# ASHA CHANGE AGENT OF THE SOCIETY

ROLES, RESPONSIBILITIES AND FACTORS THAT INFLUENCE PERFORMANCE OF ASHA IN MATERNAL AND CHILD HEALTH CARE,INDIA

(2000-2018)

# INTRODUCTION

- In India frontline workers are women who come from the communities that they are serving and act as an essential link to health facilities by bringing health services directly to communities, where access is often limited.
- Three types of frontline workers, AWW, ASHA, ANM, fall within the purview of two ministries, the ministry of health and family welfare (MoHFW) and the ministry of women and child development (MoWCD).
- Accredited Social Health Activist (ASHA) program was established by the National Rural Health Mission (NRHM) in 2010 with an aim to improve health outcomes particularly among women and children, to reduce geographic and socio economic disparities.

- The key selection criteria such as education level, representatives of the local community, adequate knowledge and preparedness to perform effectively are found to be extremely crucial for sustainability and retention.

According to WHO (1976), maternal and child health care services can be defined as promoting, preventing, therapeutic or rehabilitation facility or care for the mother and child.

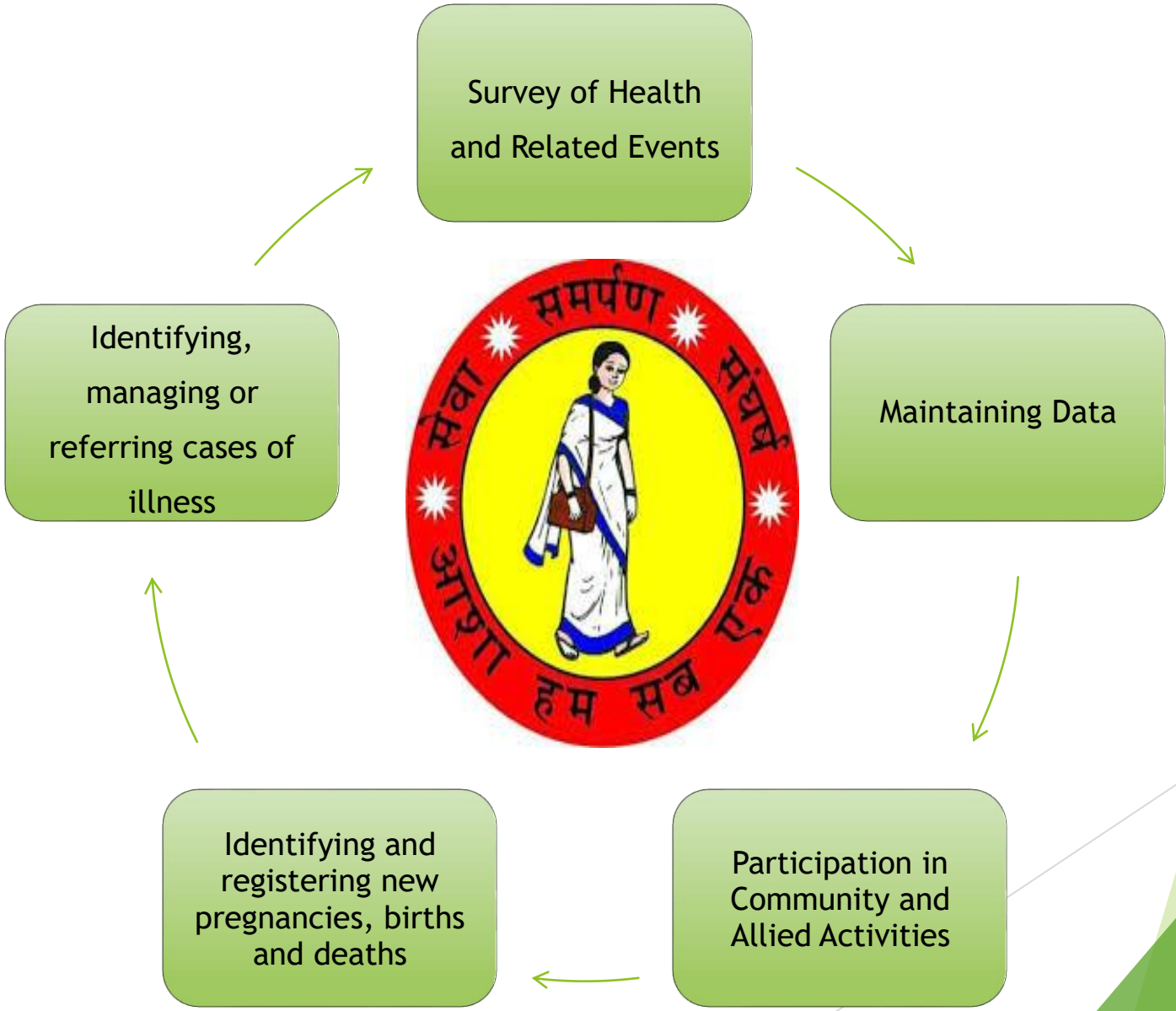
MCH strategy is to provide mother and child health services an integrated package of “essential healthcare” also known as primary health care.

