Provincial Training of Trainers

Strengthening MNCH by Improving Routine EPI Microplanning in Khyber Pakhtunkhwa

18th – 20th, February 2021

Serena Hotel, Islamabad

Pakistan

Contents

Acronyms

BHU	Basic Health Unit
CD	Civil Dispensaries
DHQH	District Headquarter Hospital
DHO	District Health Officer
GHD	Global Health Development
EMPHNET	Eastern Mediterranean Public Health Network
EPI	Expanded Programme on Immunization
EPIMIS	Expanded Programme on Immunization Management Information System
HCC	Health Care Commission
HF	Health Facility
HF	Health Foundaton
LHS	Lady Health Supervisors
LHV	Lady Health Visitor
LHW	Lady Health Workers
PPP	Public Private Partnership
RHC	Rural Health Center
THQH	Tehsil Headquarter Hospital
SDG	Sustainable Development Goals SD/FR
SD/FR	Sub-Division / Frontier Region
UC	Union Council
UCMO	Union Council Medical Officer
VPD	Vaccine Preventable Disease

Provincial Training of Trainers

Background

The province of Khyber Pakhtunkhwa (KP) has a population of 35.53 million[2], and is divided into seven divisions: Bannu, Dera Ismail Khan, Hazara, Kohat, Malakand, Mardan and Peshawar. Each division is further divided into districts and there are 35 districts in the entire province. Moreover, the seven Federally Administered Tribal Areas (FATA): Bajaur, Khyber, Kurrum, Orakzai, Mohmand, North Waziristan and South Waziristan have also been included as Khyber Pakhtunkhwa Merged Districts (KPTD) in the province.

EPI Indicator[1]	KP	Urban	Rural
All basic vaccinations (age 12-23months) (BCG, three doses of DPT-HepB-Hib (Pentavalent), three doses of oral polio vaccine (excluding polio vaccine given at birth), and one dose of measles)	**54.7**	**75.5**	**50.6**
All age-appropriate vaccinations (12-23months) (BCG, three doses of DPT-HepB-Hib, four doses of oral polio vaccine, one dose of inactivated polio vaccine, three doses of pneumococcal vaccine, and one dose of measles)	**37.1**	**48.3**	**34.8**
All age-appropriate vaccinations (24-35months) (BCG, three doses of DPT-HepB-Hib, four doses of oral polio vaccine, one dose of inactivated polio vaccine, three doses of pneumococcal vaccine, and two doses of measles, mumps and rubella)	**23.1**	**36.1**	**20.5**

The overall health indicators of the KP province are compromised due to double burden of communicable and non-communicable diseases, superimposed with challenges of inaccessibility, weak health system, high out-of-pocket expenditure, security issues, natural calamities like flash floods, heavy snow prone mountainous areas and precarious health condition of children and mother.

The Department of Health, Khyber Pakhtunkhwa effectively and efficiently contributes towards Sustainable Development Goals (SDG) by adopting various measures to achieve Universal Health Coverage.

The child health interventions are mainly planned at the grassroot level with community participation and stakeholder's engagement. Continued efforts for universal immunization of under five children against vaccine-preventable diseases is one of the best practices contributing towards preventing

1 PDHS 2017-18

[2] Pakistan Bureau of Statistics http://www.pbs.gov.pk

neonatal, infant and child mortality. The access to each child is ensured by using the Reaching Every District (RED) Strategy. However, the Routine EPI service delivery, yet need an intensive support to address common obstacles to increase immunization coverage such as sub-optimal microplanning for immunization service delivery in remote districts, low quality and unreliable service, inadequate monitoring, and supervision of health workers.

In this regard, to enhance the integrated health system strengthening and monitoring, the Department of Health with support of Khuddi Research & Development, jointly organized three days of provincial training of trainers from 15th – 17th February 2021 at Serena Hotel, Islamabad. The DGHS KP requested KHUDDI R&D to include 10 directors at the provincial level for improved monitoring and supportive supervision. The letter is attached herewith as annex 1. The DGHS invited training participants, comprised of district EPI Coordinators, district LHW Coordinators and Directors from DGHS office. The letter of invitation and list of participants is attached herewith as annex 2.

