



TRAINING REPORT

SAMARTH Project

[Improving the health and well-being
of urban poor women and children]

January 2023





Training report on strengthening the capacity of health workers to promote and support breastfeeding across different segments of the community and Home-Based Newborn Care

Introduction:

Breastfeeding is best feeding for neonates and infants. Early initiation of breastfeeding within one hour of birth along with skin-to-skin contact immediately at birth, and exclusive breastfeeding for the first six months of age is crucial for optimal health, intact survival, nutrition, growth and neuro-development of the children. Breastfeeding should be continued for two years of age of the child or beyond along with adequate and appropriate complementary feeding after six months of age.

In India, breastfeeding is inadequate as only 55% of babies are exclusively breastfed between 0 – 6 months of age and only 41% are able to begin breastfeeding within one hour of birth. Cost of inadequate breastfeeding is too high to be ignored. Inadequate breastfeeding results in preventable childhood deaths due to diarrhea and pneumonia. The impact on the health of mothers is more due to breast cancer, ovarian cancer and Type-2 diabetes. (Breastfeeding Promotion Network of India, July 31, 2019)

The World Health Assembly has set a target to increase global exclusive breastfeeding rate from 38% in 2012 to 50% in 2025 globally. To contribute to this goal, India has to ensure at least 65% exclusive breastfeeding by 2025.

According to the World Breastfeeding Trends Initiative, Baby-Friendly Hospital Initiative with “Ten steps to successful breastfeeding” must be followed to support the mothers during antenatal and postnatal period for promotion of breastfeeding practices, both in health facility and at community level including during disasters and emergencies.

The theme of World Breastfeeding Week, 2022 is “Step up for Breastfeeding: Educate and Support”. It focuses on strengthening the capacity of actors that have to protect, promote and support breastfeeding across different levels of society. These actors should comprise the warm chain of support for breastfeeding. These actors must include both facility level and community level health care workers along with community participation from all groups of society/ the community.

Promotion of exclusive breastfeeding practices along with other aspects of “Home Based Newborn Care” is a significant approach for the improvement of neonatal health, and thus for the reduction of NMR (Neonatal Mortality Rate) and IMR (Infant Mortality Rate). The target of “India Newborn Action Plan (INAP) Goal” is planned to reduce NMR to single digit (less than 10 per 1000 live birth)

by 2030. To fulfill this target, improvement of neonatal health should be given priority in all segments of the community by the promotion of facility-based newborn care as well as home-based newborn care.

Capacity building of front-line community health workers (ASHA/HHW, AWW, ANM, SHG members) for the improvement of breastfeeding and home-based care of all infants is essential and must be emphasized in different segments of the community by regular on-site teaching learning sessions for health workers.

Objectives of the Training Sessions:

On completion of the two-day training sessions on selected topics, the participants would be able to or have the capacity to: –

- Improve their knowledge and understanding to promote and support breastfeeding and home-based neonatal care in the selected urban community.
- Develop a positive attitude of the mothers towards recommended guidelines on breastfeeding practices and home-based newborn care for the promotion of neonatal/ infant health in their working fields.
- Practice health teaching and support the

mothers and family members to follow recommended practices on breastfeeding and home-based neonatal care for optimal health of the infants in selected urban areas.

Methodology:

Participants Profile

The HHW/ASHA, ANM, and SHG members from Urban Primary Health Centers of Ward 32 under Kolkata Municipal Corporation Health and AWWs and Supervisors of ICDS in Ward 32 were the participants for this training session. The detailed participant list was finalized through a discussion with the Medical Officer of Ward 32 and CDPO of Battala & Beliaghata Project under ICDS

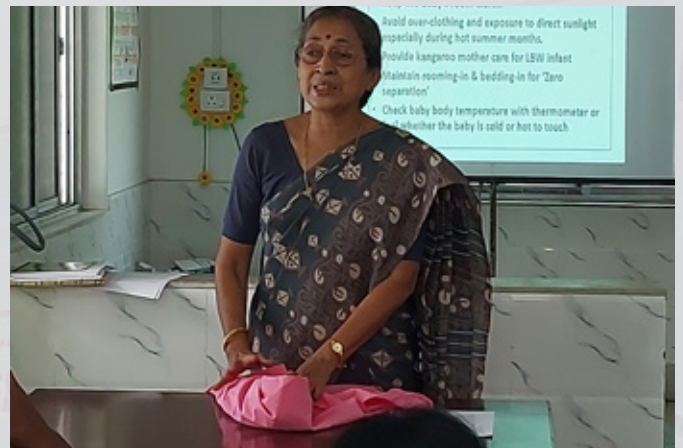
Facilitator's Profile

Consultant herself was the facilitator for both the training sessions. The facilitator has a vast experience in neonatal and child health nursing for more than 40 years. She is presently working as Master Trainer for Facility Based Newborn Care (FBNC), Neonatal Resuscitation Program (NRP), Kangaroo Mother Care (KMC), Preterm Care E-Module Package, and Infection Control Program for promotion of child health.

Training Design

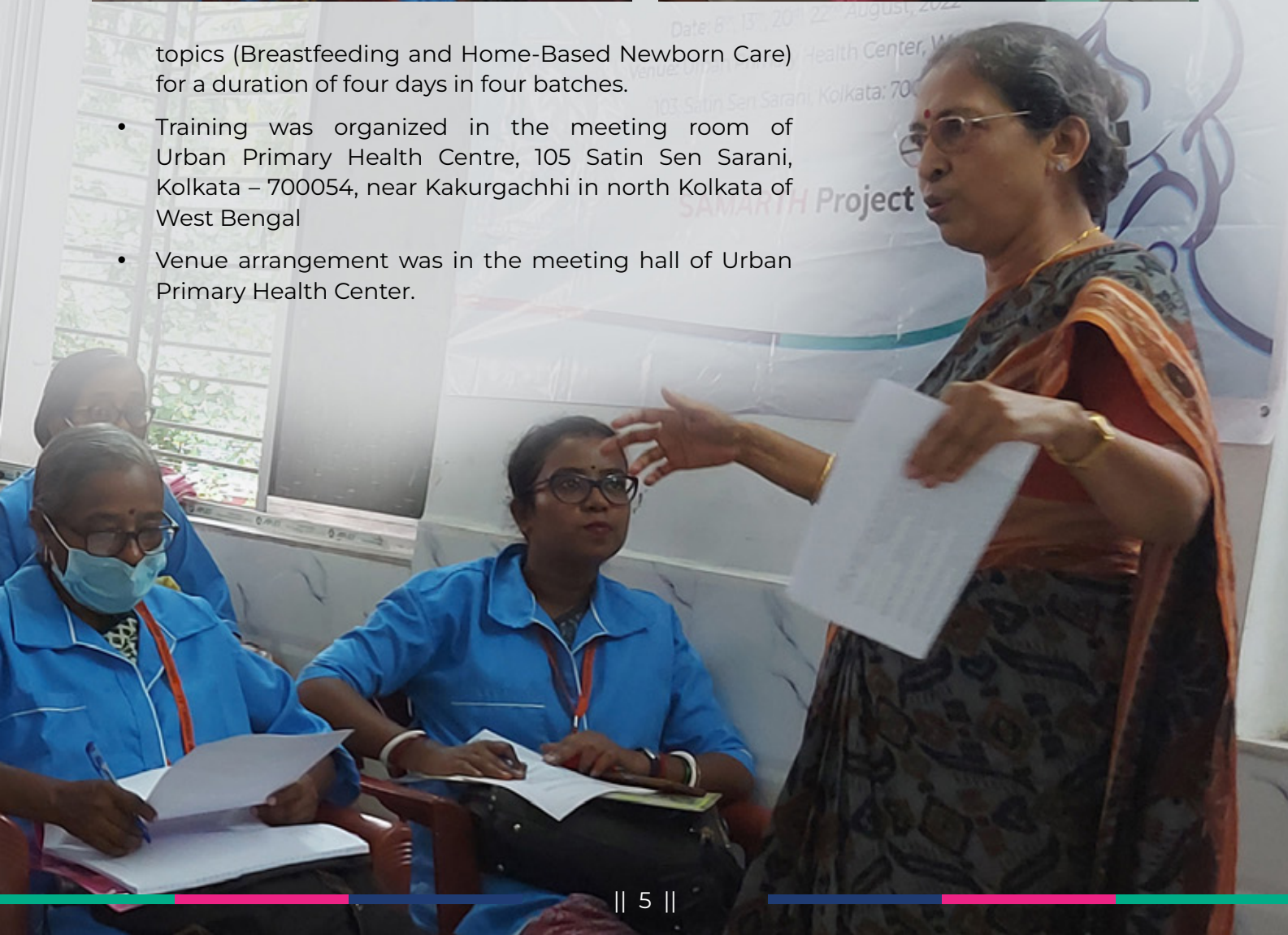
- Training sessions were delivered for the front-line service providers on the selected





topics (Breastfeeding and Home-Based Newborn Care) for a duration of four days in four batches.