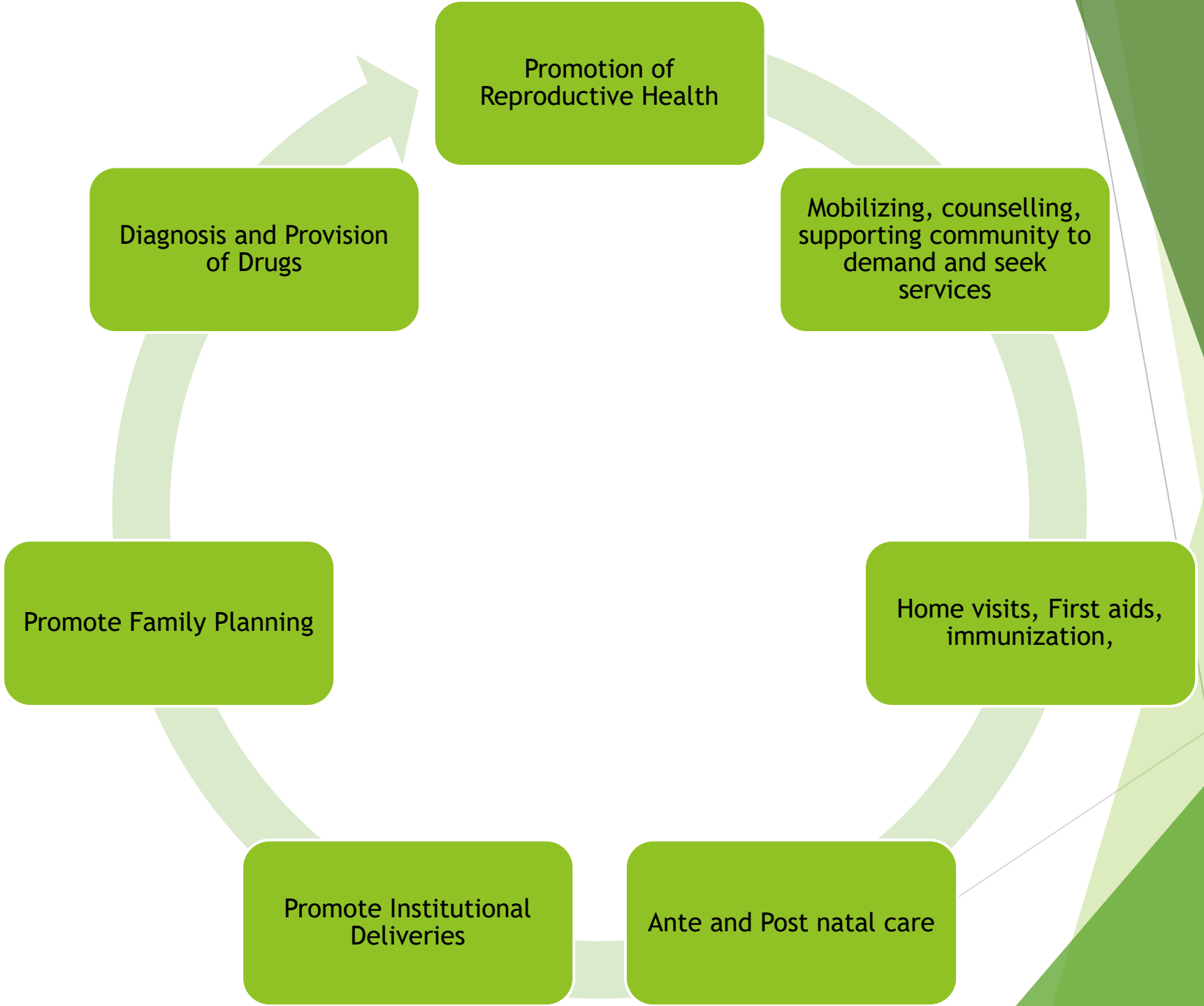
Reduction of maternal, prenatal, intranatal, postnatal, under five mortality and morbidity, promotion of reproductive health, prevention of malnutrition and communicable diseases, early diagnosis and treatment of health problems, health education and family planning are prime focus of MCH.

- MCH services are rendered through the infrastructure of primary health centers and sub centers.

  ASHAs are recruited and trained to work in their own communities as health activists, educators and providers of basic essential services.

# ROLES AND RESPONSIBILITIES OF ASHA IN MATERNAL AND CHILD HEALTHCARE




Promotion of Reproductive Health
Mobilizing, counselling, supporting community to demand and seek services
Home visits, First aids, immunization,
Ante and Post natal care
Promote Institutional Deliveries
Promote Family Planning
Diagnosis and Provision of Drugs

- Mothers and children not only constitute a large group but they are also among the vulnerable groups. The vast majority of maternal and child deaths occur despite existing known and affordable treatments. In India, under five mortality rate (Deaths per 1000 live births) - 36.6 (male 36, female 37) 2018, infant mortality rate (Deaths per 1000 live births) - 30 (male: 29.88611442, female: 29.95410796) 2018, neonatal mortality rate (Deaths per 1000 live births) – 23, (UNICEF 2018 data), maternal mortality rate: 145/100,000 live births (2017).
- The Crude Birth Rate during 2018 stands at 20.0. There is a decline of 0.2 points over 2017. Maximum has been reported in Bihar (26.2) and minimum in Kerala (13.9). Maximum infant mortality rate has been observed high in Madhya Pradesh (48) and minimum in Kerala (7). One point decline in infant mortality rate has been seen from 2017 to 2018.

