MASTER OF PUBLIC HEALTH

Johns Hopkins Bloomberg School of Public Health
in collaboration with
IIHMR University, Jaipur

PRACTICUM REPORT

By

Nisha Mohan

Cohort-5

2017-2019

Under the Guidance of

Dr. Anoop Khanna

Professor

IIHMR University

Dr Hemanth Deepak Shewade

Honorary Advisor (Community Health & Operational Research)

Karuna Trust, Bengaluru

TO WHOMSOEVER MAY CONCERN

This is to certify that ***Dr. Nisha Mohan,*** student of Master of Public Health Program offered by IIHMR University, Jaipur in cooperation with Johns Hopkins Bloomberg School of Public Health, Baltimore has undergone Practicum Training at **Karuna Trust** from ***05-11-2018*** to ***15-12-2018.***

The Candidate has successfully carried out the study designated to her/his during practicum training and her approach to the study has been sincere, scientific and analytical.

The Practicum Training is in fulfilment of the course requirements.
I wish her/him success in all his future endeavours.

Sd-

Dr. Anoop Khanna

Practicum Advisor

CERTIFICATE BY SCHOLAR

This is to certify that the Practicum Project titled submitted by me, **Dr. Nisha Mohan** with Enrollment No. 29 under the supervision of ***Dr. Anoop Khanna*** for award of **Master of Public Health** carried out during the period ***05-11-2018 – 15-12-2018*** embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

Dr. Nisha Mohan

MPH Cohort 2017-19

Certificate from the Organization

karuna trust
(Affiliated to Vivekananda Girijana Kalyana Kendra)
Bangalore Branch : # 686, 16th Main, 39th Cross, 4th 'T' Block, Jayanagar, Bangalore-560 041
Phone / Fax : 080 - 22447612 email : karunatrustblr@gmail.com www.karunatrust.com

INTERNSHIP COMPLETION CERTIFICATE

Dr Nisha Mohan who is pursuing her MPH (Master of Public Health) from IIHMR, Jaipur in affiliation with Johns Hopkins Bloomberg School of Public Health, USA, has completed her internship with us at Karuna Trust.

She has been with us for 6 weeks from 5th November, 2018 to 15th December, 2018. As part of her internship assignment, she has worked on deliverables specific to our health innovations projects. As part of her internship she worked on literature review and prepared a brief introduction for a research project on "Assessing the implementation of Comprehensive Public Health Management application: A mixed method study in Chamrajarajanagara district, Karnataka, India". She has also worked on the referencing software "Mendeley".She has also extended her support in preparing the organization's newsletter.

She has completed her internship satisfactorily under the supervision of our team member, Dr Hemant D Shewade.

We found her to be an intelligent and hardworking professional who managed to complete her assignment within the time period.

We wish her all the best in her future career.

KARUNA TRUST (R) BENGALURU

Dr. Shilpa,
Programme Manager, Karuna Trust T: +919480826352
E:karunatrustblr@gmail.com
W: www.karunatrust.com
Date :19th December 2018

About the organization

I, Dr. Nisha Mohan, did my practicum with a trust based organization called Karuna Trust, based in Bangalore.

Karuna Trust established in 1986 is affiliated to Vivekananda Girijana Kalyana Kendra (VGKK) located at Biligiri Rangana Hills (B R Hills) in Chamarajanagar district of Karnataka that works for tribal empowerment. The Trust was established to respond to the widespread prevalence of leprosy in Yelandur Taluk of Karnataka and has been singularly successful in addressing this problem. Drop in the prevalence of leprosy from 21.4 per 1000 population to 0.28 per 1000 spanning across 26 years is a testimony for the success of the intervention.

Apart from primary healthcare, education, sustainable livelihoods, and advocacy have been the prime focus areas of Karuna Trust. The interventions of Karuna Trust have been consistently through the Public Private Partnership (PPP) model which was initially piloted in collaboration with Government of Karnataka at the Gumballi PHC in Chamarajanagar district of Karnataka in 1996 when the PHC was entrusted to Karuna Trust by the government. Observing the manner in which Karuna Trust successful turned poorly equipped and low performing PHCs into model health centres, offering high quality and affordable primary healthcare, other state governments have approached Karuna Trust to start similar PPP initiatives in their respective States. Karuna Trust today reaches out to over 1.3 million people through direct management of 60 PHCs in 5 states of India, 2 Mobile Health Units, 1 Eye Hospital and 1 First Referral Unit with over 2,000 dedicated healthcare professionals serving the poor in areas where healthcare has hardly reached.