- Training was organized in the meeting room of Urban Primary Health Centre, 105 Satin Sen Sarani, Kolkata – 700054, near Kakurgachhi in north Kolkata of West Bengal
- Venue arrangement was in the meeting hall of Urban Primary Health Center.



Training Sessions: (Annexure I)

- ♦ Time distribution of the training session was systematically allocated for each segment. To begin with, 15 minutes were set aside for pre-evaluation, then two hours for presentations using PPTs and hand-written notes, followed by a group discussion on the question-answer session, and a post-evaluation round for 15 minutes in the end.
- ♦ All discussions were conducted in simplified terms in Bengali with explanations and practical examples.
- ♦ Demonstration was done on – (i) correct positioning on breast feeding, (ii) technique of burping the baby after feed, (iii) wrapping the baby with baby sheet, (iv) Position for Kangaroo mother care (v) recording of body temperature using digital thermometer, and (vi) use of pulse oximeter for adults.
- ♦ Return demonstration was taken from the participants.
- ♦ Hand notes were prepared in English language with crucial information for both the topics and given to all participants for discussion and self -study.
- ♦ Questionnaires were developed for pre-evaluation and post-evaluation sessions with 15 questions in Bengali for both the topics. Questions were framed to assess the knowledge, understanding, aptitude and practices on breastfeeding and home-based care of newborns.
- ♦ A Demonstration was given using mannequins/ dolls on selected procedures.

Training Tools:

- ♦ Power-point presentations (PPTs) were prepared on “Breastfeeding” and “Home based Newborn Care” based on latest recommendations.
- ♦ Laptop and projectors were used for the presentation of PPTs during training sessions.
- ♦ Pre-evaluation and Post evaluation questionnaires were prepared by the consultant in the local language (Bengali) for both the sessions. The total number of questions was 15 in each topic and the time duration allotted for answering these questions was 15 minutes. Questions were mainly prepared as ‘fill in the blanks’ and ‘True – False’ type. **(Refer Annexure – I and Annexure – II for Pre-evaluation /Post evaluation Questionnaire with Answer key).**
- ♦ Pre-evaluation was done before starting the training sessions for both the topics. Post-

Evaluation of Knowledge:



evaluation was done immediately after the completion of the presentations and group discussion for both the sessions. The pre-evaluation and post-evaluation scores were analyzed and presented below. **(Refer Table 1)**

- ◆ There was gain in knowledge as per scores shown in post-evaluation for both the topics.
- ◆ Feedback was taken from the participants by verbal response regarding the effectiveness of both the topic. Participants were satisfied and gave positive feedback for both the sessions.

Pre-evaluation and Post-Evaluation score for the session on ‘Breastfeeding’

- ◆ Pre-evaluation Score Range: 3.5 – 10 out of full marks 15 (23.23% - 66.66%)

- ◆ Pre-evaluation Average Score: 7.48 out of full marks – 15 (49.89%)
- ◆ Post-evaluation Score Range: 9.5 – 15 out of full marks 15 (63.33% - 100%)
- ◆ Post-evaluation Average Score: 12.78 out of full marks 15 (85.25%)

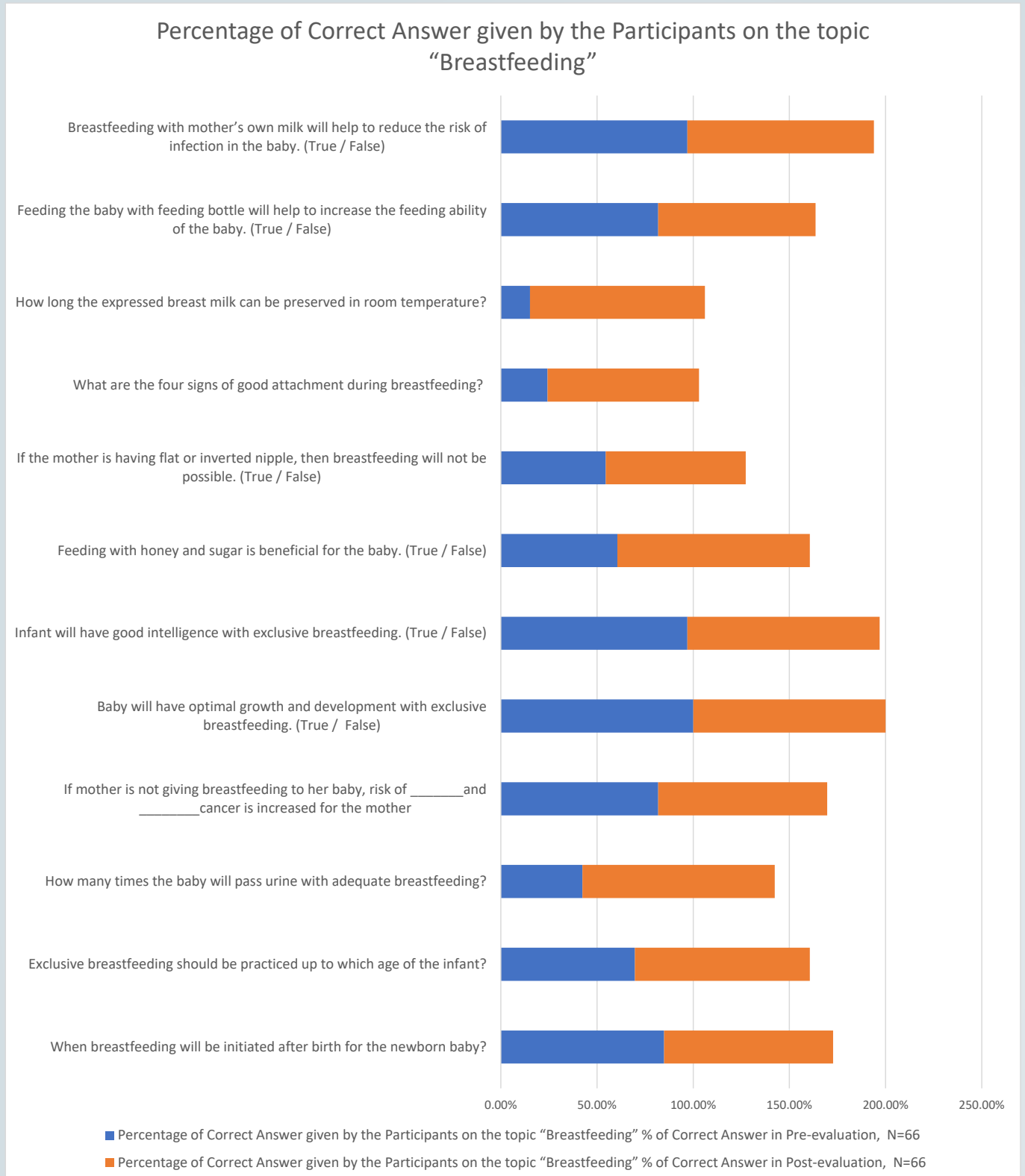
Pre-evaluation and Post-Evaluation score for the session on ‘Home Based Newborn Care

- ◆ Pre-evaluation Score Range: 2 – 14 out of full marks 15 (13.33% - 93.33%)
- ◆ Pre-evaluation Average Score: 7.62 out of full marks 15 (50.86%)
- ◆ Post-evaluation Score Range: 5 – 15 out of full marks 15 (33.33% - 100%)
- ◆ Post-Evaluation Average Score: 13 out of full marks 15 (86.66%)