**Trend of Birth rate, Death rate, Infant Mortality rate, Total Fertility rate, Sex ratio at Birth and Sex ratio of children (0-4 age group), India**

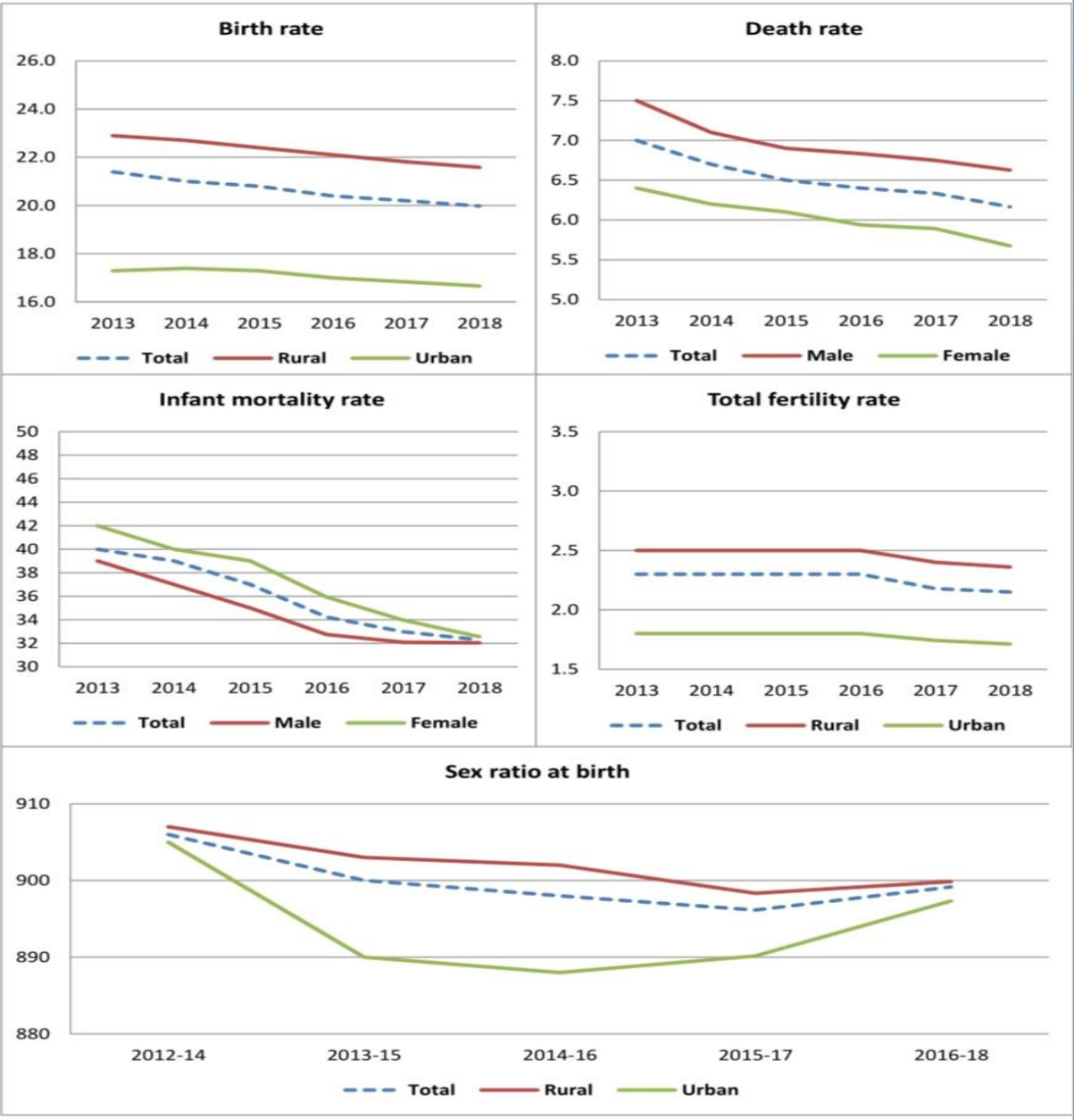



**Table 1: Maternal Mortality Ratio (MMR), Maternal Mortality Rate and Life Time Risk; India, EAG & Assam, South and Other states, 2016-18**

| India & Major States | MMR | 95% CI | Maternal Mortality Rate | Lifetime risk |
|---|---|---|---|---|
| | | | | |
| **INDIA** | **113** | **(103-123)** | **7.3** | **0.3%** |
| | | | | |
| Assam | 215 | (133-297) | 14.0 | 0.5% |
| Bihar | 149 | (104-194) | 15.1 | 0.5% |
| Jharkhand | 71 | (20-123) | 5.6 | 0.2% |
| Madhya Pradesh | 173 | (126-221) | 15.9 | 0.6% |
| Chhattisgarh | 159 | (69-249) | 12.1 | 0.4% |
| Odisha | 150 | (96-205) | 9.7 | 0.3% |
| Rajasthan | 164 | (112-215) | 14.5 | 0.5% |
| Uttar Pradesh | 197 | (152-241) | 17.8 | 0.6% |
| Uttarakhand | 99 | (49-150) | 6.4 | 0.2% |
| **EAG AND ASSAM SUBTOTAL** | **161** | **(143-180)** | **13.2** | **0.5%** |
| | | | | |
| Andhra Pradesh | 65 | (26-104) | 3.6 | 0.1% |
| Telangana | 63 | (16-110) | 3.6 | 0.1% |
| Karnataka | 92 | (53-131) | 4.9 | 0.2% |
| Kerala | 43 | (10-77) | 2.1 | 0.1% |
| Tamil Nadu | 60 | (29-92) | 3.2 | 0.1% |
| **SOUTH SUBTOTAL** | **67** | **(50-84)** | **3.6** | **0.1%** |
| | | | | |
| Gujarat | 75 | (41-109) | 5.1 | 0.2% |
| Haryana | 91 | (43-139) | 7.0 | 0.2% |
| Maharashtra | 46 | (19-73) | 2.6 | 0.1% |
| Punjab | 129 | (56-202) | 7.0 | 0.2% |
| West Bengal | 98 | (59-137) | 5.0 | 0.2% |
| Other states | 85 | (62-108) | 4.5 | 0.2% |
| **OTHER SUBTOTAL** | **83** | **(68-97)** | **4.7** | **0.2%** |

- The risk of maternal and infant mortality and pregnancy related complications can be reduced by increasing access to quality preconception, prenatal and interconception. Their wellbeing determines the health of the next generation and can help predict future public health challenges for families, communities and the health care system. Considering above mentioned problems we attempt to do this study to assess the factors that influence ASHAs roles and responsibilities in maternal and child health care so as to improve the uptake of healthcare services and other benefits across beneficiaries.

