property to get the proper treatment. Universal affordable, accessible, available, acceptable health service is the need of hour.

# Globalization – Is it only innovations and technology.. Does it make any impact in Public health?

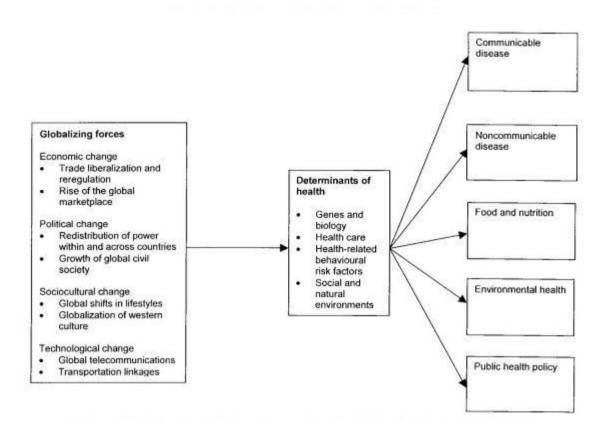
Globalization is the system of interaction among the countries of the world in order to develop the global economy. It refers to the integration of economics and societies all over the world. Globalization involves technological, economic, political, and cultural exchanges made possible largely by advances in communication, transportation, and infrastructure.

There are many advantages of globalization such as increased free trade among nations, reduces cultural barrier and reduces the likelihood of wars among nations. It really helps for the people who work abroad in many different ways. However, globalization can also be disadvantageous as it might affect the nations to lose its own culture and just be like any other nation. But even then, it has managed to retain its originality and its culture. Undoubtedly globalization is the process of creating both winners and losers. (*Ref; Globalization and its Economic Social Political and Cultural impact, academia.edu*)

There are people who support globalization, believe that it can bring people together and make everyone richer without getting rid of local cultures. But some people are against this thought, they say globalization only helps rich people get richer by making poor people poorer.

How globalization affects the health system. It has made positive and negative impacts. When we look at the positive impacts of the globalization is the introduction technologies in the field

heath care, such as telemedicine, HIS, electronic health records, m-Health, and web-based services, digital patient data, electronic medical records are some examples. But I was unaware that globalization has made negative impacts on society as well as the health system. Emergence of communicable and non-communicable diseases are the negative bonus of the globalization.



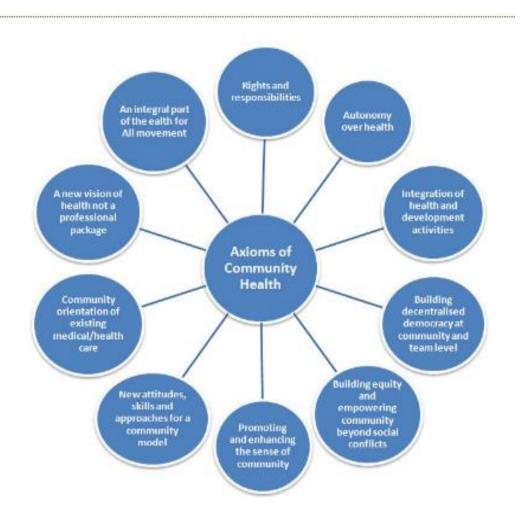
# **Paradigm Shift**

Paradigm shift is a transition from biomedical model to social model. Public health projects and programmes are based on bio medical model. Which focus on disease rather than health and wellbeing. But social model is not limited to individual alone but it is extending to the whole community. Social model is a holistic approach, based on the psychosocial, cultural,

economic, political and ecological dimensions. We believe in education and social process rather than drug and vaccine. We enable, empower and build autonomy processes and initiate the community rather than social marketing. We change the attitude of people from patients or passive beneficiaries to people and communities as active participants. Also shift in research, focus from molecular biology, pharmaco-therapeutics and clinical epidemiology to socio-epidemiology, social determinants, health systems and social policy research. Also shift from institutional based (hospital and health centric) work to community based and led approaches. This is called paradigm shift! We all are followers of paradigm shifts. (http://sochara.org/Paradigm-Shift)

But Is the paradigm shift alone will help us to reach Health for all? Is social model is enough? From my opinion we need integral approach for reaching heath foe all, both biomedical and social approaches. If there is no bio medical models how we will diagnose our cases, how will we do the early detection and treatment?

## **Axioms of Community Health**



I would say this is SOCHARA model of community health. It is the outcome of two years of study, reflection, action, and experiment of group of people belongs to SOCHARA.

The 10 principles says, what exactly community health is and If we follow or practice this 10 axioms without any bias, we would be able to achieve Health For All Soon! Practicing these axioms are not much easy, it need likeminded people with integration of health with other developmental activities. Building decentralized democracy at community and team level is very important, the power should be given to the people and community. These axioms are new packages of actions. Community Health Action is closely builds an alternative sociopolitical-economic-cultural system in which health can become a reality for all people.

## **CHAPTER II**

# Field Learning

## Learning by Doing

Even though I had only two field work, it molded like a good researcher, It gave me the confidence to do independent researches in future. I had some knowledge about quantitative research, but I haven't any knowledge of qualitative research before I am coming here. In depth interview, Focus group discussions, Participatory Rural Appraisal (PRA) and all were new lessons for me. So my field learning I can relate to this Chinese proverb, "If I hear, I forget. If I see, I remember. If I do, I know"

What is the plus point of field learning in CHLP is, before starting the research study the researcher or the investigator were understand the community well. That will help us to do a quality study without any pre-determined questions. From my personal experiences, in college they will send you the field area without knowing needs of the community we do our research and come back. SOCHARA taught me all the ethics in research, how to do the research and how should be a researcher to be.

## Larvae to Pupa ... Getting supplements for the growth

I would say apart from the class room learning, field learning or field exposure were the supplementary items I have got for the growth and development, If we looked at the life cycle of butterfly once the caterpillar came out from the egg, it will eat the egg shell and other leaves in the plant, like wise after completing the 3 months collective learning in SOCHARA, they sent me to Chennai Community Health Cell and Tata tea plantation for further growth. The two months I got very good experience in working office as well as field.

# National Human Rights Commission - Public Hearing

NHRC is an autonomous public body responsible for the protection and promotion of human rights. In January 2016 it was planned to conduct the public hearing in Chennai for the southern region. Unfortunately the public hearing was cancelled due to unexpected flood in Chennai. But It was an opportunity to work with SOCHARA and other NGOs to gathering the data related to private and public health systems in Tamil Nadu. In Chennai my role is to help the other staffs for NHRC, JSA southern public hearing work. National Inquiry on Health Rights during 2015-16. The public hearing was mainly focused on reviewing human rights violations in context of public and private health care services in India with a view to drawing attention to key systemic and policy related issues including denial, improper care, lack of access to health care, exploitation, abuse, corruption lead to violation, misappropriation and failure of regulation from the rights perspective.

For this enquiry we were looked at both private and public health sector. In public health system we were mainly looking at the status of primary health centers in terms of whether the doctors are present in the centers, whether the evening OPD and AYUSH were functioning, the status of HSCs in Tamil Nadu like whether they Own/ Rent building for functioning sub center, whether it is fine or damaged, VHN is positioned or not etc. Also we were looked at private practicing of Govt. doctors, status of VHSNC, PWC etc. Regarding to VHSNC and PWC, whether it is functioning or not and they were aware about the untied funds etc.

In private sector we mainly looked at the cost expenses in the hospital care like surgery cost, delivery cost etc.

Out of this enquiry our finding were, Out of 77 PHCs studied from 16 districts of Tamil Nadu, only 6 PHCs had functioning evening OPDs. About the private practicing of the Govt. doctors, we have studied 43 doctors from various blocks in Tamil Nadu, there were 24 doctors were practicing in private sector. Out of 138 panchayats studied from 34 blocks in Tamil Nadu. Shows that 99 panchayath had functioning VHWSNC.

Above all those things my learning was, I got an undersatnding about Tamil Nadu health system. Even if we says public health system is very good in Tamil Nadu and Kerala compared to other states, The reality is something different when we consider state as such. In my personal experience, our doctor in PHC will be available only from 10 am to 2 pm. There is no evening OPD or anything. The real situation will be different from what we are expecting. In

kerala 5 years back (2011) when new cabinet came into power they upgraded some of the HSCs into PHCs, PHCs into CHCs and District hospitals into Medical colleges. When I went for community visit in Munnar, I visited the community health center and the medical in charge were telling the Government only made changes in board; there are no changes in the staffing pattern and facilities. Not even in patients' services, ambulance services etc. These are the hidden reality of progressive state like Kerala or Kerala model of health system where other states are trying to follow. The situation is same in the newly upgraded medical colleges also, no specialized doctors available. At last people will go to the private sector for seeking treatment.