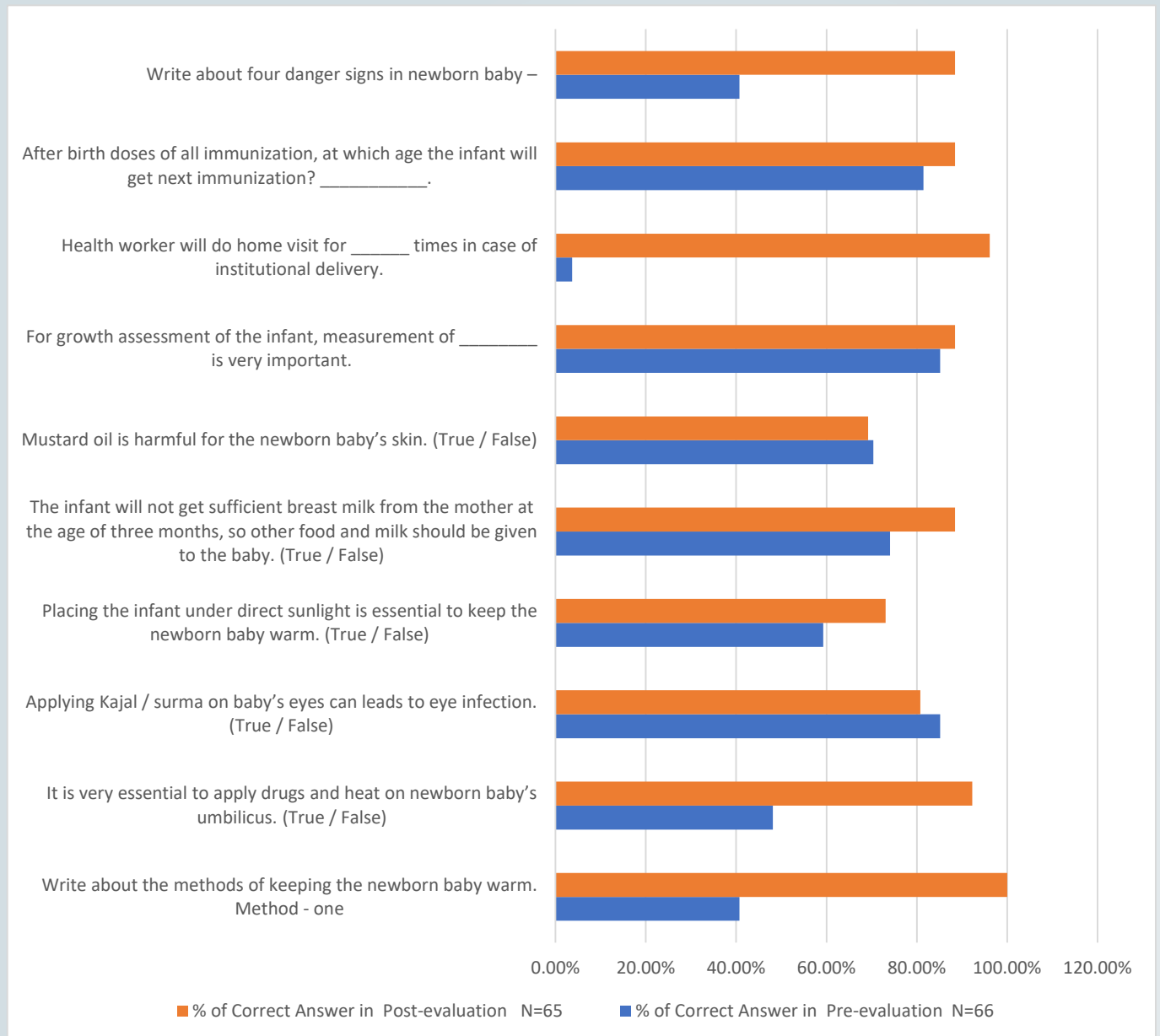
Table – 1: Result of Knowledge Evaluation Pre-Evaluation and Post-Evaluation Score (Total Score 15)

Batch	Score	Pre-Evaluation	Post-Evaluation	Remarks
I (Breastfeeding)	Range	3.5 - 9.5 (23.33% - 63.33%)	11 - 15 (73.33% - 100%)	
Do	Average	07 (46.66%)	12.91 (86.06%)	
I (HBNC)	Range	2 - 10 (13.33% - 66.66%)	5 – 15 (33.33% – 100%)	
Do	Average	6.88 (45.86%)	12.64 (84.26%)	
II (Breastfeeding)	Range	4.5 – 10 (30% - 66.66%)	9.5 – 15 (63.33% – 100%)	
Do	Average	8.06 (53.73%)	12.63 (84.2%)	
II (HBNC)	Range	5 – 14 (33.33% - 93.33%)	12 – 15 (80% - 100%)	
Do	Average	8.9 (59.33%)	13.66 (91.06%)	One participant was absent in post-evaluation

Graph – 1: Percentage of Correct Answer given by the Participants on the topic “Breastfeeding”



Graph – 2: Percentage of Correct Answer given by the Participants on the topic “Home Based Newborn Care (HBNC)”



Conclusion:

Promotion of exclusive breastfeeding practices along with continuation of “Home Based Newborn Care” is important for the improvement of neonatal and infant health. Home based care of the newborns should include maintenance of normal body temperature, breastfeeding with mothers’ own milk, promotion of hygienic practices, prevention of infections (with appropriate cord care, eye care and skin care) and avoidance of harmful childcare practices. Immunization, identification of danger signs, appropriate

health seeking behavior and follow up care at facility level must also be practiced for better health of the infants. Use of MCP card and birth registration should also be followed for all infants.

Front line health workers should educate and support the mother and family members for optimal care of the neonates and infants to prevent short term and long-term illnesses thus to reduce their mortality. Hope, learning from these training sessions will be implemented by the health workers to support the community members for better neonatal health.

Annexure - I

Session Plan for training on Breastfeeding			
Session #	Content	Duration	Methodology
Session I	Introduction	10 minutes	Discussion
Session II	Pre-evaluation	25 minutes	Questionnaire
Session III	Icebreaking session: Field-level experience share-covering related to breastfeeding issues. learning and challenges in handling this issue with the community Practices observed at field level	60 minutes	Group discussion
Session IV	<ul style="list-style-type: none"> ◆ Introduction of Breastfeeding ◆ Definition of breastfeeding ◆ Basic anatomy of the breast ◆ Source of breast milk ◆ Explain the role of hormones in breast milk production ◆ Composition of human milk ◆ Advantages of breast milk ◆ Know the breastfeeding position ◆ Know the good and bad attachment ◆ Recommended breast feeding practices ◆ Common breast condition and breastfeeding problem ◆ Baby Friendly Hospital Initiative ◆ Ten steps of successful breastfeeding 	180 minutes	Power point presentation and video show
Session V	◆ Post evaluation session	25 minutes	Questionnaire
Closed with Lunch Break			
Session Plan for training on Home Based New Born Care (HBNC)			
Session I	Field-level experience share-covering related to Home based new born care practices. learning and challenges in handling this issue with the community Practices observed at field level	60 minutes	Group discussion
Session II	Pre-evaluation	25 minutes	Questionnaire
Session III	<ul style="list-style-type: none"> ◆ Introduction of HBNC ◆ Aspects of HBNC for newborn care ◆ Essential New Born Care ◆ Teaching family on basic new born care ◆ Keeping the baby warm-demonstrate baby wrapping ◆ Taking Cord care ◆ Rule of bathing new born child ◆ Helping the mother to start breast feeding ◆ Care of a low-birth-weight baby ◆ Skin to skin contact ◆ Danger sign of new born child ◆ Importance of Mother and child protection card ◆ Importance of age-appropriate immunization 	180 minutes	
Session IV	Post Evaluation	25 minutes	Questionnaire
Session V	Discussion on evaluation question on both topics	10 minutes	
Closed with Lunch Break			

Annexure - II

Pre-evaluation / Post-evaluation Questionnaire on Breastfeeding

Name –

Date and Time –

Instructions – Please read the question carefully and answer on this sheet only in given space. Each correct response will have “one” marks. No minus marking will be given for negative response. Total mark is 15.

1. When will breastfeeding be initiated after birth for the newborn baby? _____
2. Exclusive breastfeeding should be practiced up to which age of the infant? _____
3. How many times will the baby pass urine with adequate breastfeeding? _____
4. If mother does not breastfeed her baby, the risk of _____ and _____ cancer increases for the mother.
5. Baby will have optimal growth and development with exclusive breastfeeding. (True / False)
6. Infant will have good intelligence with exclusive breastfeeding. (True / False)
7. Feeding with honey and sugar is beneficial for the baby. (True / False)
8. If the mother has a flat or inverted nipple, then breastfeeding will not be possible. (True / False)
9. What are the four signs of good attachment during breastfeeding?
 - a.
 - b.
 - c.
 - d.
10. How long the expressed breast milk can be preserved in room temperature? _____
11. Feeding the baby with a feeding bottle will help in increasing the feeding ability of the baby. (True / False)
12. Breastfeeding with mother’s own milk will help to reduce the risk of infection in the baby. (True / False)

Answer Key

- 1. Within one hour 2. 6 months 3. 6 – 8 times 4. Breast and ovary 5. True 6. True 7. False 8. False 9. a. Baby’s mouth is wide open b. lower lip turns outward c. baby’s chin touches mother’s breast d. majority of the areola is inside the baby’s mouth 10. 6 – 8 hours 11. False 12. True**

Annexure - III

Pre-evaluation / Post-evaluation Questionnaire on “Home Based Newborn Care”

Name –

Date and Time –

Instructions – Please read the question carefully and answer on this sheet only in given space. Each correct response will be given one marks. No minus marking will be given for negative response. Total mark is 15.

1. Write about the methods of keeping the newborn baby warm –
 - a.
 - b.
 - c.
2. It is very essential to apply drugs and heat on newborn baby's umbilicus. (True / False)
3. Applying Kajal / surma on baby's eyes can leads to eye infection. (True / False)
4. Placing the infant under direct sunlight is essential to keep the newborn baby warm. (True / False)
5. The infant will not get sufficient breast milk from the mother at the age of three months, so other food and milk should be given to the baby. (True / False)
6. Mustard oil is harmful for the newborn baby's skin. (True / False)
7. For growth assessment of the infant, measurement of _____ is very important.
8. Health worker will do home visit for _____ times in case of institutional delivery.
9. After birth doses of all immunization, at which age the infant will get next immunization?