- **Objective:**

- To study the awareness and perception of ASHAs regarding their roles and responsibilities in maternal and child health care delivery system.
- To determine competency and motivational level of ASHA in conducting their role efficiently.
- To study the facilitating and inhibiting factors affecting their performance in delivering maternal and child health care services.
- To expand data available for quality improvement and demonstration of value.

- **Methodology:**

- The present study has been conducted to access ASHAs roles, responsibilities and factors that influence their performance in maternal and child healthcare India. Journals, research papers have been collected for analysis. The study covers a period of eighteen years from 2000 to 2018.
- The collected data has been analyzed by using descriptive statistics to understand realization and proficiency of ASHA workers. Let us look into certain data extracted through journals and research papers and analyze the trends and patterns.

# Literature Review

- Bhargavi C N et al.(2014), study was conducted to assess awareness of ASHAs on MCH care in Delhi and to relate the association of knowledge with specific demographic variables. Eight community settings of Delhi South, South East, South West, East, North East, West, North West and Central zones were selected for survey. Randomly five hundred ASHAs were selected and were interviewed by using a structured questionnaire. SPSS was used to analyze the data. Conclusions were drawn on the basis of analysis and it was found that majority of them were aware about positive health behavior services on family planning, sex education, menopause, reproductive tract diseases. But nearly half of them were not comprehended regarding intra natal, post natal, new born care, immunization, nutritional requirement, nutritional deficiencies, unsafe abortions and MTP. ASHAs were more years of experience were found to be significant in their role when compared with those having lesser experience. Age factor didn't play much role in their performance.

- Mondal et al.(2017), unmatched case control study was conducted to identify factors associated with low performance of ASHA regarding maternal care in Howrah District, West Bengal. 993 ASHAs as low cases and 994 as control cases were categorized based on average incentive received by each ASHA, among them 261 cases and 261 control were randomly selected. They were interviewed to collect information regarding factors that influence their performance such as workload, socio economic details, training, support and supervision. Crude and adjusted odd ratios with 95% confidence interval using simple and multi logistic regression was used for analysis. It was found that low performance of ASHA was associated with population burden, lack of IFA in stock, inadequate supervision by ANM.

- Guha et al.(2018), study was conducted to assess awareness and perceptions of ASHA regarding their role and responsibilities and factors influencing their performance in health care system. Primary health centers in Wardha district, Maharashtra, had undergone a qualitative study in seven selected villages. ASHAs were selected through non probability sampling and in depth interview were conducted. It was found that ASHAs were aware about their roles and responsibilities but were more inclined towards higher incentive performance. Their clarity as with respect to their roles as facilitator, social activist and service provider was found somewhat compromised. Ignorance was observed among them towards newly launched national programs. Supervision of their performance, appraisal by higher authority and support from community proved to be positive influencing factors in their performance. Workload, poor orientation to program, lack of qualitative training and delayed monetary incentives were some of the challenges

- Kohli et al.(2015), in the North East district of Delhi, descriptive cross sectional study was conducted among 55 ASHAs. Pre tested and semi structured questionnaire was used to collect data on socio economic demographic profile of ASHA, knowledge and practices about their role and responsibilities and difficulties faced in communities. SPSS software was used to analyze data. Quantitative data was expressed in mean + SD whereas qualitative data was expressed in percentages. Mean age of ASHA was 31.84 + 7.2 years. Most of them were married (96.4%) and were serving population of 1000 – 2000(87.3%). It was found that majority of them were aware of their work of maternal and child health services. But however lesser number were aware about their role in registration of deaths, births and measures to treat minor ailments. They even reported problem of lack in coordination between them and ANM.

- Parost et al.(2012), in four blocks of Lucknow a cross sectional study was undertaken with an objective to study the factors influencing overall performance of ASHAs in MCH care services. Sample size of four hundred ASHAs was selected through multistage random sampling technique. For statistical analysis, simple proportion and chi square test were used. Their performance was judged on the basis of work performed to the work expected from them in MCH care. Their performance was divided into four categories namely, very good (>76%), good (51-75%), average (26-50%), poor (0-25%). As per their assessment, majority were found into good category, followed by 30.7%,3.8% and 2.8% into average, poor and very good category of performance respectively. Their performance was found to be significantly influenced by factors such as type of family, socioeconomic class, getting cash incentive total and timely, time taken to reach at place of delivery, family and community support, population served, networking ability.

- Srivastav et al.(2009) In Gorakhpur the study surface of interface of ASHA with the community and the service providers in Eastern Uttar Pradesh was conducted. Different parameters were evaluated to analyze factors that affect performance of ASHA workers. The study also focuses on coordination of ASHA with different stakeholders. Training and selection procedure of ASHA, knowledge and communication, skills, motivational factors were the parameters that were assessed. It was found that ASHA was not able to function adequately due to lack of periodic training, lack of motivation, lack of coordination and understanding between ASHAs, ANM and AWW. The study concluded by recommending various suggestions to improve ASHAs performance in health care delivery system.

# FINDINGS

- ASHAs with more years of experience were found to be significant in their role when compared with those having lesser experience. Their ability with respect to their role as facilitator, social activist and service provider was found to be somewhat compromised. Though they were aware about positive health behavior services on family planning, sex education, menopause, reproductive tract disease, but were not comprehended regarding intra natal, post natal, new borne care, immunization, nutritional requirements and deficiencies. Ignorance was observed towards newly launched national programs.
- Their performance was found to be positively influenced by factors such as timely motivation, supervision, and evaluation.