#### Chennai Flood

It was one of the frightening moments of my life. Every end of the year there will be rainy season in Chennai and other part of Tamil Nadu. Last year 2015 it went something worst. As we know all that like Bangalore and Hyderabad, a small rain is enough to log water in the entire city. In Chennai the rain started in the first week of December. That time I was with our Chennai SOCHARA for field posting. There were continuous rain for one week, I was unable to reach office some days, no buses, autos anything. If we are travelling in two wheeler It will stop somewhere in the middle of road and we have to push the vehicle rest part. Water I will be above the knee level. After reaching home will have to take bath in Dettol water. While going to the office will carry extra one dress to wear after reaching the office. In my life this is the first time I am facing the flood. It was very struggling days, won't feel to go out from house when think of walking through the dirty water.





After 2 weeks the situation was very pathetic and the rain fall was high and same time the Tamil Nadu Government opened shutters of the dams in the outskirts of the city to avoid the burst. That led to over flow the small rivers in the city. It mostly affected the poor people residing near to the river. Both rain and dam opening were the reason for this disaster.

More than 500 people were killed and over 18 lakh people were displaced all over Tamil Nadu. With estimates of damages and losses ranging from nearly ₹200 billion to over ₹1 trillion (Wikipedia)

Another incident which was very heart breaking was the death of 14 patients At the MIOT Hospital Chennai, due to the failure in the power and oxygen supplies. In a short span of time it taken the life of 14 people. These are the some retrieves about Chennai flood.

## **Community Visit - Munnar**

Munnar is a hill station located in the Idukki District of Kerala. The name Munnar literally means three rivers, denoting the three rivers (Muthirapuzha, Nallathanni and Kundala) that come together in the location.

Munnar is one of main tea growing areas of kerala. Munnar houses 4 large tea plantations; Kanna Devan Hills Plantation (KDHP), Tata Tea plantation, Harrison Malayalam Limited (HML) and Thalayar estate which is run by the Woodbriar group.

KDHP was formed in the year of 1897 and has 22 estates that are bordered by the Eravikulam national park, Anemudi chola, Pambadum chola and Mathikettan chola. Each estate has 3 to 4 divisions. In each division 110 to 120 households exist in the lanes. The 22 estates are divided into 7 different groups covering an area of 24000 hectares with around 10,000 workers. Tata tea plantation has 2 estates which are Pallivasal and Periyakanal Estate.

As per the Plantation Act every estate should have a garden hospital and group hospital. Here they run one dispensary (Garden Hospital) for four divisions that is estate. Doctor visits are weekly once or twice for a particular division estate. Also the plantation workers have the access to General Hospital Munnar which is known as Tata Tea Hospital (Group hospital). The nearest Government hospital is Community Health Centre (CHC) in Devikulam which is

located 6 km away from Munnar town. Four years ago Kerala government upgraded the Primary Health Centre to CHC, but still the facilities are same as a PHC, Only changes made are in the board of the hospital. The staff working pattern remains the same- the CHC operates with 2 doctors and there is no In Patient service (IP). Outpatient services (OP) works from 9 Am to 1 Pm. They have around 7 beds that are used only for patient observations. Within such limitations the CHC however is working to their best as was evident by the crowded OP section in the morning of the field visit. As per the Indian public health standards CHC should provide referral as well as specialist health care to the rural population. Delivery care is not provided in the CHC due to the lack of facilities, and as per the rule the CHC should have an Ambulance facility but here its lacking.

Under this CHC there are 2 PHCs (Vattavada, Koviloor) and one more PHC is to be opened in Munnar. Under this CHC there should be 20 sub centers as per the population but only 7 sub centers are working, rest of the sub centers have no buildings. Many of the workers are depending on the panchayat hospital in Chithirapuram which is 13 Km away from munnar. As per workers' point of view they are getting better treatment in panchayat hospital than garden hospital and group hospital of the company. They felt that their illness are cured easily when they approach Panchayat hospital. Many of the workers are not aware that Tata hospital have scanning facility, and complained that in many of the cases hospitals refer them to other institutions outside. These are more expensive and they suffer loss of wage also. Also there are many private clinics functioning in Munnar. For tertiary care treatment people have to depend on other hospitals such as taluk hospital Adimali which is 31 Km away from Munnar, Medical college Theni which is 76 Km from Munnar, Medical college Kottayam which is 80 Km away from Munnar. For many of the tertiary care people are depending on Medical College Theni because they are more comfortable with language.

Company is providing free education to the workers children up to 4<sup>th</sup> standard. Every estate has primary schools and crèches for preschool children. After the primary education they have to go to Govt. higher secondary school in Munnar, where there is both Tamil and Malayalam medium. Some people prefer to send their children to Tamil nadu for higher studies. Company has one CBSE school in Munnar, and children of staff study there. Many workers however complained that their children are not getting admission there unless they were a

driver or care taker of staff. In munnar educational facilities are better than health facilities by means of quality and availability. There is a Govt arts and science college, Govt engineering college and several private educational institutions.

When we look at the tea plantation community, all the workers are migrants from Tamil Nadu 3 to 4 generations back. They all belong to the SC/OBC caste. Both Men and women are engaged in work. Only women are engaged in leaf-plucking whereas men are engaged in spraying pesticides, cutting trees and factory works like packing etc. Their day in the plantation starts by 8 Am in the morning and ends by 5 Pm in the evening. In between they get a 1 hour lunch break. Usually they carry their lunch with them and since munnar is very cold place and their food often becomes inedible. In the field the women workers have no other option but open defecation, and during menstruation times they face much difficulty. They themselves say it is not possible to build or demand a toilet. The plantation is spread on hectares of land. Each worker gets 230 rupees per day as daily wage. Many of the families are run their household expenses with loans. Each worker receives incentives based on how many kilos they have extra plucked. If the worker has plucked more than 20 Kg they will receive 50 paisa extra for each Kg, If its more than 50 or 100 Kg incentives will become 65 paisa to 80 paisa. After all this, they are receiving around 6500 rupees per month, with this amount they have to pay current bills, loan repayment, fire wood, 750 Rs for the rice they are getting from company, even they have to pay for the tea powder that they get from the company, Company gives a blanket to each family which also the workers have to repay by installment after deducting all expenses including pension and provident fund, after which they will get only about 3500 rupees in their hand. With this 3500 Rs they have to run the other house hold expenses including children education.





While observed their housing and sanitation it was seen that they maintain their surroundings well though in limited space. Each household are uniformly placed and constructed in a lane. Each house has a small verandah, a common room and a kitchen. 4 to 6 members live in a house with everyone sleeping in the same room. Some houses have attached type of toilets and some have toilets that are outside the lanes. But the toilets are in poor condition they look dilapidated with no water supply in the toilets. For drinking purpose they are getting filtered water through pipe lines





Toilets provided by the company

Housing pattern

Regarding working conditions, they work five days in a week and Saturday half day. The whole day have to worker under sun, as there is hardly any shade in the plantation. Now a days hand plucking is out of practice in many plantations. They use the Scissors and a heavy loaded machine to cut the leaves. The heavy loaded machine was introduced two years back and is mainly used by young women. Based on the pension number they are allotted to handle this. But women are not happy with the machine as the weight of the machine alone comes around 15 Kg. The fumes and noise from machine affects them very badly as also the

heat produced by the machine. Workers revealed that every day they suffer from bad head ache because of this sound and fumes, and after reaching back home they are unable to do any house hold works as they can only drop to sleep. These workers are very worried about their life expectancy. They feel that their ancestors lived much longer, and that even if they lived long their life will be bedridden one. All workers have typical health problems such as shoulder pain, back pain, knee pain etc. It was also observed that hysterectomy is more prevalent in women plantation workers. This may be due to their tying collection bag over their abdomen. They carry the heavy tea bag for 4 hours with 20 to 30 Kgs.





Woman Carrying the collection bag and Scissor

Scissor used for cutting the tea leaves

The visit reveals the following- The big company is clearly exploiting the workers. Health is last priority though it is the responsibility of the company to give better healthcare facilities to the workers. It should be impressed upon the management that only if the workforce is kept healthy, then can work longer and better.

## **CHAPTER: III**

# **Learning outside the SOCHARA**

## **Seminar on Little Things Matter**

Dr. Bruce Lanphear, M.D., M.P.H., is a public health physician and professor at Simon Fraser University in British Columbia.

The seminar was organized by Pesticide Action Network (PAN) India, Seminar mainly focused on the Impact of toxin on developing Brains. How children are exposed to pesticides and other environmental toxins and how low levels of toxins can impact the developing brain of a child.