10. Write about four danger signs in newborn baby –
 - a.
 - b.
 - c.
 - d.

Answer Key – 1. a. keeping the baby dry, b. wrapping the baby with adequate cloth, c. keeping the room warm. 2. False. 3. True. 4. False. 5. False. 6. True. 7. Weight. 8. Six. 9. 6 weeks. 10. a. poor feeding ability, b. respiratory difficulty, c. abnormal movements/ seizures, d. vomiting and diarrhea, (or Cold to touch or Hot to touch or Yellow palms and soles etc.)

Annexure – IV

Power-point Presentation on the topic “Breastfeeding”

Annexure – V

Power-point Presentation on the topic “Home Based Newborn Care”

Annexure – VI

Hand-written notes on the topic “Breastfeeding”

Topic – One: Breastfeeding is best feeding

Breastfeeding is a baby's right at birth. Early initiation of breastfeeding and exclusive breastfeeding practices up to six months of age of the baby must be followed to promote optimal health and well-being as well as optimal growth and development of the neonates and infants.

Advantages of Breastfeeding:

- ◆ Benefits to the newborn baby: Breast milk provides optimal nutrition for the growth and development of the neonates. It protects from various infections (ARI, diarrhea) and allergies including eczema and asthma. It is essential feeding for the health and well-being of children. It is available at appropriate temperature and can be easily digested. It promotes emotional bonding between the mother and baby. Breastfed babies have higher intelligence and have less chances of developing hypertension, diabetes, and coronary heart disease in later life.
- ◆ Benefits to the mother: It prevents bleeding (PPH) and promotes good involution of uterus in postnatal period. It reduces the risk of breast and ovarian cancer in the mother. Exclusive breastfeeding delays next pregnancy. It reduces workload of the mothers.
- ◆ Benefits to the family and society: It is economical than artificial feeding. It promotes family planning. It decreases the risk of infections in infants and need for hospitalization. It reduces infant morbidity and mortality.

Recommended Breastfeeding Practices:

- ◆ Initiate breastfeeding soon after birth within one hour, if mother and baby are not sick
- ◆ Avoid pre-lacteal feeding (e.g. water, honey, other milk etc.).
- ◆ Ensure colostrum feeding. It is first

immunization to the baby. It prevents neonatal jaundice.

- ◆ Ensure exclusive breastfeeding (feeding with only breast milk) up to six months of age, except if medications are required.
- ◆ Allow breastfeed to the baby day and night on demand at least eight times or more per day.
- ◆ Do not omit night feeding. Night feeding promotes breast milk secretion.
- ◆ Allow the baby to feed at one breast till the baby stops suckling and releases the breast. Then offer the other breast if the baby demands for more. It helps to feed the baby with both foremilk and hindmilk which helps in optimal growth and development
- ◆ Ensure correct positioning during breastfeeding: (i) Baby's body well supported, (ii) Baby's head, neck and body are kept in same plane, (iii) Baby's entire body faces the mother, and (iv) Baby's abdomen touches mother's abdomen.
- ◆ Look for good attachment of baby on mother's breast: (a) Baby's mouth is wide open, (b) Baby's lower lip is turned outwards, (c) Baby's chin touches mother's breast, and (d) majority of mother's areola is inside the baby's mouth.
- ◆ Check for effective suckling. It is found that when the infant shows slow deep sucks, sometimes pausing. Suckling appropriately is very important for sufficient milk secretion. Only nipple sucking should be avoided. Baby should have good suckling and swallowing ability.
- ◆ Ensure that the mother is calm, stress free and relaxed during breastfeeding.
- ◆ Mother should feel the baby's touch, smell and listen to the sound of the baby.
- ◆ Support the mother during initiation of breastfeeding and for continuation of breastfeeding when any breastfeeding difficulties or other problems arise.
- ◆ Maintain mother's privacy. Allow the mother to be comfortable and relaxed.

- ♦ Assess the adequacy of breast milk intake. Baby should pass urine 6 – 8 times per day, sleeps 2 -3 hours after feed and have adequate weight gain after regaining birth weight (20 – 30 gm/ day)
- ♦ For a small and low-birth-weight infant, expressed breast milk (EBM) feeding can be given with mother’s own milk using paladai/spoon. Teach the mother for manual expression of breast milk and feeding with EBM using paladai/spoon. EBM can be stored in room temperature for 6 – 8 hours and in refrigerator for 24 hours
- ♦ Initiate complementary foods or weaning foods after 6 months of age of the infant.
- ♦ Continue breastfeeding up to 2 years or more especially at night

Common Breast conditions and Breastfeeding problems:

Common problems are inverted nipple, flat nipple, sore nipple, breast engorgement, breast abscess, and reduced milk supply. These conditions should be managed with support from healthcare providers.

Baby Friendly Hospital Initiative (BFHI):

BHFI is a global initiative of WHO and UNICEF that aims to give every baby the best start in life by creating a healthcare environment that supports breastfeeding as the norm. These practices are highly beneficial to both the mother and baby when implemented properly. These protocols are designed to support individualized care and appropriate decision-making. BFHI aims at improving the care of pregnant women, mothers and newborns at healthcare facilities that provide maternity services for protecting, promoting and supporting breastfeeding.

Ten Steps to Successful Breastfeeding

WHO and UNICEF launched the ‘Baby Friendly Hospital Initiative’ (BFHI) to help motivated facilities providing maternity and newborn services worldwide to implement the ‘Ten

Steps to Successful Breastfeeding’. Evidence suggests that adherence to the ‘Ten Steps to Successful Breastfeeding’ has an impact on early initiation of breastfeeding immediately after birth, exclusive breastfeeding up to six months of the age of the infant and in total duration of breastfeeding.

Critical Management Procedures:

- 1a. Comply fully with the ‘International Code of Marketing of Breast-milk Substitutes’ and relevant World Health Assembly resolutions
- 1b. Have a written infant feeding policy that is routinely communicated to staff and parents
- 1c. Establish ongoing monitoring and data-management systems
2. Ensure that the staff has sufficient knowledge, competence and skills to support breastfeeding

Key Clinical Practices:

1. Discuss the importance and management of breastfeeding with pregnant women and their families
2. Facilitate immediate and uninterrupted skin to skin contact and support mothers to initiate breastfeeding as soon as possible after birth
3. Support mothers to initiate and maintain breastfeeding and manage common difficulties
4. Do not provide breastfed newborns any food or fluids other than breast milk, unless medically indicated
5. Enable mothers and their infants to remain together and to practice rooming-in 24 hours a day
6. Support mothers to recognize and respond to their infants’ cues for feeding
7. Counsel mothers on the use and risks of feeding bottles, teats and pacifiers
8. Coordinate the discharge from the hospital to ensure that the parents and their infants have timely access to ongoing support and care.

Annexure – VII

Hand Notes on the topic – “Home Based Newborn Care”

Topic – Two: Home based Newborn Care (HBNC)

Home based care of newborn baby is very important to improve good health, wellbeing and optimal growth and development of the infant. It helps to reduce neonatal & infant morbidity and mortality.

Home based care of the newborn baby is provided by the mother and family members with good support from community health workers (ASHA, AWW, ANM, SHG members, etc.) along with facility level follow-up care.

Minimum of six home visits should be done in case of institutional delivery and seven visits in case of home delivery. Special care with extra attention should be provided to the low birth weight (LBW) infant and to the sick infants who are discharged from sick neonatal care units i.e. SNCU/NICU of hospitals.

Mother and Child Protection (MCP) Card should be available for all mothers and infants. HBNC ensure that both mother and baby are safe with appropriate health seeking behaviors and birth registration has been done in time.

HBNC should give emphasis on the following aspects of neonatal care:

1. **Maintenance of warmth** by keeping the baby dry, wrapping the baby with covering baby's head, appropriate clothing (cotton dress, cap, and socks) with woolens and blanket in winter should be done to prevent hypothermia. Keep the baby's room warm. Avoid over-clothing and exposure to direct sunlight especially during hot summer months to prevent hyperthermia. Provide kangaroo mother care for LBW infant. Keep the mother and baby in rooming-in and in bedding-in for 'Zero separation'. Check baby body temperature with thermometer or feel whether the baby is cold or hot to touch
2. **Exclusive breastfeeding** up to six months of age with introduction of complementary feeding after six months of age must be practiced. Burping should be done only when the baby has swallowed air during breastfeeding. No artificial feeding, pacifier and bottle feeding should be given to breast fed baby. Breastfeeding should be continued up to two years of or more, especially at night (i.e., 1000 days care concept)
3. **Care of umbilical cord** - Cord should be kept open, clean and dry. Nothing to be applied on the cord except medical advice in case of infection. The cord usually falls within 4 – 10 days of age. Look for any discharge, redness and swelling in umbilical cord
4. **Care of the eyes** - Eyes should be kept clean and no application of kajal or surma. Eyes should be clean using a separate clean cloth during bathing. Hand hygiene must be maintained before touching the baby's eyes. Observe for redness, swelling and any discharge or crusting in the baby's eyes
5. **Maintenance of cleanliness and prevention of Infections** – Hand hygiene must be maintained before touching the baby and for all baby care. The baby's skin should be kept clean to prevent any infections. Take special precautions during bathing the baby to prevent chilling. Mild soap should be used for the baby. In winter months, a sponge bath can be given to prevent hypothermia. Oil massage can be given to the baby gently using coconut oil. Avoid use of mustard oil on the baby's skin. Comb the baby's hair daily. The baby's clothing should be made up of cotton or wool and must be clean and loose. The surroundings area should clean and well ventilated. No infected person should touch the baby. Mother and another one

person only should take care of the baby. Overcrowding around the baby should be avoided.