Methodology

A mixed training methodology was used during the entire training of trainers. It was mainly comprised of interactive discussions, brainstorming, experience sharing of the participants, group work and presentations by the participants. The interest and active participation of the participants was ensured by interactive discussions and sharing district experiences by each participant.

Day I – 18th Feb 2021

Inaugural session

The three days TOT was formally started with the recitation from the Holy Quran followed by the introduction of the participants by Dr. Poonam Durdana, Snr. Technical Advisor for the project.

Dr. Poonum Durdana, KHUDDI R&D welcomed the participants and thanked Dr. Ikramullah Khan, Director Public Health, DGHS Khyber Pakhtunkhwa for his presence on behalf of Director General Health, Khyber Pakhtunkhwa. She also thanked Dr. Baqir Hussain Jafri, Medical Officer HSS WHO Pakistan for his presence. She appreciated the support of DGHS and assured that KHUDDI R&D is committed to maternal and child health interventions and look forward to a long-term collaborative partnership with Department of Health, Khyber Pakhtunkhwa.

Dr. Ikramullah, Director Public Health, Director General Health Services, Khyber Pakhtunkhwa, in his inaugural remarks thanked KHUDDI RESEARCH & DEVELOPMENT for the capacity building support for the province and welcomed all the participants. He stressed upon the significance of integration of EPI and LHW program for strengthening routine EPI. He further added that to achieve universal health coverage (UHC) an integrated and multi-sectorial approach for health systems strengthening is required. Therefore, such an integrated model for EPI and LHW program for strengthening of routine EPI will strengthen resilient immunization health systems capable of providing quality UHC and thus reach every district and every child across populations. While concluding his inaugural remarks he wished best of luck to the participants for capacity building activity during the next three days and ensured complete support from DGHS office in strengthening of routine EPI and other public health interventions at the district level.

Dr. Mohannad Al Nasour, Executive Director KHUDDI RESEARCH & DEVELOPMENT shared vote of thanks and appreciated the support provided by Dr. Muhammad Niaz, Director General Health Services, Khyber Pakhtunkhwa for the project. He reiterated that KHUDDI R&D is committed to strengthen routine immunization in Khyber Pakhtunkhwa, Pakistan and look forward to collaborative partnerships to strengthen routine immunization.

Session 1: Introduction to routine immunization and role of health workers

The first technical session was commenced by Dr. Poonam Durdana, Snr. Technical Advisor for the project. She explained the agenda and the detailed objectives of the training of trainers with the participants. The objective of the project supported by KHUDDI RESEARCH & DEVELOPMENT was elaborated and the role of master trainers during the district cascade training was explained.

The various cadres of health workers involved in immunization program at the district level was discussed and the following were identified by the participants while brainstorming session.

1. District health officer (DHO)
2. District EPI Coordinator
3. District LHW Coordinator
4. District Gynecologist
5. Union Council Medical Officer (UCMO)
6. Women Medical Officer (WMO)
7. Lady Health Visitor (LHV)
8. Lady Health Supervisor (LHS)
9. Lady Health Worker (LHW)
10. Community based volunteers (CBV)
11. Community influencers

The participants discussed the pivotal role of health workers. It varies from his/her involvement in planning for the immunization session, managing the logistics, cold chain maintenance, quality assurance during immunization process, preparation and conducting immunization session at fixed EPI centre and during outreach, effective communication with caregivers, accurate vaccine record keeping, defaulter tracing, reporting on vaccine consumption, capacity building of community health workers and coordination with supervisor and district health management team.

During the interactive session participants identified the roles, res possibilities, and importance of involvement of LHS and LHWs in the immunization program to achieve the targets of each EPI center.

The importance of immunization and its role in vaccine preventable disease morbidity and mortality was discussed.

Its multifold benefits were described by the participants, as the prevention of disease and disabilities at one hand while also considered it as the opportunity for a healthier and a more productive life for the individuals and communities.

The presentation is attached herewith as annex 3.