Children in India are being exposed to various environmental toxins, like pesticides, mercury and lead. Many of these chemicals have been banned in other countries and are linked to lowered intelligence, learning disabilities and behavioral disorders.



Brain harming

chemicals are so tiny that it can hardly be seen by the naked eye. Trace amounts of these chemicals have been found in umbilical cords and blood samples of children.

#### **Visit to NIMHANS Wellness Clinic**

NIMHANS Wellness Clinic is the place that welcomes anybody who is looking for support and comfort. This Centre was started with the idea on treating severe mental disorders. There is not much awareness about minor mental disturbances that could be a part of anybody's daily life. Their unique facility is designed to be available to share our thoughts, feelings, problems, concerns etc. with expert teams from NIMHANS,

The services provided here include counseling and support for issues like depression, anxiety, anger outbursts, lack of sleep, marital counseling for couples, support for alcohol/nicotine/drug de-addiction, services for technology addiction, family counseling, support for parents of children with behavioral disturbances, support and guidance for children with behavioral/emotional issues, stress and lifestyle management, personal exploration and growth, support and guidance for any mental health and wellbeing related concerns. Individual counseling, couple counseling, family counseling, support groups etc. are provided. They also provide mental health information through telephone, email etc.

#### Various clinics in the NWC

- Outreach and Liason
- Preventive services for Addiction
- Marital Enrichment Services
- Trauma Recovery Clinic Family Enrichment Program and Pre-marital counseling.
- Preventive services for Addiction (CAM team)
- Awake clinic
- Asare A parent support group
- Stress management and Lifestyle Clinic.
- Flourish Positive Mental Health Clinic Psychology.
- Child-Parent Well Being Clinic.
- PEPSI (Program for Early Parent Support and Interventions for Wellbeing)
- SHUT Clinic (Services for healthy Use of Technology)

# "Do not leave us behind" - Panel Discussion on Sustainable Development Goals

It was organized by Praxis India – Voice for change Initiative. The peculiarity of this discussion was people from the ground level were the participants of panel, the main focus on discussion were recently introduced "Sustainable"Development Goals , People from the various background like famers, disabled, transgender community, sex workers, migrant labours, tribal and slum community were represented. It is very important to addressing their problem, This panel discussion was an example for community participation, people from the community came out, also it is necessary to integrate them in to planning, decision making process of formulating goals, policies etc.

## **Dissemination meeting**

SOCHARA celebrated its 10 years of 'Community health learning programme' (CHLP) on December 7<sup>th</sup> and 8<sup>th</sup> at the St. Johns National Academy. The meet served to recollect the 10 years life journey of CHLP. Going down memory lane, many recalled how Ravi and Thelma decided to quit their medical profession and reach out to the community and dedicate their lives to the community. After 6 months of travelling across the country and 6 more months of reading and reflection led them to a decision to facilitate young people and initiate them to the field of community health.

Also the two days programme made me to meet many people in field of community health. Also we could meet our senior fellows which we only heard by the facilitators. It was a happy moment to meet them all. Also it helped to strengthen the Alumni networks .The main thing I reflect on after the meet was that Fr.Claude, Dr. Chandra in their late 80s are still actively participating in community health work and this inspired me and made me to think that how passive I am in my field, with less knowledge etc. I was thinking about the era in which they had grown up and mine. Overall the alumni meet made me aware and committed.

#### **FRLHT**

Foundation for Revitalisation of Local Health Traditions. Vision of the institution is "To Revitalize Indian Medical Heritage" FRLHT aims to enhance the quality of medical relief and healthcare in rural and urban India and globally by creating institutions for knowledge generation, dissemination and community outreach. It was another world with peace and calm. The campus was full of trees and medicinal plants. They Institute of Ayurveda and integrated medicine and Tarns Disciplinary University (TDU), Their main areas work were, validate traditional medicine and bring up the hidden scientific knowledge about traditional medicine, Research also were there main focus, currently they were working on the Malaria research in Orissa, trans disciplinary approach to prevent malaria. Also another research was underway that on low cost water filter for water purification by copper coils. They used to document the local health traditions and they had very good database of plants and its use. Data base we could access in all the south Indian native language as well as some of the northern language. That was surprising and interesting to look at. The importance of introducing local health practices and certifying the local healers were need of the hour.

# **Medico Friends Circle meeting**

This was one of the milestones in our CHLP journey; it was a great experience, unforgettable days. Also it was a new place; I cut down Raipur from my travelling list. One of my dreams is to travel all over the India. I hope I can. It was a memorable train journey with co fellows and lots of fun, games, songs etc. Also the train journey realized me to think of people suffering, drought and climate change. I personally feel we bother the climate based on the climate which we feel now both extremes. Otherwise we won't much think of other people. When we started our journey from Bangalore the climate was very pleasant and we crossed thorough Andra, Thelangana, Maharashtra the situation was very painful. Dried out lands, there were no greenery only dry leaves and trees. On our journey happened to see people staying small tends in open area, It was a bank of river, but it was dried. This journey reflected me on the spectrum of suffering people and how they struggling to push each day. We all are lucky on the facilities we have.

The MFC meeting was very good opening to our community health life, proud to be part of pioneers in the field of public health, ethics, human rights like Binayk Sen, Amar Jesani and Mira Siva. All others were integral part of the meeting. Each day was good lessons. First day we met Mitanins. The bare foot doctors, like our ASHAs. This is first introduced in Chhattisgarh.

The main focus of this programme is the knowledge and capacity building of rural women for addressing the first level of community health care needs at hamlet level itself and then to generate demand for the public health entitlements of the community. The primary beneficiaries of this innovation are children and mothers living in the rural habitations of the tribal state of Chhattisgarh.

The Mitanins are from the community itself, the first level of care and services are brought at the doorstep of all rural families of the state. A unique drug kit with those critical drugs needed for first level curative care is available free of cost with all these Mitanins. Despite the fact that many of them are not formally educated, these women are thoroughly trained on dispensing these drugs using innovative symbols and colour codes, identifying danger/risk signs and to promptly referring them to the health care facilities and getting them proper treatment. Through proper orientation and awareness by these women community volunteers, the community is made willing to use the available health care facilities at its best and many times, even to pressurize the public health providers to improve the quality of service delivery.

The main theme of the MFC meeting was Urban health, during the two days meeting we discussed on various topic related to urban health like Urbanization, inequity, and health, Lives of urban migrant workers, interstate migrant labors, Women health in Urban areas, Urban health care issues and challenges, challenges of urban planning, Medical pluralism and health care of the poor, culture and urban health inequity, waste management, urbanization and cardiovascular diseases etc.

Also we were discussed about current issues like social death of Rohith Vemula and sterilization death in Chhattisgarh. I was ignorant of many issues, its gave me the opportunity understand various urban health issues, when I think of urban health, waste management and air pollution were the issues, but after sitting with MFC I realized that there many other interrelated issues are there.

I felt that the MFC meeting was the golden opportunity meet many people and know about their area of work and their background of studies and its gave me mentors like Mira Siva, K R Antony etc.

#### Visit to GRACE

Grass Root Action for Community Empowerment is an NGO mainly working on the waste management, development issues of urban poor. The organization is started in the year of 2005 with street children and today it is diversified into women, children etc.

Their areas of work are:

- Work among street children
- Slum development
- Self-help groups
- Water sanitation
- Tuition for children
- Working with adolescents etc.

# **Meeting with E.P Menon**

It was very pleasure to meet E.P Menon, the peace messenger, In 1962 Menon and friend walked 8000 miles around the globe with the support of people without any penny in their hand to meet world leaders. He had taken over 2 years to complete the journey. It was great experience to listen various varies from him.

#### **Health in Slums**

The symposium was organised by Zuyd University of Applied Sciences, Maastricht University, Bangalore Baptist Hospital, and Manipal University in collaboration with a number of partners in India, including Global Action on Poverty (GAP), Movement for Alternatives and Youth Awareness (MAYA), Society for Community Health Awareness Research and Action (SOCHARA), SELCO Foundation, Forus Health, e-HealthEnablers, Pragathi Charitable Trust, One Good Step and Icarus Nova,

The aims of the symposium was to bring together the organizations, researchers, educational institutions and students working closely with slum communities, facilitating the exchange of ideas and experiences, and stimulating collaboration. Thus, it will allow the development of a Health in Slums network of partners that works together to maximize their efforts, and enhance the lives of urban slum communities in Bangalore.