- 6. Avoiding harmful neonatal care practices** - Traditional harmful practices must be discouraged such as applying kajal on the baby's eyes, putting oil in nostrils and ears, applying cow dung, mud or anything else on the umbilical cord, balding the scalp hair, feeding with animal or formula milk, feeding with feeding bottles, use of pacifier, feeding herbal preparations, neglecting girl baby, separation of mother and baby, etc.
- 7. Identification of the danger signs** of the neonates/infants and prompt initiation of medical management for treatment are very important to prevent long term complications and neonatal/infant death. Common danger signs include poor suckling, lethargy, cold or hot to touch the baby, respiratory difficulties, yellow discoloration of baby's skin especially palms and soles, abnormal movement of the baby (seizures) and diarrhea with vomiting. Excessive crying, bluish discoloration of baby's skin, not passing urine for six hours, bleeding from any site, and infections like

umbilical sepsis, skin pustules, oral thrush and eye infections are also considered as danger signs. Danger signs of the infant must be explained to the mother and family members for early detection and for appropriate management of the conditions.

- 8. Immunization as per immunization schedule** must be given to all infants. After all birth doses of immunization (HBV, BCG, and OPV) at hospitals, next immunization should be given at six weeks of age of the infant in any clinic.
- 9. Regular health check-up of the infant and recording of baby's body weight;** It can be done to assess baby's growth and development at home in community by the front-line health workers or in the clinic of the health facility.
- 10. Follow up visits for each baby** in well-baby clinic in healthcare facility must be arranged for assessment of growth and development, early diagnosis and management of illnesses and for health education of parents along with family members for continued care at home for optimal health of the infants.



Reference:

- ◆ Facility Care Newborn Care Training Module for Doctor and Nurse, Ministry of Health and Family Welfare, Government of India, 2014
- ◆ Newborn Nursing for Facility Based Care, WHO Collaborating Centre for Training and Research in Newborn Care, AIIMS, New Delhi, 2014 – 15
- ◆ Infant and Young Child Feeding, Training Module for ANMs, Ministry of Health and Family Welfare, Government of India, 2014
- ◆ Home Based Newborn Care, Operational Guidelines – National Health Mission, Government of India, 2014
- ◆ World Breastfeeding Week 2019 - Press Release, Breastfeeding Promotion Network of India, www.bpni.org.

Activity snaps:



Evaluation process



Training – Day - 1, Batch - 1



Training – Day - 2, Batch - 1



Training – Day - 1, Batch - 2



Training – Day - 2, Batch - 2, demonstration on hand washing



Training – Day - 1, Batch - 2





PREVENTION OF



Common Seasonal INFECTIONS AND DISEASES





Introduction:

Each season arrives with its beauty and utility. Seasons are important but they also open the chances of many health-related ailments that we get as per our condition of health, immunity level and lifestyle. It is important to know about the health-related problems of different seasons and take necessary precautions to stay healthy and happy. In Kolkata, majority of the children are suffering from cold and cough. Infection with SARS-CoV-2 begins when respiratory droplets containing the virus enter upper respiratory tract. As the virus multiplies, the infection develops into pneumonia.

Pneumonia is closely related to the most severe forms of acute respiratory infections, or ARIs. Most of these infections are limited to the nose and throat (the upper-respiratory tract). Acute lower respiratory tract infections, the most widely used classification in health surveys, refer to all infections extending into the chest, including bronchiolitis and pneumonia cases, where infection extends into the lung tissue. Pneumonia is a form of acute lower respiratory tract infection that occurs when viruses, bacteria or other micro-organisms cause inflammation of the lungs. Most severe or fatal pneumonia is caused by bacteria.

Malnourished children, particularly those with severe acute malnutrition, have a higher risk of death from common childhood illnesses such as diarrhoea, pneumonia and malaria. Nutrition-related factors contribute to about 45% of deaths in children under 5 years of age. According to the World Health Organization (WHO), the rate of severity is more in children less than 5 years of age. Therefore, precautions need to be taken to prevent the disease at an early stage. The surge in COVID pneumonia cases in recent times is expected to add significantly to the total number of deaths due to pneumonia. It is a disease that affects the lungs and aggravates the air sacs of the lungs. This might happen because the lungs are filled with discharge or liquids. The symptoms can be mild or severe in children less than 5 years of age to adults more than 65 years of age who have the risk of suffering from this disease. According to WHO and UNICEF, pneumonia can be controlled with a combination of interventions - protect, prevent, and treat.

Children living in slums are highly exposed to pollution and infections, which includes not only the climatic conditions but also the poverty, poor nutrition, poor housing conditions, indoor air pollution such as parental smoking, absence of ventilation, overcrowding etc. The risk factors of ARI in slums however are hard to generalize, due to diversity of slum population, their housing, living conditions and different health related challenges in different parts of the country.

Childhood pneumonia is the top most infectious killer among the under 5 children, contributing 15 percent under-five deaths in the country. According to SRS 2017 report, under-5 mortality is 37/1000 live births and the goal of National Health Policy 2017 is to reduce under 5 newborn to 23/1000 live births by 2025. In order to achieve the National Health Policy goals, Pneumonia mortality needs to reduce to less than 3 per 1000 live births. When an individual has pneumonia, the alveoli are filled with pus and fluid, which makes breathing difficult and limits oxygen intake.

To ensure diagnosis of pneumonia by Front



Line Health Workers (FLHWs) like (ASHA/ HHW, AWW, ANM, SHG members), two signs, i.e. cough and fast breathing or difficulty in breathing due to chest related issues have been recommended in Integrated Management of New-born and Childhood Illness (IMNCI) strategy.

Objectives of the Training Sessions:

- On completion of the one-day training sessions on selected topic, the participants would be able to support the community according to the guideline of Childhood Pneumonia Management and Saans Campaign Guidance under MoHFW .
- The trained community health workers can easily identify, classify and manage cases of Pneumonia.
- To improve facility care for severe Pneumonia cases by strengthening health facilities. This can build the trust of the community in the public health system and avoid delays in quality care and thus contributing to a reduction in mortality.



Methodology:

Participants Profile

The HHW/ASHA, Nodal of School Health Programme, ANM, and SHG members from Urban Primary Health Centers of Ward 32 under Kolkata Municipal Corporation Health and AWWs and Supervisors of ICDS in ward 32 were the participants for this training session. Total 47 participants were present in the training programme.

SI No	Nature of participants	Number of participants
1	ASHA/HHW	4
2	Anganwadi worker	6
3	Nodal of school health program	7
4	Other front-line health workers	26
5	Field mobilizer of SAMARTH Project	4
Total		47

Facilitators Profile

Dr. Sharad Bagri is a Pulmonologist in Kolkata and has an experience of 9 years in this field. Dr. Sharad Bagri practices at Charring Cross Nursing Home in Kankurgachi, Kolkata. He completed MD - Respiratory Medicine from School of Medical Sciences and Research, Greater Noida in 2021 and MBBS from West Bengal University of Health Sciences in 2013.

Training Design

Training sessions were delivered for the front-line service providers on the selected topics for a duration of one day in two batches.