In addition to the respective State Government, the Trust has collaborated with Corporates to manage Health Centres as part of their Corporate Social Responsibility (CSR) initiative. With

a prime objective of 'Reaching the Unreached' to provide healthcare to the underserved and the poor in the remote areas, Karuna Trust continues to serve the community it has been serving with renewed vigor and dedication.

Learning Objectives

Throughout my practicum, I intended to address three core public health competencies which are the analytic competency, the policy development competency and the cultural competency. The learning objectives to accomplish the same are given below:

1. To write a paper in collaboration with the organization after thorough literature review to bring into light the shift of means of data collection into digitalized format, highlighting the need for a comprehensive application that includes all vertical programs.
2. To receive training on how to use the new NCD app so as to be able to train the ANMs at ground level to facilitate the introduction of this app, to increase focus on NCDs.
3. To observe the various diversities in working with a tribal population and note the different and unique ways in which this is achieved specific to this population, realizing the need for different communication strategies and a diverse work force.

Objective 1: To write a paper in collaboration with the organization, highlighting the need for a comprehensive application that includes all vertical programs.

One of the public health issues being tackled by the organization is the conversion of data from paper based format to a digital based format in all the PHCs it looks after, with further plans of scaling up to all health organizations. But although the digitalization of patient records and data collection is on the rise in various organizations due to the technological shift, among both private and government, new challenges are arising.

We decided to write a paper for publication to bring about the awareness of the various challenges surrounding the data collection methods and systems using the vast experience of the organization in managing a number of NGOs along with the government. In the course of our elaborate literature review as well, we discussed the various advantages and barriers of the current system as well as the challenges in introducing a Comprehensive Public Health Management system/application (CPHM).

In India, under National Health Mission, CPHC is delivered through primary health centres (PHC) catering to 30,000 population encompassing range of services including but not limited to; vaccination, screenings, prevention, control/management of non-communicable and communicable diseases; services that maintain and improve maternal, new-born, child/adolescent health; mental and sexual/reproductive health. The PHC is managed by a medical officer below which, sub-centres catering to 5,000 population, are managed by Auxiliary Nurse Midwife (ANM).

The ANM manages around 12-15 registers containing data related to primary health care at sub-centre level pertaining to summary of villages (family registers, eligible couple registers), Ante-natal care, vaccinations, referrals, contraception. The continuous flow and quality of this data is crucial in the maintenance of health-care and service delivery. This proves to be a surmountable task for the ANM at sub-centre and primary health centre (PHC). On many occasions, data related to one patient usually needs to be recorded into more than one register. Furthermore, this data further needs to be fed into the Health Management Information System (HMIS) and indicators need to be generated.

Through our experience of implementing similar applications in the PHCs, one of the major barriers/disadvantages that we repeatedly came across was an increased work load of the ground-level staff in various aspects. We see that data at PHC level is being entered in both registers and tablet devices. We identified a couple of reasons for this. Firstly, there is no clear transition period from paper based data collection to sole use of the electronic devices after the introduction of the latter. Therefore, wherever the electronic devices have been introduced, data entry of both types still continue to happen. Secondly, the government system still expects their data to be received in paper based format. This means that paper based data entry has to continue despite the innovations surrounding digital data entry. Considering patient load and manpower, this becomes a huge task for the ANMs and the other ground level staff as it consumes a lot of time and can as well act as a distraction. This then further affects delivery of patient care in terms of patients' waiting time before being seen by a doctor or the precision of care and quality of services; not to mention the effect of the data quality being entered.

Another barrier that we came across was the management of the various existing vertical programs in terms of the digital data entry and management. Each vertical program pertaining to a new disease, introduces a new application as well as a new technological device, mostly

a tablet. For example, with the epidemiological shift of diseases now toward non-communicable diseases (NCD), during my duration of the internship, Karuna Trust in collaboration with DELL EMC corporation introduced an android based application to record and follow-up non-communicable diseases such as Diabetes Mellitus, hypertension, cervical cancer and breast cancer to name a few. For this application, new tablet devices have been given to the ANMs for its sole use. This now becomes cumbersome for the field workers who already have a couple of other devices for maternal and child health care or even for tuberculosis in areas where a TB program is running.