## **CHAPTER: IV**

# In Search Of New Knowledge

#### Pupa to Butterfly

In search of my new knowledge I landed up in Munnar tea plantation. There is a story that how I reached there. In 2015 September there was a protest by the women workers from the TATA tea estate to increase their bonus and to increase their wage. They formed a group and named it as "Penpillai Orumai" which means unity of women. The interesting thing is they kept away all the men and trade unions, and fought for their right. It was big issue in kerala as well as India. In the Indian history this is first time women forming a group for their rights. The protest was longed to 15 to 20 days, during this strike women workers raised many issues like we all are under medication for many illnesses, many of us suffered by breast cancer, we don't have good hospital here, we will get only paracetomol for all illness in our estate hospital, the company is exploiting us etc.

The Munnar is in my own district. During this incident I thought as a community health activist, I should go and understand the real situation, thus how I reached there.

My research was mainly looking at their occupational health due the impact of mechanization works in the plantations. For reaching the results for my objectives, I have done survey among 50 women workers and In-depth interview with women who done only manual plucking. These women are retired from service and age will be 80 plus. Then women using scissor for cutting the leaves and women using heavy machine for cutting leaves.

The one and half months with plantation workers was really a great experience. I learned from tea planting to the process of tea powders. Also workers socio economic health status. For me the one and half month was a paradigm shift. From 24 hours Wi-Fi to no network areas, from ola auto to walk. Hostel food to own cooking. All these experiences strengthened me confidence work in any conditions. The day time in the plantation was very horrible, there is no enough shade, we were heated with sun, Feeling pity on the women and their each day displeasing.

| PROJECT REPORT   |
|--|
| A STUDY ON "OCCUPATIONAL HEALTH HAZARDS DUE TO MECHANIZATION OF TEA LEAVES CUTTING IN WOMEN TEA PLANTATIONS WORKERS IN |
| MUNNAR- KERALA"  |
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## Introduction

<sup>1</sup>Agriculture industry is one of the most hazardous sectors in both the developing and the developed worlds. Increasing attention is being drawn to the application of practical actions in rural and agricultural settings to help reduce work-related accidents and illness, improve living conditions and increase productivity. In India there are some 487 million workers, which make India the second largest country after China in terms of workers population. It is estimated that unsafe work conditions is one of the leading causes of death and disability among India's working population. These deaths are needless and preventable. <sup>2</sup>Occupational health is an application of preventive medicine – the prevention of disease and maintenance of the highest degree of physical, mental, social well being of workers in all occupations. Health promotion, specific protection, early diagnosis and treatment, disability limitations and rehabilitations are also applicable in occupational health. Occupational health in agriculture sector remains unpopular and there is also a misconception that occupational health is mainly concerned with industry and industrialized countries. The Industrial revolutions as well as globalization are increasing the burden of occupational hazards. We can see the difference in traditional hand plucking workers and mechanized workers. The new era workers are early bedridden when compares to their ancestors.

Occupational Health Hazards in agriculture sector varies in different ways. The workers are more exposed to Zoonotic diseases when compare to other industrial workers, they have close contact with animals and their products. Leptospirosis, tetanus, anthrax, bovine tuberculosis are the common Zoonotic diseases in agricultural field. With the mechanization of agriculture sector, accidents are also prevalent in agricultural industry. Insect bite and snake bite are the other major hazards faced by the plantation workers. Other life threatening hazards include chemicals used in the field such as fertilizers, insecticides or pesticides. <sup>3</sup>Physical hazards like

<sup>&</sup>lt;sup>1</sup> Ergonomic Check points in agriculture. Prepared by the International Labour Office in collaboration with the International Ergonomics Association, pp- 31-177

<sup>&</sup>lt;sup>2</sup> K.Park . Text book of preventive and social medicine.

<sup>3.</sup> Safety and health in agriculture-ILO pp.7

extreme climatic conditions, excessive noise and vibration from the machines and working unnatural body position or prolonged static postures for long period, use of inadequate equipment and tools, carrying of heavy loads, repetitive work, and excessive long hours of time are affecting the wellbeing of workers.

<sup>4</sup>According to world health organization there are 0.1 million deaths due to 100 million occupational injuries in the world. It is also estimated that in India alone 17 million occupational non-fatal injuries (17% of the world) and 45,000 fatal injuries (45% of the total deaths due to occupational injuries in world) occur each year.

<sup>5</sup>Plantation industry in India is the one of most exploited industry in the country. Plantation workers are less paid workers when compared to other organized sectors. In Munnar tea plantations, a maximum of Rs 6,500 is the average salary of a worker per month. After deducting all the expenses including pension, provident fund, fire wood charge, rice, loan etc, workers get only Rs 3,000 to Rs 3,500 per month. With this pittance amount, they have to run their family and meet other expenses including the education of children and health needs. But when we compare this wage with other tea growing areas in India such as West Bengal and Assam, its very high. Now a days people started migrating from north east to south India for getting job. In Kerala, tea plantation industry is one of the neglected area in terms of its wage rates. Other plantations like coffee, cardamom, rubber etc pays more than the wages of tea plantation workers. For example in Kerala, a coconut climber gets 700 rupees per day and a carpenter or mason gets Rs 600 to Rs 800 a day.

My study is concentrating specially on women workers. In Indian population, <sup>6</sup>women account for almost half of the world's agricultural workforce, about 44 % of the regional agricultural workforce in Asia. However, women's role in agricultural production has been traditionally under-estimated and gender inequalities are pronounced in this sector. In plantation industry women are more vulnerable to occupational hazards compared to men, as they are engaged in task works, they are spending up to nine hours in the field a day. They have to cope up with extreme climatic conditions, standing long time in field with heavy weight of tea bag and the

<sup>&</sup>lt;sup>4</sup> National Program for Control and Treatment of Occupational Diseases, Burden of Occupational Diseases in Injuries. National Institute of Health and Family Welfare.

<sup>&</sup>lt;sup>5</sup> Living conditions of tea plantation workers-economic and political weekly

<sup>&</sup>lt;sup>6</sup> Safety and health in agriculture. Occupational hazards in agriculture. Iternational labour office.pp 7-10

cutting machines. Use of machines which are used for plucking the tea leaves also adversely affecting them. Women in agriculture, like any other rural workers, have a high incidence of injuries and diseases and are insufficiently reached by health services. Most of them are illiterate and lives away from the mainstream world without much access to the information on the risks involved in their work. Carrying load is one of the major chores of rural womenworkers in developing countries. Carrying heavy loads can cause serious musculoskeletal disorders, such as chronic back pain, chest pain. This working conditions badly affecting the women's health.

In our country many of the occupational health problems are undiagnosed or underreported by health officials. It is essential to have proper monitoring and record of the occupational health problems. It has equal importance like maternal and child health, communicable diseases etc

## Field of Study

The study will be conducted in Munnar. <sup>7</sup>Munnar is a hill station in Idukki district in the South Indian state of Kerala. It is located 1600 meters above from the sea level. It is the one of main tea growing areas of kerala. Munnar houses four large tea plantations: Kannan Devan Hills Plantation (KDHP), Tata Tea plantation, Harrison Malayalam Limited (HML) and Thalayar estate. Around 4 months ago, in September there was a strike by 10,000 Dalit women tea plantation workers. They formed a new trade union and they kept away all other trade unions and men from this. The strike was mainly for seeking better wages and living standards. It was interesting to note that one of the major issues they raised during the protests was their occupational health hazards due to various reasons including the kind of tools they use at work, lack of hospitals and medical care, shortage of medical practitioners in their livelihood, increasing number of diseases including cancer, which they claims to have happened due to the direct exposure to fertilizers they use every day without adequate safety gears.

<sup>&</sup>lt;sup>7</sup> Idukki district official website http://idukki.nic.in/munnar.htm

# **METHODOLOGHY**

#### TITLE OF THE STUDY

A study on "Occupational Health Hazards Due to Mechanization of Tea Leaves cutting in Women tea plantations workers in Munnar- Kerala"

### AIM OF THE STUDY

To identify the occupational hazards and quantify the associated health problems that has occurred due to mechanization of tea leaves cutting

#### STATEMENT OF THE PROBLEM

In the tea plantations, women are mainly working in tea cutting process. Now a days hand plucking is out of practice in Munnar tea plantations. They are cutting the leaves instead of plucking, with the help of scissors and handheld machines. This scissor is introduced 15 years back and the heavy machine introduced two years back. During my last visit it is confirmed that workers are happy with hand plucking when they think of their health. After the introduction of these machines they are facing many health problems and they are worried that their life expectancy will be less when compared to our ancestors.