- Training was organized in the meeting room of Urban Primary Health Centre, 105 Satin Sen Sarani, Kolkata – 700054, near Kakurgachhi in north Kolkata of West Bengal

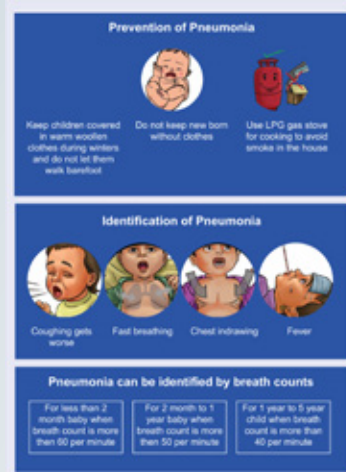
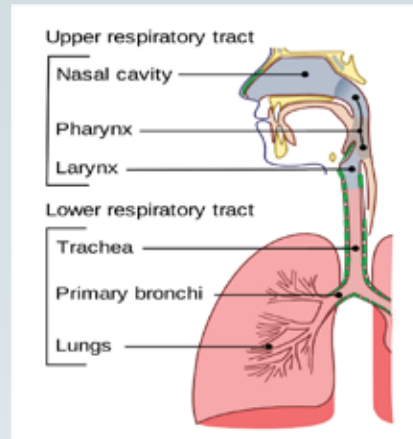
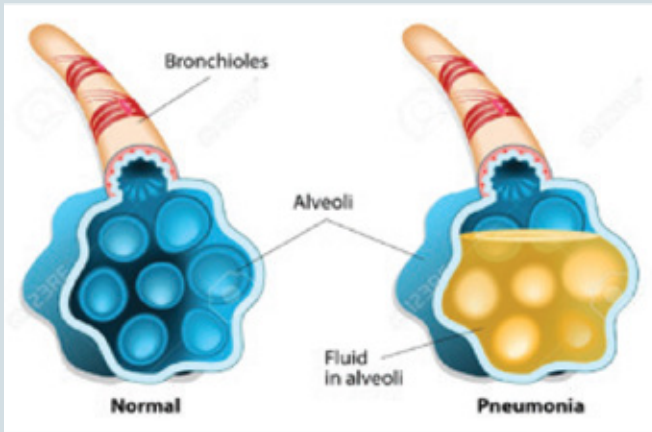
Training Sessions:

- The training started with a general introduction to participants for 15 minutes. Dr. Sourav Basu the Medical officer started with an overview of the common seasonal infection. He said that number the incidence of measles are increasing among children this winter season. He also added that the large number of measles cases were reported from a few districts including Kolkata and Kolkata Municipal Corporation is geared up for measles rubella vaccine for children of 9 month to 15 years from January 9th to February 15th -2023. The children in that age group who are already vaccinated against the diseases will be offered the jab, too. The aim of the drive is to identify those who have not yet taken a single dose of the MR vaccine despite having reached the eligible age.
- Dr. Basu also elaborated on the importance of Mumps Measles and Rubella (MMR) vaccine. It is very effective at protecting people against measles, mumps, and rubella, and preventing the complications caused by these diseases.
- Next session was facilitated by Dr. Bagri a Pulmonologist. He started with an overview of Pneumonia. Pneumonia is a form of acute

respiratory infection that affects the lungs. The lungs are made up of small sacs called alveoli, which fills with air when a healthy person breathes. When an individual has pneumonia, the alveoli are filled with pus and fluid, which makes breathing painful and limits oxygen intake. It is the single largest infectious cause of death in children worldwide. As per the Childhood Pneumonia Management guideline of the Ministry of Health and Family Welfare-Government of India, the following topics were discussed-

- ✦ Key facts of childhood pneumonia
- ✦ Sign and symptoms of pneumonia
- ✦ How to measure the Respiratory rate
- ✦ How to identify chest drawing
- ✦ Key awareness messages on early detection, prevention
- ✦ Danger sign of pneumonia
- Dr. Basu also added that the treatment facilities are available at Ward Health Unit so that field worker can refer the cases to the Ward Health Unit.
- Dr. Bagri also explained the objectives to accelerate pneumonia control with a combination of interventions to protect, prevent and treat pneumonia in children-
 - ✦ **protect** children from pneumonia, including promotion of exclusive breastfeeding and adequate complementary feeding.
 - ✦ **prevent** pneumonia with vaccinations, hand washing with soap and reducing household air pollution.
 - ✦ **treat** pneumonia focusing on making sure that every sick child has access to the right kind of care – either from a community-based health worker, or in a health facility if the disease is severe – and can get the antibiotics and oxygen they need to get well.

Dr. Bagri concluded the session with practical experience at the community level shared by health workers and Anganwadi Workers. The Front line health workers also shared their observations. Dr. Bagri ensured to extend



full minute. If the respiratory rate is fast i.e. respiratory rate > 60 breaths per minute counted for a complete one-minute period, the rate should be counted for a second time; fast breathing is significant only if second count is also 60 breaths per minute or more. The respiratory rate should be counted when the baby is calm and not crying or being fed.

Normal young infants often have mild chest indrawing. However, severe chest indrawing is very deep and easy to see and is a sign of severe Pneumonia. In case of doubt, the infant should be observed in a different position, lying flat in the mother's lap or on a bed. Chest indrawing is significant if it is present all the time, in all positions and not only when the child is crying or upset but also when calm and peaceful.

his support in future to guide the Front line Health workers to identify the cases from the community. Detailed session plan is given in **Annexure I**

Training Tools:

- Hand notes were prepared in Bengali language with crucial information on pneumonia and given to all participants for discussion and self -study.
- Questionnaires were developed for pre-evaluation and post-evaluation sessions with 10 questions in English for both the

topics. Questions were framed to assess the knowledge, understanding, aptitude and practices on home-based pneumonia management and prevention of pneumonia.

Evaluation of Knowledge level:

- Pre-evaluation and Post evaluation questionnaires were prepared in English. The total number of questions were 10 in each topic and the time duration allotted for answering these questions was 15 minutes. Questions were mainly prepared as 'fill in the blanks' and multiple choice questions. **(Refer Annexure – II and Annexure –**

III for Pre-evaluation /Post evaluation Questionnaire with Answer key).

- Pre-evaluation was done before starting the training sessions for both the topics. Post-evaluation was done immediately after the

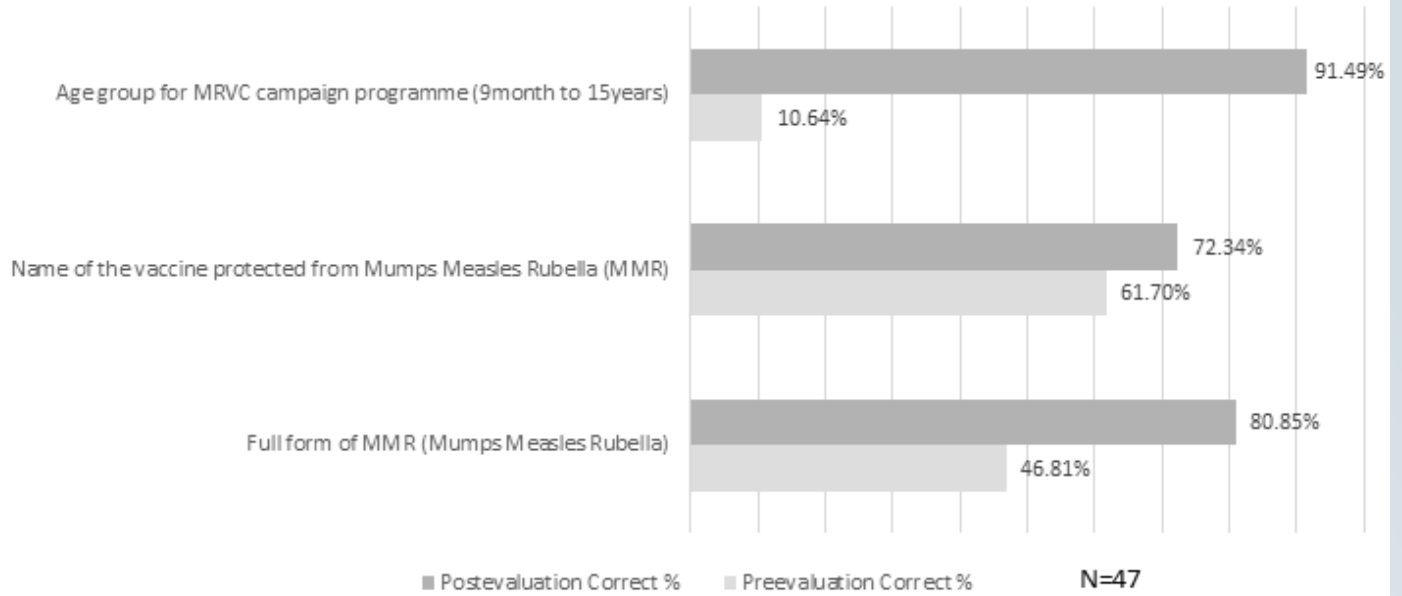
completion of the presentations and group discussion for both the sessions. The pre-evaluation and post-evaluation scores were analyzed and presented below. **(Refer Table 1 to 4)**

Table: 1 Question on Basic knowledge on Mumps Measles and Rubella	Pre-evaluation	Post evaluation
Basic knowledge on MRVC	Correct %	Correct %
Full form of MMR (Mumps Measles Rubella)	46.81%	80.85%
Name of the vaccine protected from Mumps Measles Rubella (MMR)	61.70%	72.34%
The age group for MRVC campaign programme (9 month to 15 years)	10.64%	91.49%