- ASHAs were not able to function adequately due to lack of periodic training, lack of motivation, lack of coordination and understanding between ASHA, ANM and AWW.
- Population burden, inadequate drug supply, cash incentive based work, time taken to reach work place hindered their work performance.

# LIMITATION

- Challenges and constraints affect their ability to function effectively and efficiently.
- Their literacy level differs widely across states, ASHAs come from poorer background and face difficulty in reading and writing. Limited opportunities for continuing education, less of efficacy in training, lack of strong supervision and evaluation, not only affects their ability to discharge daily activities, but also makes them less confident to deliver new ideas in group settings. Unfamiliar ideas and topics like condom use, hinder them from speaking socially.
- Their work is not structurally defined, they perform list of work and still have limited avenues to earn income, they aren't paid timely, which draws their attention towards high incentive based services as monetary incentives fail to attract their interest.

- Community dynamics creates cultural constraints as ASHAs need to engage themselves with all community stake holders. Families belonging to upper income group may object interacting closely with front line workers or front line workers may not interact openly with those belonging to very low socio economic group. Thus caste, culture, misbeliefs, socio economic group and gender influences ASHAs work.
- Lack of family support for working at odd hours, issues they face due to strenuous mobilization, no proper transportation facility, large work load, excessive paper work mostly maintaining various registers  all these factors affect their ability in delivering health services to beneficiaries.

# RECOMMENDATION

- Emphasis should be given for better selection criteria which goes beyond their education and age. It is important to ensure some basic skills during recruitment such as communication skills, inter personal skills, work ethics, propensity to learning, team work, adaptability, work management.
- ASHAs perform a list of work, their work should be structurally defined. They should be motivated for their work and guided for further improvement.
- Poor monetary avenues hinder them from performing effectively and thus they are more inclined towards high incentive work. Timely and adequate salary should be paid through e banking system for smooth functioning of work.
- Paper workload can be reduced by incorporating digital system for entering data.

- Socio economic factor, gender, culture, caste, misbeliefs serve as challenges in delivering health care services to the beneficiaries. Community recognition, support and respect of ASHA is very essential for them to carry out work effectively and efficiently.

- At times front line workers need to work at odd hours and hence they should informed prior to avoid any disapproval from family. Family members should be aware of their work so that they can support completely. ASHAs need to be mobile as they provide health services directly to the communities where access is often limited. Improper transportation facilities delays their work and at times they refuse to work at such locations.

- Drug and equipment supply should be adequate for efficient and smooth work functioning. They should be educated and made aware of drugs and equipment they are handling. At times even if they are equipped with right medical care, they aren’t aware about its usage.

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# CONCLUSION

- ASHA is an important part of NRHM in meeting the “Millennium Development Goal”. She serves as a health worker by providing outreach services to areas where access is often limited. Her role is multifaceted involving knowledge and practice in the fast changing health scenario and society and thus it is crucial for them to be skilled, educated, dedicated and motivated towards their work. There is a need for continuous and consistent training, recognition and reinforcement for better performance, motivation and also for retention. Less knowledge of work component, less cooperation from health staff, delay refilling of drug kit, incentive oriented practices, delayed and inadequate payment of incentives, lack of awareness about intra natal, post natal, new borne care, immunization, nutritional requirements and deficiencies, affected their work performance. Due to number of issues their practices are affected which need to be addressed through skill based training in terms of problem solving and good communication. Monitoring should be made an integral part of ASHA working in field to ensure that knowledge is converted into practice as well.

# REFERENCE


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# EPIDEMIOLOGY

THE BASIC SCIENCE OF PUBLIC HEALH

# COURSE DESCRIPTION

- This course explores public health issues and helps study the distribution and determinants of diseases, health condition or events among populations and application of study to control health problems. It's a six week course which helped me understand the need of epidemiology in today's dynamic society. Its role and importance in various fields. In public health, epidemiological studies are used extensively for disease surveillance, outbreak investigation and observational studies to identify risk factors of zoonotic diseases in both humans and animals and is being widely used by veterinarians and public health professionals. Risk factors detected through epidemiological studies help in disease control measure implementation. Public health policies are planned, implemented, monitored and re-evaluated on the basis of health care data provided through epidemiological studies. Thus it plays a very crucial role in health care management system. Its ever growing need in health care system drew my attention towards this course. Through this course I was able to understand and explore various aspects of epidemiology.