In terms of occupational hazards there are plenty of definitions for the word 'hazard.' But a clearer definition would be of any source of potential damage, harm or adverse health effects on something or someone under certain conditions at work. It not only causes a mere harm but cause for adverse effects on the lives of people. With the introduction of industrialization and the increased productivity with the help of mechanized work spaces, occupational health hazards have become an essential part of work places. And that makes it more significant in Munnar tea plantations where the workers who face health problems are

not just exposed to a hazard due to their 15-kg handheld machine but they are already victims of a highly exploitative work environment, socially underprivileged and prone to diseases in absence of adequate medical facilitates too in the vicinity

The study is being carried out at a time when there is a major uprising of over 10,000 Dalit women who works in the tea plantations against the government and the established trade unions seeking better wages and living standards. It was interesting to note that one of the major issues they raised during the protests that lasted for over a month was their occupational health hazards due to various reasons including the kind of tools they use at work, lack of hospitals and medical care, shortage of medical practitioners in their livelihood, increasing number of diseases including cancer, which they claims to have happened due to the direct exposure of fertilizers without safety gears. During my interview with medical officer of community health center Munnar revealed that there are 33 cases of cancer and in that 33 cases 75% are breast cancer. Within the limits of available resources and time, this project will look at all possible and reported health hazards in plantations.

#### **OBJECTIVES OF THE STUDY**

- To identify the occupational hazards and quantify the associated health problems that have occurred due to mechanization of tea leaf cutting
- To assess the positive and negative impacts of mechanization
- To compare the health problems as the result of the tool they using (Scissors and handheld machine)
- To study how they manage occupational health problem and the document the response to this problem.

### **HYPOTHESIS**

"Occupational health problem are more among women using hand loaded machine than the scissors using and manual plucking women"

#### **INCLUSION CRITERIA**

- Women workers who are presently working and retired from service
- Workers who gave the consent of the study.

#### STUDY DESIGN

A cross sectional- quantitative study will be done to gather the information from tea plantation workers. Also observational study design will be using to understand the occupational health hazards.

#### POPULATION OF THE STUDY

Study population includes only women plantation workers. The population is 7000.

#### TIME PERIOD OF STUDY

The duration of study will be two months. The study was carried out from February  $24^{th}$  to April  $10^{th}$ , 2016.

#### ETHICS STATEMENT

Research proposal was accepted and approved by the SOCHARA Institutional Scientific and Ethics Committee in January 2016.

#### **SAMPLE SIZE**

100 women workers will be selecting for doing survey. And for in depth interview 3 women workers will be choosing in each category based on the tool they are using and manual plucked women

#### **SAMPLING TECHNIQUE**

Convenient sampling method will be using to select the samples.

#### **VARIABLES**

The variables here will be the occupational hazards, occupational health problems and mechanization.

#### STUDY METHOD

Both quantitative and qualitative method is using. In quantitative method survey method of tool is using. In qualitative technique in depth interview schedule is using.

Structured interview schedule will be used for collecting data. The schedule is constructed after reviewing the past researches on occupational health hazards of plantation workers conducted in India and other countries. Schedule was prepared in English. The medium used for collection of data was Tamil. First part of the schedule consists of demographic data, and the second part of the schedule includes occupational history, occupational health hazards and problems of the women workers.

#### **DATA COLLECTION**

The data collection procedure will begin after due consent from the respondents is obtained and direct conversation with them to gather the data. In this study primary and secondary data will be used for the analysis and interpretation. Primary data will be collected with the help of pre structured interview schedule. Secondary data will be collected from various studies already done on occupational hazards of plantation workers, Official websites and print media.

#### DATA ANALYSIS

The collected data will be recorded in spread sheet and coded into numeric. Using Epi Info the same will be summarized and the results put down in the form of tables. The tabulated data will be represented as graphs and diagrams. Inference will be drawn. The qualitative data will be analyzed with the help of open code or manually.

# **Data Analysis**

Table -1
Age distribution of the Respondents

| Age Group | Frequency | Percent | Cum. Percent |
|-----------|-----------|---------|--------------|
| >0 – 35   | 5         | 10.00%  | 10.00%       |
| >35 - 50  | 36        | 72.00%  | 82.00%       |
| >50 – 70  | 9         | 18.00%  | 100.00%      |
| Total     | 50        | 100.00% | 100.00%      |

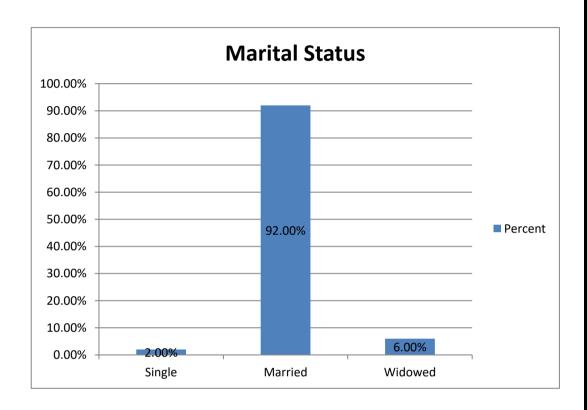
• 72% of the respondents are belongs to the 35 to 50 years

| Total Observation | Mean age | Std Deviation |
|-------------------|----------|---------------|
| 50                | 44.12    | 6.8053        |
| Minimum Age       | Median   | Maximum Age   |
| 32                | 44       | 58            |

• Minimum age of the respondents were 32 and maximum was 58

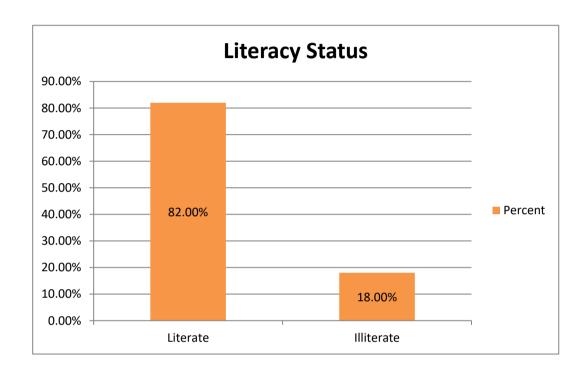
Figure - 1

Marital status of the Respondents



92% of the respondents were married and 2% were single.

Figure - 2
Literacy status of the Respondents



82% of the respondents were literate. That means they are able to read and write their mother tongue.

Table-2 Caste wise distribution of the respondents

| Caste or Tribe   | Frequency | Percent | Cum. Percent |
|------------------|-----------|---------|--------------|
| Not<br>mentioned | 1         | 2.00%   | 2.00%        |
| SC               | 42        | 84.00%  | 86.00%       |
| ОВС              | 3         | 6.00%   | 92.00%       |
| OEC              | 4         | 8.00%   | 100.00%      |
| Total            | 50        | 100.00% | 100.00%      |

Majority of them are belongs to SC community (84%)

 $Table-3 \label{eq:table-3}$  Absenteeism among workers for the last One year

| Absent due to ill health | Frequency | Percent |
|--------------------------|-----------|---------|
| Yes                      | 31        | 62.00%  |
| No                       | 19        | 38.00%  |

62% of the women workers were absent in the last one year due to various health problems.

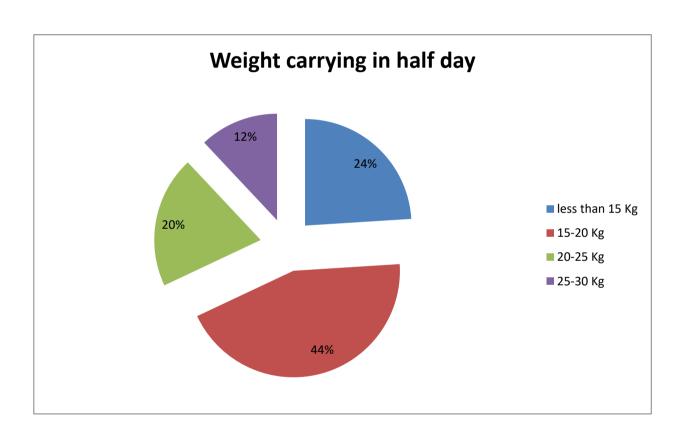
Table - 4
Reason for absenteeism among the respondents

| Reason for absenteeism   | Frequency  | Percent    |
|--------------------------|------------|------------|
|                          | 2104101103 | 2 01 00110 |
| Musculoskeletal problems | 22         | 70.97%     |
| Throat pain              | 2          | 6.45%      |
| 1 m oat pam              |            | 0.4370     |
| Head ache                | 2          | 6.45%      |
| Fever                    | 2          | 6.45%      |
| Other                    | 10         | 32.26%     |
| Total                    | 31         | 100.00%    |

70.1% of the absenteeism were due to various musculoskeletal problems like shoulder pain, leg pain, body pain etc

Figure – 3

Average Weight of carrying Tea leaves in half day



44% of the women carry 15-20 kg of tea leaves in a half day. In the season they used to carry 40-50 kg in half day. Since my visit was during the off season it's affected the result.