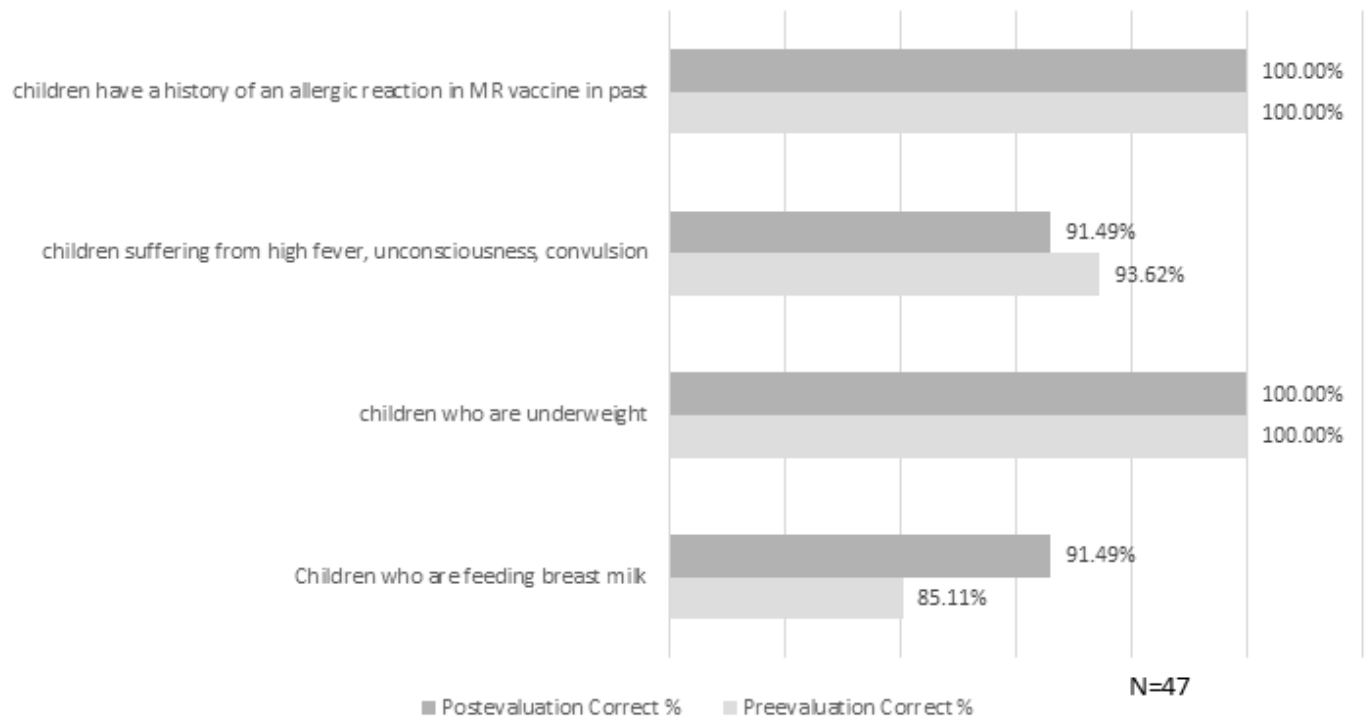
Table: 2 Who should not be vaccinated at MRVC	Pre-evaluation	Post evaluation
	Correct %	Correct %
Children who are feeding breast milk	85.11%	91.49%
children who are underweight	100.00%	100.00%
children suffering from high fever, unconsciousness, convulsion	93.62%	91.49%
children have a history of an allergic reaction to MR vaccine in past	100.00%	100.00%
Private Hospital	100%	11%
Clinics & medical store	4%	0%
Any medicine shop	4%	0%
All of the above	0%	0%

Table: 4 Knowledge of basic concept on Pneumonia	Pre-evaluation	Post evaluation
	Correct %	Correct %
Knowledge on full form of PCV (Pneumococcal Vaccine)	0%	14.80%
Knowledge on pneumonia is a disease of-Chronic lung disease	93.60%	100%
Knowledge on pneumonia spread by virus and bacteria	78.72%	100%
Knowledge on symptoms of pneumonia	85.11%	100%
Vaccination-preventive measure of pneumonia	6.38%	59.60%
Maintain WASH-	65.96%	100%
Adequate nutrition -preventive measure of pneumonia	29.79%	40.40%

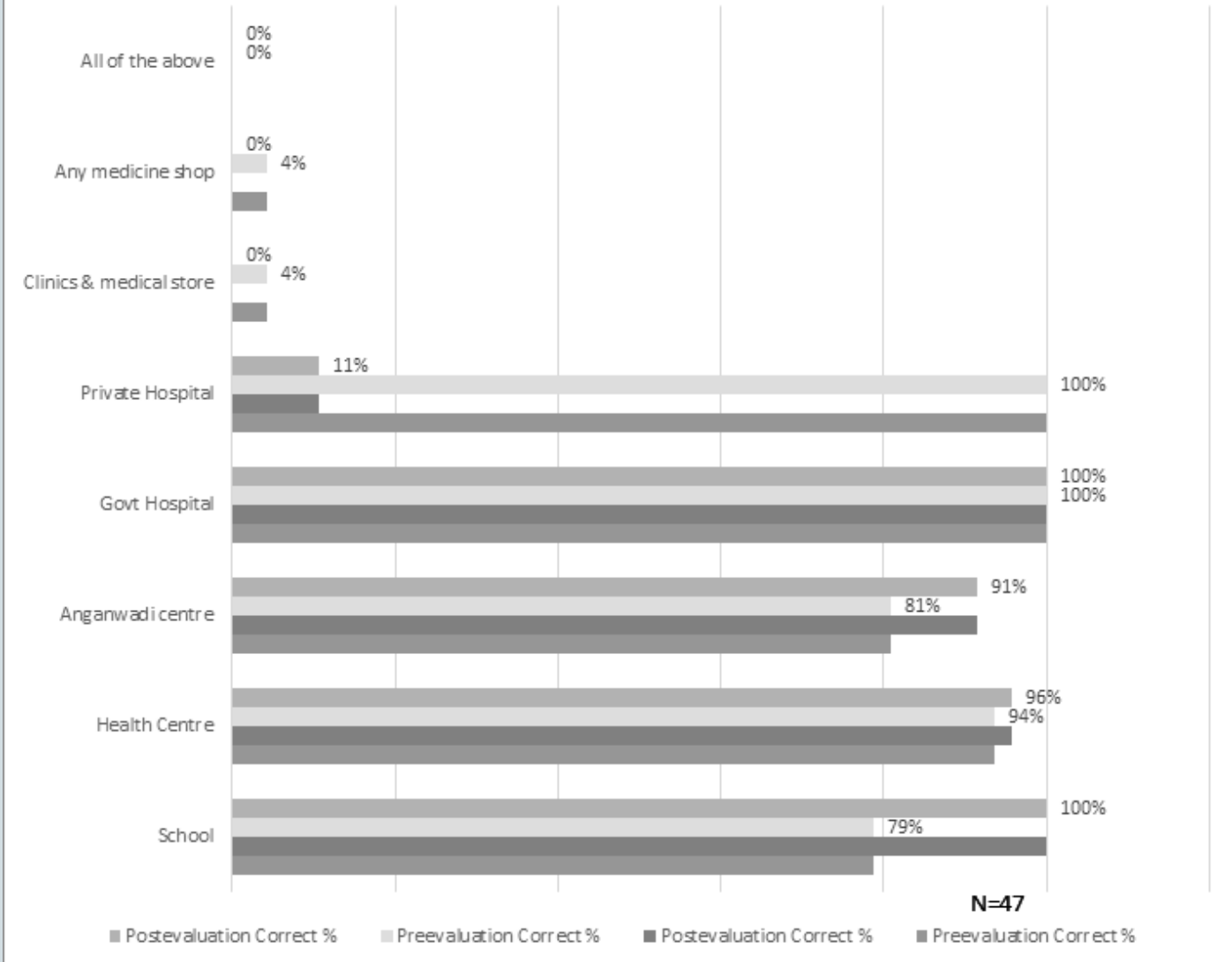
Basic knowledge on Mumps Measles and Rubella Vaccine (MRVC)