# COURSE OBJECTIVES

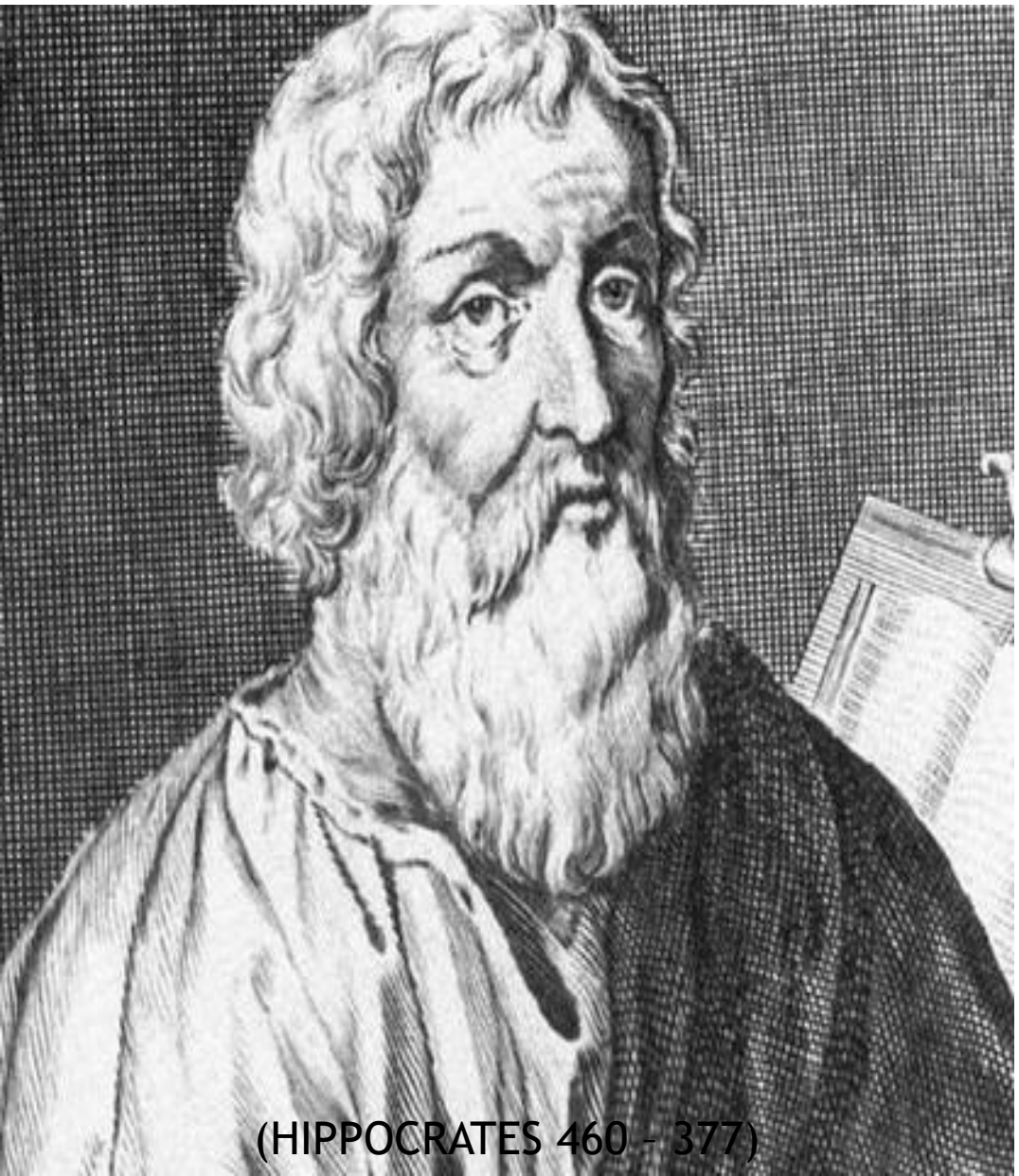
- The objective of this course is to make understand the importance of epidemiology in public health. As it plays a very crucial role in health care system. Through this course they have in depth explained its association with health care system.
- To analyze pattern and other information relating to the development and spread of disease or other health conditions.
- To gain brief knowledge about epidemiological studies, parameters to be taken into consideration while conducting epidemiological studies so that errors can be avoided
- To gain a sense of knowledge of  using resources effectively and efficiently in bringing out maximum output.

# INTRODUCTION

- Epidemiology is the study of distribution and determinants of health, related state or events in specified populations and the application of this study to control health problems (John M Last in 1988).
- According to WHO, it is the study of occurrence and distribution of health related diseases or events in specified populations, including the study of determinants and the application of this knowledge to control health problems.
- The word epidemiology is derived from Greek word epidemic, epi means among, demos means study of population or people, logos means scientific study.


- According to the International Epidemiological Association (IEA), epidemiology aims to describe the distribution and magnitude of health and disease problems in human populations, identifies etiological factors in the pathogenesis of disease and provides essential health data for planning, implementation and evaluation of services for prevention, control and treatment of disease and sets priorities among those services.

# HISTORY



(HIPPOCRATES 460 – 377)

The history of epidemiology has its origin back to 400BC. Hippocrates, John Graunt (1662), William Farr, John Snow believed that environmental factors influenced the occurrence of disease and did not support the supernatural viewpoint of diseases. Relationship between the occurrence of disease and environmental influences was first examined by Hippocrates. He coined the terms endemic and epidemic. Mortality data was analyzed and published by John Graunt in 1662. He was first to quantify pattern of death, birth and disease occurrence.

JOHN GRAUNT(1620-1674)

William Farr initiated systemic collection and analization of mortality statistics. He is considered father of vital statistics and disease classification. John Snow conducted classical study in 1854 when an epidemic of cholera developed in the golden square of London. He conducted study to discover the cause of disease and prevent its recurrence. Farr was adhered to miasmatic theory of disease, according to this theory disease is transmitted by a miasma or cloud and thus strongly opposed classical study of John Snow.

WILLIAM FARR(1807-1883)

Snow believed and proved that outbreak of cholera was through contaminated water and this was the major achievement in the field of epidemiology. Others pioneers include Danish physician P.A Schleisner 1849, his work was related with the prevention of epidemic of tetanus neonatorum in Iceland. Hungarian in 1847 brought down infant mortality at Vienna hospital by instituting disinfection procedure. His findings were published in 1850, but his work was not widely accepted by his colleagues. British surgeon Joseph Lister discovered antiseptics in 1865 in light of work of Louis Pasteur. In the early 20$^{th}$ century, mathematical methods were introduced in epidemiology by Ronald Ross, Anderson Gray Mckendrick and others.