Table -5
Women who are taken leave in the last one month

| Leave Taken the prior month of data collection | Frequency | Percent |
|--|-----------|---------|
| NI   | 21        | 42.000/ |
| No   |           | 42.00%  |
|  |           |         |
| Yes  | 29        | 58.00%  |
|  |           |         |
| Total  | 50        | 100.00% |

58% of the women were taken leave prior to the month of data collection

Table -6
No. of days women taken leave in the one month prior to the data collection

| No.of days taken leave in one month | Frequency | Percent |
|-------------------------------------|-----------|---------|
| 0                                   | 21        | 42.00%  |
| 1                                   | 5         | 10.00%  |
| 2                                   | 9         | 18.00%  |
| 3                                   | 5         | 10.00%  |
| 4                                   | 8         | 16.00%  |
| 7                                   | 1         | 2.00%   |
| 9                                   | 1         | 2.00%   |
| Total                               |           | 100.00% |

Average numbers of days leave taken by women were 1. It was represented by Median.

Table -7
Reason for taking Leave

| Causes of taking leave | Frequency | Percent |
|------------------------|-----------|---------|
| Social cause           | 20        | 68.97%  |
| Medical cause          | 6         | 20.69%  |
| Non Occupational cause | 6         | 20.69%  |
| Total                  | 32        | 100.00% |

68.97% women taken the leave because various social causes like death, marriage, pilgrimage etc

Table - 8
Stated health problems by workers

| SL |                          |           |         |
|----|--------------------------|-----------|---------|
| No | Health problem from      | Frequency | Percent |
| 1  | Musculoskeletal Problems | 39        | 79.59%  |
| 2  | Headache                 | 2         | 4.17%   |
| 3  | Respiratory problem      | 2         | 4.17%   |
| 4  | Fever                    | 2         | 4.17%   |
| 5  | Cough                    | 3         | 6.25%   |
| 6  | Sneezing                 | 3         | 6.25%   |
| 7  | Others                   | 2         | 4.17%   |
|    | Total No.of cases        | 53        | 20/     |

Musculoskeletal problem is more prevalent in the workers. 79.59% were reported various musculoskeletal problems.

Table - 9
Women who suffered injuries in last 6 months

| Any Injuries last 6 months | Frequency | Percent |
|----------------------------|-----------|---------|
| Yes                        | 3         | 6.00%   |
| No                         | 47        | 94.00%  |
| Total                      | 50        | 100.00% |

Injuries due to machines were not common among workers. Only 6% were reported injuries due to machines.

Table 10
Women who have Vision or Hearing limitations due to occupation

| Physical limitation | Frequency | Percent |
|---------------------|-----------|---------|
| Yes                 | 15        | 30.00%  |
| No                  | 35        | 70.00%  |
| Total               | 50        | 100.00% |

30% of the women were reported vision limitation due to occupation.

Table 11
Women who are currently under medication

| Under medication  | Frequency | Percent    |
|-------------------|-----------|------------|
| Unuci inculcation | rrequency | 1 CI CCIIC |
|                   |           |            |
|                   |           |            |
| Yes               | 13        | 26.00%     |
|                   |           |            |
|                   |           |            |
| No                | 37        | 74.00%     |
|                   |           | , 1100,0   |
|                   |           |            |
|                   |           | 100.000/   |
| Total             | 50        | 100.00%    |

26% of the women were under medication of various illnesses

Table 12
Women who undergone surgery other family planning

| Undergone surgery | Frequency | Percent |
|-------------------|-----------|---------|
|                   |           |         |
| Yes               | 7         | 14.00%  |
|                   |           |         |
| No                | 43        | 86.00%  |
|                   |           |         |
| Total             | 50        | 100.00% |

14% of the women were undergone for hysterectomy alone.

Table-13 Association between Musculoskeletal Problems and Weight carrying by the workers

|          | Muskuloskelatel problems |            |       |
|----------|--------------------------|------------|-------|
| AGEGROUP | No                       | Yes        | Total |
| <35      | 2                        | 3          | 5     |
| 36-50    | 7                        | 28 (71.7%) | 35    |
| >51      | 2                        | 8          | 10    |
| TOTAL    | 11                       | 39 (78%)   | 50    |

Single Table Analysis: Chi-Squared = 1.7058, Degree of freedom is 2

An expected value is <5. So Chi-squared may not be a valid. So there is no association between weight carrying and musculoskeletal problems.

Table – 14
Association between Musculoskeletal Problems and Age of the workers

|                      | Musculoskeletal Problems |     |       |
|----------------------|--------------------------|-----|-------|
| Weight Carrying (Kg) | No                       | Yes | Total |
| <15                  | 4                        | 8   | 12    |
| 15-20                | 5                        | 16  | 21    |
| 20-25                | 0                        | 10  | 10    |
| 25-30                | 1                        | 5   | 6     |
| TOTAL                | 10                       | 39  | 49    |

Chi-Squared = 4.1002, df = 3

An expected value is < 5. Chi-squared may not be a valid. So there is no association between Age and musculoskeletal problems.

# Case study 1



I am Eswari, I started working in the tea plantation from the age of 16, My parents also worked here. I had 7 siblings and I was the elder one, I got married in the age of 17 and the marriage I moved to Tamil Nadu where my husband's place. After spending 2 year we both came back Munnar since my parents were here. My father was a supervisor at the plantation, One day her father lost his job due to some issues in the company. I used to get 1 rupee wage per day that time. My last wage was 120 rupees when I got retired from the service. Now it is been over 20 years I have retired.

When our time we used to pluck the tea with our hand, 2 leaves and one bud, that was the standard. Now no one is plucking by hand. Even the taste of the tea also changed. In our time there were 10 workers needed to cover 1 acres of land, now two workers are enough to complete the job. I never used that machines, I used only my hands.

Now my age is 80 plus, I am still going for the 100 days employment (NREGA), past 3 years I feel my health going down, in between I had removed small growth from my uterus, after that only I felt sick. I don't have any diabetics or blood pressure; I hardly take tablets for body aches. I feel these aches and all part of my age.

# Case study 2



My name is Tamil Selvi, I am working with KDHP for more 20 year. I am married and I have 2 children, one son and one daughter, son is a civil engineer and daughter is doing her BSc. My husband is supervisor here. I had gone to school till my 8<sup>th</sup> standard and due to some issues at home I quit my studies and joined with my parents. They were also employees of KDHP. Both are retired from the service.

My day in the plantation start by 8 Am in the morning, end by 5 pm in the evening, in between I will get one hour lunch break. I am using the scissor for plucking the tea. It not plucking, its cutting. This scissor method came into the plantation 15 years back. I used to pluck over 100 Kgs in peak season and since it is very bad season for tea I used to pluck only maximum 40 kg a day. If we pluck in hand maximum we pluck is 25 Kg. Introduction of scissor helped us to generate more income. Our income will be based on the how many Kilos we plucked. Now our wage is increased to 280 to 302. Also we have 60 paisa incentives more each 1 kg of more than 27 Kgs.

But in another way scissor is affecting our health very badly, frequent cutting with scissor, both shoulder can't even move properly, very paining; pain killers are the only solution to forget this pains. Other problem is the field are small, small hills. We have to go all the steeps and

tops to pluck the leaves. We wear Gum boots and cover our body with tarpaulins. Otherwise it is very difficult to walk between the shrubs. There are chances of snake and insects bite.

Actually the introduction of scissor increased our health problem. My parents are very health in their 80, But in 40s itself I am taking many medicine of various aches. We have to long time in the field we gave more pressure to one leg to support the other. Another problem are extreme climates if it is cold extreme cold, if it is hot it is too hot. During rainy time very difficult go to the field. Fields are too slippery. We used to fall during rainy. What to do we should work for running the family.

We don't have any other option if we leave this job. With this why we feed every day, educating the children etc. We struggling enough, our children should not struggle too. That why we are trying to give good education to our children. At least they will escape from this job!

I personally feel to make the work interesting; we should get some leisure time in between our job. If we pluck more our health will go more worst. If the work goes in a medium strain we can preserve the health. Our health is in our hand. But the problem is the supervisor come and scold if we are slow in work or if we take rest in between. There are women supervisors also there. They know the problems of women well but they won't bother.

# Case study 3



I am Amutha, I am 38 years old. I have been working with KDHP more than 15 years. I have two children. My husband working in the KDHP factory. Last four years I am using this heavy loaded machine for plucking the tea leaves. The weight of the machine alone 15 kg, It ran by petrol, It has a pump to exhale the fumes and container in the back side to store petrol. Also there is one long iron rod and blade in the front portion. Standing for long time with carrying this machine very hectic. We usually handle the machine with two people. One is for carrying the machine and other person is for carrying the collection bag along with machine. We face multiple problems with this machine, but company has more profit, It can work for 4 man's job.