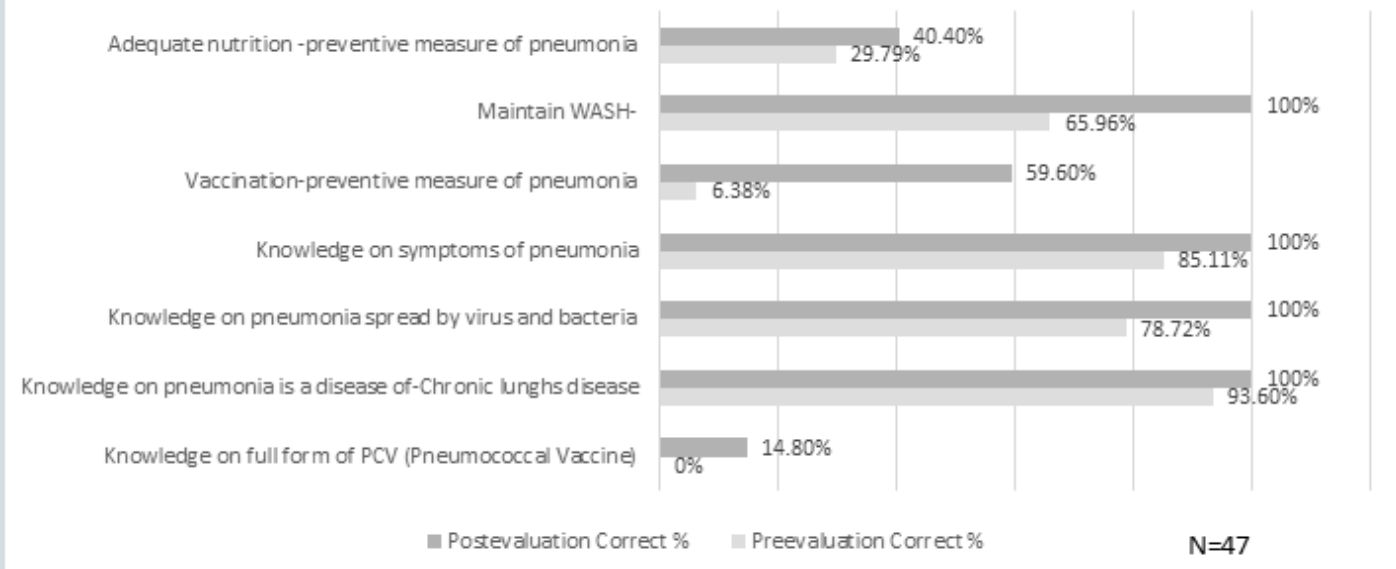
Knowledge on who should not be vaccinated at MRVC



Knowledge on source of services available for MRVC



Pre and Post Evaluation of basic concept on Pneumonia



Annexure: I

Session Plan for training on the Identification and Prevention of Seasonal Diseases

Issues covered	Methodology
Registration	
Introduction of the participants	
Pre-evaluation	Questionnaire
Basic introduction on seasonal disease	Discussion
Discussion on Mumps Measles and Rubella	Discussion
Discussion on the importance of MRVC campaign	Discussion
Classification of pneumonia-cough & cold, pneumonia, severe and very severe pneumonia	Discussion
Identification of pneumonia Sign of pneumonia Respiratory rate counting Chest in drawing Other danger sign	Discussion and demonstration
Prevention against pneumonia Role of hygiene and sanitation in prevention and control including indoor air pollution association with pneumonia	Discussion
Session on skill build up-Respiratory counting	Discussion and demonstration
Sharing field level observation and finding solution	Discussion
Post evaluation	

Annexure: II

NAME:

DATE: 24.11.2022

Pre and Post-Evaluation

1. What is the full form of MMR?
2. Which vaccine is given to protect the child from mumps, measles and Rubella?
DPT/POLIO/TT/MMR/BCG
3. Which age groups are targeted the for MRVC campaign programme?
6month to 9month/ 2year to 5year/ 9month to 15years/ more than 15years
4. Who should not be vaccinated at MRVC?
Children who are feeding breast milk/children who are underweight/children suffering from high fever, unconsciousness, convulsion/ children have a history of an allergic reaction in MR vaccine in past
5. Where will the children be vaccinated during the campaign?
 - i. School
 - II. Health Centre
 - III. Anganwadi centre
 - IV. Govt Hospital
 - V. Private Hospital
 - VI. Clinics & medical store
 - VII. Any medicine shop
 - VIII. All of the above
6. Name the full form of PCV.
7. Pneumonia is a-
 - i) Chronic lung disease
 - ii) Chronic heart problem
 - iii) Chronic digestion problem
8. Pneumonia spread by
 - i. Virus
 - ii. Bacteria
 - iii. Both
9. Write any two symptoms of pneumonia.
10. Write any two preventive measures for preventive measures of pneumonia.

Annexure: III

Answer tool

1. Mumps Measles Rubella
2. MMR
3. 9 month to 15 years
4. Children suffering from high fever, unconsciousness, and convulsion. Children have a history of an allergic reactions in MR vaccine in past
5. School, Health Centre, Anganwadi Centre
6. Pneumococcal conjugate vaccines
7. Chronic Lungs disease
8. Virus and bacteria
9. Cold and cough and fever. Severe breathing problem.
10. Vaccination-preventive measure of pneumonia. Maintain WASH practices. Adequate Nutrition.

Reference:

1. Childhood Pneumonia Management Guidelines. Ministry of Health and Family Welfare. Government Of India.
2. Introduction of Measles Rubella Vaccine (Campaign and Routine Immunization). National Operational Guideline,2017. Ministry of Health and Family Welfare.

SAMPLE COPY OF PRE AND POST-EVALUATION ON PREVENTION OF COMMON SEASONAL INFECTIONS AND DISEASES

NAME: Mammi Akshay DATE: 14.11.2022

Pre and Post-Evaluation

1. What is the full form of MMR? Mumps, Measles, Rubella
2. Which vaccine is given to protect the child from mumps, measles and Rubella?
DTP/DTPC/TDA/TDA/DC
3. Which age groups are targeted for the MMR campaign programmes?
Month to 15 months / 2 year to 15 year / 15 years to 18 years / more than 18 years
4. Who should not be vaccinated at MMR?
Children who are having breast milk/children who are underweight/children suffering from high fever, uncontrolled convulsions, children have a history of allergic reaction to MMR vaccine in past
5. Where will the children be vaccinated during the campaign?
 - School
 - Health Centre
 - Anganwadi centre
 - Govt Hospital
 - Private Hospital
 - Clinic & medical store
 - Any medicine shop
 - All of the above
6. Name the full form of PCV. Pneumococcal conjugate vaccine
7. Pneumonia is a
 - Chronic lung disease
 - Chronic heart problem
 - Chronic digestion problem
8. Pneumonia spread by
 - Virus
 - Bacteria
 - Fungi
9. Write any two symptoms of pneumonia.
 - Fever
 - Chest pain when you breathe or cough
10. Write any two preventive measures for pneumonia.
 - Good hygiene (wash your hands often)
 - Keeping your immunity system strong

NAME: Anika Nika DATE: 14.11.2022

Pre and Post-Evaluation

1. What is the full form of MMR? Mumps, Measles and Rubella
2. Which vaccine is given to protect the child from mumps, measles and Rubella?
DTP/DTPC/TDA/DC
3. Which age groups are targeted for the MMR campaign programmes?
Month to 15 months / 2 year to 15 year / 15 years to 18 years / more than 18 years
4. Who should not be vaccinated at MMR?
Children who are having breast milk/children who are underweight/children suffering from high fever, uncontrolled convulsions, children have a history of allergic reaction to MMR vaccine in past
5. Where will the children be vaccinated during the campaign?
 - School
 - Health Centre
 - Anganwadi centre
 - Govt Hospital
 - Private Hospital
 - Clinic & medical store
 - Any medicine shop
 - All of the above
6. Name the full form of PCV. Pneumonia protect vaccine
7. Pneumonia is a
 - Chronic lung disease
 - Chronic heart problem
 - Chronic digestion problem
8. Pneumonia spread by
 - Virus
 - Bacteria
 - Fungi
9. Write any two symptoms of pneumonia.
 - Coughing, breathlessness
 - High fever
10. Write any two preventive measures for pneumonia.
 - Hand washing, Breast feeding, clean and rest

NAME: Puja Das DATE: 14.11.2022

Pre and Post-Evaluation

1. What is the full form of MMR? Mumps, Measles, Rubella
2. Which vaccine is given to protect the child from mumps, measles and Rubella?
DTP/DTPC/TDA/DC
3. Which age groups are targeted for the MMR campaign programmes?
Month to 15 months / 2 year to 15 year / 15 years to 18 years / more than 18 years
4. Who should not be vaccinated at MMR?
Children who are having breast milk/children who are underweight/children suffering from high fever, uncontrolled convulsions, children have a history of allergic reaction to MMR vaccine in past
5. Where will the children be vaccinated during the campaign?
 - School
 - Health Centre
 - Anganwadi centre
 - Govt Hospital
 - Private Hospital
 - Clinic & medical store
 - Any medicine shop
 - All of the above
6. Name the full form of PCV. Pneumococcal conjugate vaccine
7. Pneumonia is a
 - Chronic lung disease
 - Chronic heart problem
 - Chronic digestion problem
8. Pneumonia spread by
 - Virus
 - Bacteria
 - Fungi
9. Write any two symptoms of pneumonia.
 - Chest pain when you breathe or cough
 - Shortness of breath
10. Write any two preventive measures for pneumonia.
 - Good hygiene
 - Keeping your immunity system strong

ABOUT PPHF

PPHF is a non-profit organisation that works towards transforming lives for improved health and wellbeing through locally- driven solutions.

PPHF works closely with communities and key actors on sustainable solutions for public health challenges. These include :

1. Women, Adolescent and Child health
2. Non-Communicable Diseases
3. Nutrition
4. Infectious diseases- T.B, Malaria, COVID-19
5. Environmental Health

We focus on building public health capacity and community actions for better health outcomes. We work collaboratively with stakeholders, leveraging partnerships and influencing policies and practices.

Contributor:

People To People Health Foundation

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