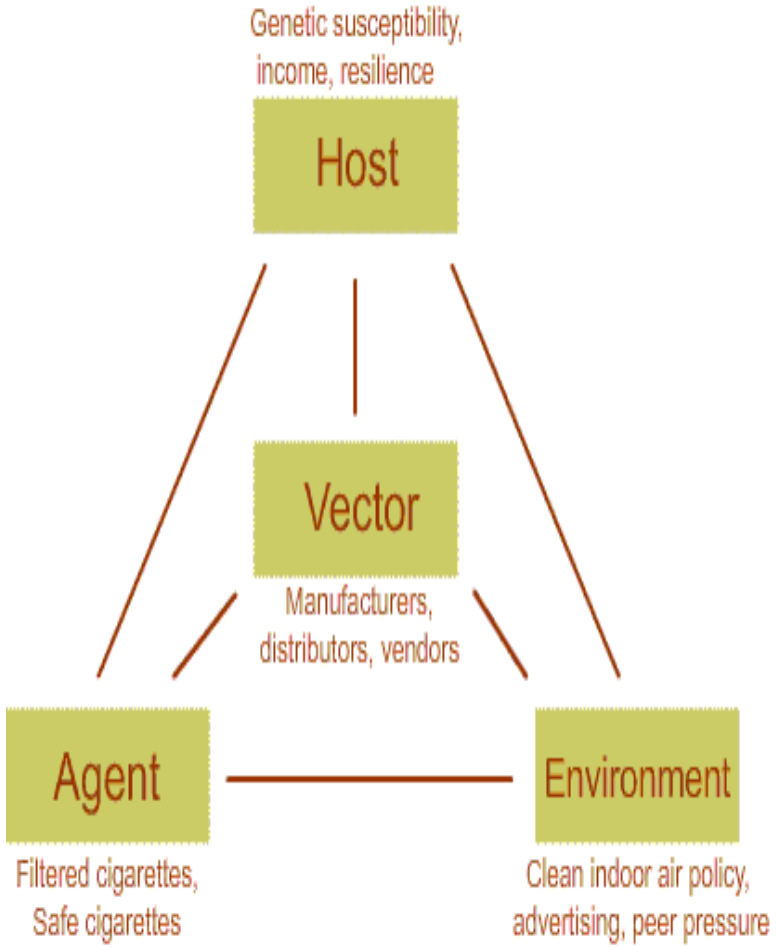
# EVOLUTION

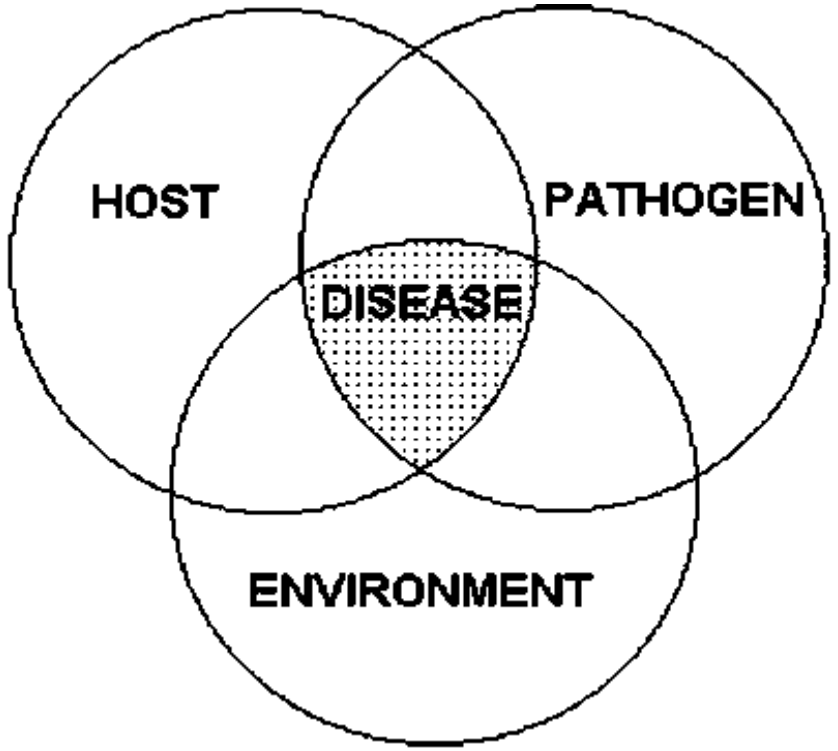
| | |
|---|---|
| **Year** | Transformation |
| **1873** | Epidemiologist were driven towards infectious diseases and epidemics. |
| **1951** | Focus was not just on infectious diseases but also towards specific conditions associated with them |
| **1962** | Laws governing distribution of disease at community level were taken into consideration |
| **1988** | Control, prevent spread and recurrence of diseases was their prime focus in year 1988. |