The weight of the machine, heat, vibration, sound all together make a mad effect at end of the day. Head ache and vomiting tendency is the main problem. Every day I am fed up with head ache. I won't be able to do any household works after coming to home. I will just take bath and lie down. I am sure that I won't be able to work over 50 years. My parents and grant parents were healthy at the end of their retirement. I am just 38 years now, already there is no place where there is no pain. All parts are aching. Our ancestors were lived till 90 years. But our case will be less if it is going like this.

# **Results**

- 72% of the respondents are belongs to the 35 to 50 years. Minimum age of the respondents was 32 and maximum was 58. (Table 1)
- 92% of the respondents were married and 2% were single. (Figure 1)
- 82% of the respondents were literate. That means they were able to read and write their mother tongue. (Figure 2)
- Majority of them are belongs to SC community (84%) (Table 2)
- 62% of the women workers were absent in the last one year due to various health problems (Table 3)
- 70.1% of the absenteeism were due to various musculoskeletal problems like shoulder pain, leg pain, body pain, neck pain etc.(Table 4)
- 44% of the women carry 15-20 kg of tea leaves in a half day. In peak season they used to carry 40-50 kg in half day. Since my visit was during the off season it was affected in the result.( Figure 3)
- 58% of the women were taken leave prior to the month of data collection, Average number of days taken is 1. It is represented by Median.(Table 5)
- 68.97% women taken the leave because various social causes like death, marriage, pilgrimage etc. 20.69% of the women taken due their own medical issues like hospitalization, musculoskeletal problem, fever etc. and same number of women taken leave due to non-occupational causes like medical issues of the family members and parents meeting in the school.(Table 6,7)
- Musculoskeletal problem is more prevalent in the workers. 79.59% were reported various musculoskeletal problems. Sneezing and cough were second main ill health in workers (6.25%), Fever, Head ache and respiratory problems like breathlessness, throat pain etc.(4.17%) (Table 8)
- Injuries due to machines were not common among workers. Only 6% were reported injuries due to machines.(Table 9)
- 30% of the women were reported vision limitation due to occupation. (Table 10)
- 26% of the women were under medication of various illnesses (Table 11)
- There is no association between weight carrying and musculoskeletal problems.(Table 12)

• There is no association between age and musculoskeletal problems.(Table 13)

# **Discussion**

The purpose of my study was to identify the occupational hazards and quantify the associated health problems that have occurred due to mechanization of tea leaf cutting. It was a cross sectional study. Both qualitative and quantitative techniques were used. Survey and In depth interview were the method of collecting the data. I used to meet them in the plantation, survey had taken only maximum 10 minutes to each person, my study did not disturb their work. For doing In depth interviews I visited them at their houses in the evening and Sundays. Once we opened a question they will go beyond one hour with their life stories. It was very good experience to know their stories. I faced little trouble with some Tamil words, but the workers can understand Malayalam that was the plus point.

There are positive and negative impacts of mechanization in the plantation. One way it helps to increase their income and other way it's affecting their health. Main hazard due to machine were Its weight, vibration, heat and sound. Other than there is not much injuries due to machine. Health problem varies from women using scissor and women using heavy loaded machine. Problem is more in women using heavy loaded machine. They themselves wearing thick cloths and gloves to protect them from heat and injuries. There is no solution for keeping away the sound and vibration in our own way. As a researcher I would say that company should replace this machine with less heated, less sound less vibration machines. Using helmets and ear cottons will not help them to work in this condition.

#### Conclusion

As a community health person I felt that there health is in risk. From the study it is clear that 71.7% of women are facing various musculoskeletal problems. This study helped me to understand various health problems faced by women workers, what are the main hazard causes to this health problem, their working pattern etc. The study reveals that mechanization increased their health problem; The women are worried about their life expectancy with parents or grant parents who had the same occupation. The mechanization helped them to improve the

economic status that is why they are able to give good education to their children. There are engineers, doctors, nurses and teachers from their children.

# Limitation of the study

Since I have done the study during the very off season of tea, so the weight carrying by the workers were less, weight carrying was one my indicator of study; it is affected in the result. So that I cannot interpret that weight carrying causes any health problems to them.

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# Annexure - 1

# A Study On Occupational Health Hazards Due to Mechanization of Tea Leaves Cutting In Women Tea Plantation Workers In Munnar-Kerala

| Demographic Data  |                    |  |
|---|--------------------|--|
| 1. Name:  |                    |  |
| 2. Age: (in years)  |                    |  |
| 3. Marital status: a) single  | b) married         | 3) widowed                             |
| 4. Literate [] or illiterate []   |                    |  |
| 5. Mother tongue: Tamil [] Malayalam []                                   | others             |  |
| 6. Caste/ tribe   |                    |  |
| Occupational history  |                    |  |
| 7. How many years are you working with t                                  | his plantation?    |  |
| a) less than 3 years b) 3-6 year  | rs c) more th      | nan 6 years d) Others                  |
| 8. Have you ever been absent from work d                                  | ue to ill health o | during the last 1 years?               |
| If Yes, Number of days? R   | eason              |  |
| 9. Maximum weight of carrying tea leaves                                  | in half day?       |  |
| a) less than 15 Kg b) 15-20 kg<br>10. On an average how many kilos of Tea | ,                  | d) 25-30 Kg e) more than 30 Kg in day? |
| 11. How many days you were absent last of                                 | one month          |  |
| Reason? Social causeMedical Alcoholism/nutrional disorder.                | cause              | Non Occupational cause                 |
| Occupational Health   |                    |  |
| 12. List the health problems of the workers                               | sperspective       |  |
| 13. Any Injuries occurred in last 6 months.                               | a) Yes b) No       |  |

|  | If Yes, Specif   | y               |  |  |
|--|------------------|-----------------|--|--|
| 14. H  | Iave you had any | physical limita | ations, including hearing or vision due to occupation? |  |
|  | a) Yes           | b) No           | Specify  |  |
| 15. Have you had any kind of back, joint or muscle problem?  |                  |                 |  |  |
|  | a) Yes           | b) No           | Specify  |  |
| 16. Are you currently receiving any medication or other treatment, including tablets, injections, physiotherapy etc, or undergoing any medical investigations? |                  |                 |  |  |
| 17. Have you undergone any surgery in lifetime?  |                  |                 |  |  |
| ä  | a) Yes           | b) No           | Specify  |  |
|  |                  |                 |  |  |

# Annexure- 2

# In depth Interview schedule

Workers - Manual Plucking

- Introduction
- Enquiry about responsibilities
- Perception about use of manual plucking
- Does the manual plucking impact them in any way?
- o Further follow up question on positive impacts
- Further follow up question on negative impacts
- How does machine use compare with manual plucking
- Further question on positive aspects
- o Further question on negative aspects
- Can you explain the health problems experienced due to manual plucking? Have any health problems been experienced?
- If yes, what problems?

- Can you explain the positive and negative impact of manual plucking? In your perspective
- If you are facing with some occupational hazards due to manual plucking

What will you do first?

- Where will you go for consultation?
- Target of collecting tea leaves- manual

# In depth Interview schedule – Workers using scissor and machine

- Introduction
- Enquiry about responsibilities
- Perception about use of scissor/machine
- Does the use of machine impact them in any way?
  - o Further follow up question on positive impacts
  - o Further follow up question on negative impacts
- How does machine use compare with manual plucking
  - Further question on positive aspects
  - o Further question on negative aspects
- Can you explain the health problems experienced due to using machines? Have any health problems been experienced?
- If yes, what problems?
- Can you explain the positive and negative impact of using machines? In your perspective
- Positive and negative impact of manual plucking?
- The mechanization replaced any health hazards due to manual plucking
- If you are facing with some occupational hazards due to machine

What will you do first?

Where will you go for consultation?

• Do you have any partners to use the machine while plucking tea leaves?

- Do you have wheeled stands or any other methods to storing the tea leaves in the field?
- Target of collecting tea leaves- Scissors/ machine/ manual
- Whether company has given proper training for using this equipment?

## **Occupational Health Hazards**

- Do you have any allergies or asthma/ respiratory problem due to fumes?
- 1. Sneezing, 2. runny nose, or sinus congestion 3. Red or itchy eyes 4. Skin rash or irritation 5. Coughing or wheezing 6. Difficulty breathing
  - Are your problems with physical conditions concerned with vibrations?
  - Are your problems with physical conditions concerned with noise?
  - Are your problems with physical conditions concerned with heat?
  - Are your ergonomic problems caused by

Working posture? /Repetitive work? /Lifting? /Other?