Among some of the advantages of having a CPHM, our literature review further supported us in stating that comprehensive management systems are more cost-effective, promote quality of care, provide easier access to patient information within a team and can be useful to highlight areas of concern.

Based on our experiences and literature review, we went ahead to suggest some points for implementation of a CPHM in future, taking into account the barriers. We identified training of the staff on the CPHM usage to be an adoption bottleneck, usually due to lack of prior technological experience. We suggested to conduct multiple training sessions to ensure thorough understanding, confidence and more time to assist those lagging behind or to make up for absentees and constant turnover.

We also suggested that the introduction of the CPHM should be via pilot projects involving all levels of the district, considering it as a whole rather than individual PHCs to allow for a more holistic usage and uptake so as the end users find the full benefit in using these applications. We further suggested a strong monitoring and evaluation system to ensure a smooth uptake process and address any user interface concerns and technical glitches.

Objective 2: To receive training on how to use the new NCD app so as to be able to train the ANMs at ground level to facilitate the introduction of this app, to increase focus on NCDs.

Karuna Trust in collaboration with DELL EMC corporation introduced an android based application to record and follow-up non-communicable diseases such as Diabetes Mellitus, hypertension, cervical cancer and breast cancer to name a few. This application was to be introduced to the ANMs on ground level to begin screening for and following up on NCDs as well as for better data collection pertaining to the same.

A short 1 – day training was provided by DELL EMC corporation team regarding the NCD application and its functioning including transfer of data via synchronization of the application.

We were then to forward the learnings to the team at 5 selected PHCs, specifically to the ANMs and train them on the use of the application for patients of NCDs.

Objective 3: To observe the various diversities in working with a tribal population and note the different and unique ways in which this is achieved specific to this population, realizing the need for different communication strategies and a diverse work force.

During my time of internship, I had the opportunity to visit B R Hills which is a hill station populated by majorly the tribal population of the vicinity. The set up at BR Hills comprises of a residential school as well as a small 10 bedded hospital with mobile clinic facilities.

The hospital also consists of a translator to help with communicating with the patients from the area who may speak tribal languages or different dialects. This was an important necessity in the work force providing medical are as a means to adapt to the diversity of the population specific to that area.

The mobile clinics consisted of a van with basic medicines such as mild pain killers and various drugs to treat anemia, general body aches, vitamin deficiencies etc. The team consisted of a driver, a doctor, a translator and one more person who could help or assist where required. A trip would be planned on a daily basis into the dense forests of the area lasting for 3-4 hrs. Specific stop points were pre-planned and patients would arrive at these places when the mobile clinic was expected.

Keeping in mind the remoteness of the area and the limitations of our resources, various methods were planned to be able to help the patients achieve any further care they required. The nearest PHC was approximately a 1-2hr bus ride until the base of the hill. Patients with illnesses that were beyond the capacity of the mobile clinic would be referred here.

This was an important learning experience with regard to the context and culture of where health care is provided. In such an area that is so remote and distant from any basic health care, I was urged to keep in mind the various challenges we face in providing health care to such a population. Language being one of the major challenges, we had a diverse work force which included a translator to help with translation of the tribal language when communicating with patients. We also had a community health worker, preferably from that same area to help with health education regarding the various illnesses of the area. Having a person from the same community who is trained to provide health education to his/her own community was a strong and effective step in terms of communication and acceptance. It was also essential to keep in mind that apart from the challenges of language and communication, the lifestyles of such tribal populations are very simple yet very different from what we usually come across. Behaviour change was a very essential aspect to think about and incorporate as, when and where possible to be able to successfully deliver the best quality of basic health care to our capacity.

Based on my time in the organization, I also helped prepare the half yearly progress report for the said organization which is a report on all the existing activities of the organization, any new ventures, update on various OPD and IPD patient numbers at the various PHC sites and any further plans of the organization.

Conclusion

This brings me to the end of the academic requirements of my Master in Public Health program. It has been an inspirational journey for me in terms of putting into perspective all my prior practical experience. It has helped me mature and grow as a person and a

professional and I am grateful for the multiple doors it has opened for me to be able to allow me to make a difference for those who are really in need.