# EPIDEMIOLOGIC TRANSITION

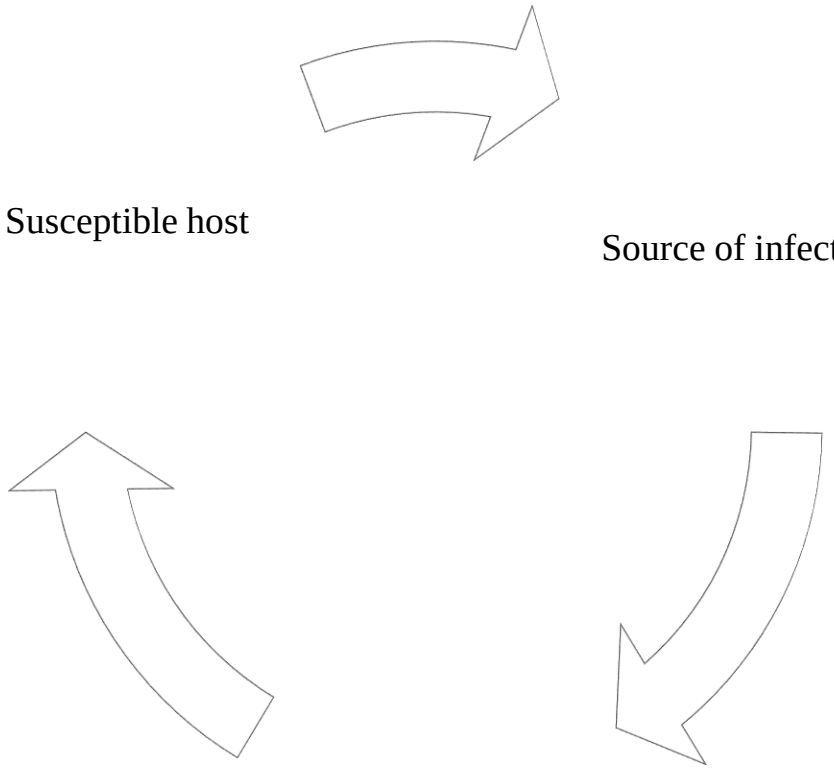
| | |
|---|---|
| **Transition** | RESULTING CHANGE |
| **Hunter-gather to cities** | From few epidemics to major epidemics |
| **Immunologic resistance** | From major epidemics to endemic diseases |
| **Public health and sanitation** | From infectious to non-infectious (chronic diseases) |
| **Increased globalization** | Resurgence of infectious diseases and high prevalence of chronic diseases |

# EPIDEMIOLOGICAL TRIAD



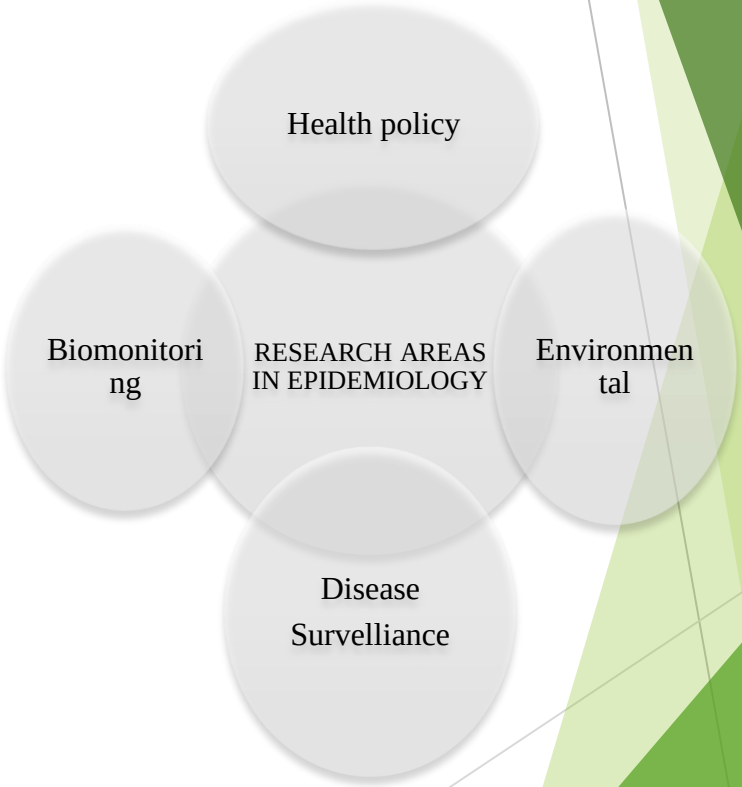
# DYNAMICS OF DISEASE TRANSMISSION




# EPIDEMIOLOGY – PUBLIC HEALTH

- **Epidemiology - Public health:** Epidemiological methods for disease surveillance, outbreak investigation and observational studies to identify risk factors of zoonotic diseases in both humans and animals is been widely used by veterinarians and public health professionals.

- Risk factors detected through epidemiological studies help in disease control measure implementation. The use of hazard analysis critical control point (HACCP) system depends greatly on the information produced by epidemiological studies.
- Epidemiology plays an essential role in community diagnosis of presence, nature and distribution of health and disease among population and the dimensions of these in incidence, prevalence and mortality.
- It helps understand the disease process and thus helps in planning, implementation and evaluation, monitoring of disease and control measures.



# METHODOLOGY

- The University of North Carolina at Chapel Hill, nation first public university is known around the world for innovative teaching and research. Dr Karin clinical associate professor and Dr. Lorraine Alexander associate professor and distance learning director delivered knowledge through video lectures, reading material was provided, article link were shared for further access. Intermittent quiz were conducted for timely evaluation. It's a six week course which covered concepts of epidemiology and its studies.

# KEY LEARNINGS

- Epidemiology study is the study of close association between disease, host, vector, environmental factors and agent
- Use of epidemiology in maternal and child health, health policy planning and implementation, disease surveillance
- Epidemiological transition from infectious disease to resurgence of infectious disease and high prevalence rate of chronic diseases due to sedentary lifestyle

- Sample size selection plays a very crucial role in policy making, Implementation and evaluation. Human errors take place while considering sample size. Emphasis should be given more on random selection
- The magnitude of health and disease problem in human population, etiology factors associated with pathogenesis of diseases and helps in planning, implementation and evaluation of services for prevention, control and treatment of disease by providing essential health data
- The epidemiological data is collected but the data is not used effectively in bringing efficient changes. Lot of data remains as it is and is not analyzed for further planning and evaluation. Software's should be further developed for faster analysis
- Lot of human resource, time and money is utilized in conducting epidemiological studies. Emphasis should be given on minimal input and maximum output and digital system should be used for data entry to save resource and minimize human error