# **Annexure-3**

# **Consent Form**

Ms. Anu Maria Jacob, Principal Investigator, Bangalore SOCHARA-fellow have informed me about the study "A Study on Occupational Health Hazards among women tea plantation workers" and informed me that there is no perceived risk and little benefits are involved in this study. She assured me that the data will be kept confidential and the findings will be share with the workers union for appropriate action. She said the study is only for learning purpose and voluntarily I am agreeing to participate in this study and give my consent by signing this consent form.

| Name      | :- | Estate :- |
|-----------|----|-----------|
|           |    |           |
|           |    |           |
| Signature | :- |           |
| Date      | :- |           |

# **Annexure-4**

# **Information Document**

SOCHARA is registered non-governmental organization, at Bangalore, conduct Community Health Learning Programme(CHLP). In the learning program fellows learn "Community health Approach to tackle public health problem.

Principal Investigator Anu Maria Jacob is a fellow of CHLP and for his study purpose he is going to conduct a study on "Occupational health hazards among women tea plantation workers"

1. For any concern to be readdress in connection to this study you can contact:-

S J Chander Programme Officer SCHOOL OF HEALTH (SOPHEA) **PUBLIC EOUITY** AND ACTION Koramangala, No. 359, Main, Block, 1st 1st

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## **CHAPTER: V**

# There Is No Alternative for Reading

I remember Prassana used to tell "there is no alternative for reading" I know I am not a good reader. But I am not sad about that, I hope I can pick me up. After coming here, I realized the importance reading, I gradually making habit of it. I have strong desire to read. But sometimes it will not work; I read only few books in my entire life other than text books. I have put three books here out of the others, I felt that these books are directly or indirectly related to community, health etc. The Red Market, Revolutionary Doctors and Hard Choices.

# The Red Market by Scott Carney

The Red Market is written by Scott Carney. It is an alarming book. He was an investigative journalist who he lived in India for more than 10 years to write this book. He discovered some real stories that happening in our country as well outside country. This book is mainly looking at organ mafia and selling of human body or organs to generate money. Surrogacy, organ transplantation, drug testing, baby selling and blood farming there are number of things coming under this. For me this book was little scary!

During his health reporting, he visited tsunami refugee camp in Tamil Nadu. The inhabitants are so desperate and the organ brokers so ruthless. He traveled to a high end fertility clinic in Cyprus that recruited egg donors from a population of poor Eastern European immigrants. He interviews surrogate mothers at the Akanksha Infertility Clinic in Gujarat, India. Who are confined to the clinic for the duration of their pregnancy and are paid between \$5,000 (3.3 Lakhs) to \$6,000 (4 Lakhs) a terrific bargain by American standards. He visited Gorakhpur in UP, India, where he could see at least 17 physically weak people were held captive for years in brick and tin sheds on a local dairy farm, so that their blood could be draw off and sold to local blood banks. These are very heart breaking and unimaginable realities.

After investigated in an Indian orphanage, it implicated that more than 100 cases of kidnapping are for profit, it paid child-snatchers to grab children from Indian slums, who were then offered up to Westerners for adoption. After reading all those things I got nerves and thought about the safety of our body, life of our children are not in our hand. But we all should work against these

kinds' malpractices. People have the right to their own body and life. I know he written this book from experience and evidence based report, but even though It is unbelievable. But many times these are hidden from real world.

When we look at the trade of this organ business, the buyers of red-market goods are usually Westerners. Sellers are mainly from developing countries. Surprisingly large numbers of the sellers are women, and many are forced to be into the business. Middle men taking large profits from this business.

For me it was very surprising and unimaginable stories. In many of the cases the selling and buying is done with the help health care institutions. We should be very careful! While reading this book I got scared and the thought came in my mind that how will we trust the doctors or hospital when we approach for medical care, who knows that all our kidneys, liver and other organs are safe there in the positions. He also talking about bone thieves!, they will dig the crematorium and took the bones of dead one and sell it to the companies. These all are scary news's, even people are not safe after death!! Sad, but this is the reality, sometimes we may not believe that there is world like this!

It was really a good book, that gave me some inner thoughts and also new knowledge and learnings.

# **Revolutionary Doctors**

Revolutionary Doctors, this is another diplomatic book written by Steave Brouwer, This book is about how Venezuela and Cuba changed their world concept of health care. The author Steve Brouwer spends long term in Venezuela and made observations and in depth research with medical students and doctors. The extraordinary medical personnel leaf their homes and families to support radical struggles for health care abroad. And it shows how this struggle is taken up in places like Venezuela, where poor communities were organizing to provide health care from the ground up. During his visit he had taken his two sons along with him, He mentioned that they spend their time in organic farming, digging, planting, harvesting, and composting with worms; they even learned how to plow with a horse on the steep mountainsides etc.

To change the health care concept Venezuela, what they did is, they went around the countryside and poor urban areas to recruit the people who interested in medicine and then they trained them as doctors. They gave free education, and after the completion of the degree they will work in their community and trained other also. This was Venezuela's community medicine programme.

But the programme faced much hostility from traditional Venezuelan doctors as well as, all the forces antagonistic to the Venezuelan and Cuban revolutions. Despite the obstacles it describes, how a society committed to the well-being of its poorest people can actually put that commitment into practice, by delivering essential health care through the direct empowerment of the people it aims to serve.

When I am reflecting back, we have also same kind of examples like Tribal Health Initiative (THI) in Sittilingi and SOCHARA here. THI also trained the people from community and make them to do the basic medical care to the people. SOCHARA also doing the same like CHLP programme. Training the youngsters from the multidisciplinary background and molding them as a community health activist. We have examples in and around us, no need to look till Venezuela or Cuba. We have our own revolutionary doctor who kept away their white coat and stethoscopes!

#### **Hard Choices**

This is my third book, written by Hillary Clinton, the former United States Secretary of State. In this book she is talking about the memories of 4 years of being as America's Secretary of State. It is very interesting book. I didn't read completely, I would say incomplete reading or quick reading.

She is talking about the crises, choices, and challenges she faced during the governance under the Obama Administration. She also discusses some personal aspects of her life and career, including her feelings towards President Barack Obama, talking about her daughter Chelsea Clinton's wedding, her love for her mother etc.

She says that "All of us face hard choices in our lives. "Life is about making such choices. Our choices and how we handle them shape the people we become." This words inspired me well and as she said we all face ups and downs in our life. Especially in family life and in the work

life. The success is how positively we overcome those issues. Hillary believes that all her hard experiences drive her view of the future. After reading this book its opened my third eye. How successful people in their life. As woman she had taken the challenging position to heading a powerful country like America. She also mentioning that compromise is a necessary ingredient in Governance. Even in our work area or family we need some compromises with each other. I felt it is very important point.

During her governance period, she visited 112 countries, traveled nearly one million miles, and gained a truly global perspective on many of the major trends reshaping the landscape of the twenty-first century, from economic inequality to climate change to revolutions in energy, communications, and health. Drawing on conversations with numerous leaders and experts, Secretary Clinton offers her views on what it will take for the United States to compete and thrive in an interdependent world. She makes a passionate case for human rights and the full participation in society of women, youth, and LGBT people.

# **Acronyms**

ASHA - Accredited Social Health Activist

CHLP - Community Health Learning Programme

MPH- Master of Public Health

CHAI – Catholic Health Association of India

CHC – Community Health Center

NGO - Non Governmental Organization

**TB-** Tuberculosis

NRHM - National Rural Health Mission

VHSNC - Village Health, sanitation and Nutrition committee

BPL – Below Poverty Line

NRHC – National Human rights Commission

JSA- Jan Swasthya Abhiyan

PHC- Primary Health Center

**OPD-** Outpatient Department

AYUSH - Ayurveda Unani Siddha and Homeopathy

HSC- Health Sub Center

VHN- Village Health Nurse

HIS – Hospital Information System

FRLHT - Foundation for Revitalisation of Local Health Traditions

TDU - Tarns Disciplinary University

GRACE - Grass Root Action for Community Empowerment

DF- Degree of Freedom

NREGA – National Rural Employment Guarantee Act

KDHP – Kannan Devan Hills Plantations

MFC – Medico Friends Circle

THI – Tribal Health Initiative

PRA – Participatory Rural Appraisal

LGBT – Lesbian Gay Bisexual Transgender

# Through the Lens

Adding some of the photographs captured during my CHLP journey. "I may can look back on the moments but I may never recapture them."



Happiness of sharing from one plate



Happy journey to Raipur



Unforgettable moments of MFC



Beauty of the plantation





Yes! We are ready to pose (Tea plantation Munnar)



We sing in any language!!



We are the family....



Chai.. Chai... Lemon tea... Milk tea.. Sugar less tea??



Never miss a chance to dance