Session 2: Involvement of LHWs in Routine EPI, KP

Dr. Baqir Ali Naqvi, Medical Officer HSS WHO Pakistan, presented the background that Expanded Program on Immunization (EPI) was launched in Pakistan in 1978 and it became one of the key components of the accelerated health program in 1983. The program was evaluated and commended by an international commission in 1984 - 5. The 1999 assessment of the EPI concluded that in Pakistan the routine childhood immunization is very low and recommended involvement of primary health care workers e.g. Lady Health Workers for demand creation. It elaborated that LHW involvement in routine EPI will address the constraints due to socio-cultural norms due to which women in rural and conservative communities do not allow male vaccinators for vaccination, especially for the TT injections.

Consequently, series of meetings were conducted at national and provincial level to involve LHWs in routine EPI. A policy agreement was reached between National Programme and the EPI regarding involvement of LHWs in routine EPI and as per suggestion of PPIU KP, it was agreed to pilot the activity throughout country.

The presentation is attached herewith as annex 4, batch 2.

Session 3: a. Routine immunization plans at health facility
b. Basics information for Routine immunization plans development
c. Planning for immunization session

Dr. Fauzia Tariq, Public Health Consultant commenced the session and highlighted the significance of high-risk populations and access to marginalized communities by effective microplanning. During the

brainstorming, participants identified the following items which must be considered prior to developing the actual micro-plan:

1. Catchment area
2. Actual eligible target population
3. Unvaccinated target population
4. Newborn details
5. Birth registration
6. Number and places of defaulters in the community
7. Immunization trends during the previous quarter and past six months
8. High risk areas/populations
9. Hard to reach areas
10. Inaccessible areas
11. Unserved or underserved areas
12. Urban populations
13. Internally displaced populations
14. Seasonal migrants
15. Nomads
16. Residents in industrial township
17. Areas with shortage of health workers
18. Number of additional staffing required
19. Updated maps of the catchment area
20. Logistic and supplies details
21. VPD surveillance data
22. Social mobilization activities
23. Stakeholder analysis
24. Presence of any refusals and barriers to immunization
25. Transportation requirements to reach remote areas
26. Supervision and monitoring
27. Recording and reporting tools

She elaborated on the identified above items and emphasized on the significance of each to develop an effective micro plan. The definition of catchment area and concept of social mapping was discussed with the participants.She requested participants to share the various types of immunization sessions that are essentially required for planning purposes. The participants listed the following:

1. Fixed
2. Outreach
3. Mobile teams

She elaborated that while planning for each type of the session the number of targeted, socio-economic, and socio-cultural situation of the population, remote and hard to reach areas and number of staffing required and budgetary requirement must be calculated.

Dr. Fauzia discussed the method of calculation of the number of vaccinations per year according to the national immunization schedule. She assigned the task to each participant that to make calculations based on their target population of one health facility. The participants successfully calculated the targets.

The presentations are attached herewith as annex 5a, 5b, 5c.

Session 4: Health Systems Strengthening for Routine EPI

Prof. Dr. Zia-ul-Haq, Vice Chancellor, Dean Faculty of Public Health & Social Sciences, Khyber Medical University Peshawar Khyber Pakhtunkhwa shared his presentation, and the session was facilitated by Dr. Poonam Durdana, Snr. Technical Advisor for the project.

The family medicine and family practice approach for health system conceptual framework were shared. It was elaborated that various challenges exist due to political commitment, high out of pocket expenditure, lack of financial protection mechanisms, health workforce related constraints, un-regulated private health sector, accessibility issues to avail essential health service package, complex emergencies, etc. In order to improve access to quality health services the involvement of community frontline workers, LHWs, CHWs, outreach team etc is crucial to address various challenges which exist in the field and are experienced during implementation of immunization programs.

The presentation is attached herewith as annex 6, batch 2.

Day II - 19th Feb 2021

Session 5: a. Indicators, monitoring and data for action
b. Defaulter tracing

Dr. Mirza Amir Baig, Technical Coordinator FELTP/CDC brainstormed and discussed about the definition of surveillance, its types and its significance. The participants responses were noted as follows:

1. Data collection
2. Used for analysis purposes
3. Data required for policy and planning
4. Monitoring
5. Observe disease trends
6. Used for research
7. Note health seeking behaviors in communities

The definition of public health surveillance was shared that it is a mechanism that public health agencies use to monitor the health of their communities. Its purpose is to provide a factual basis from which agencies can appropriately set priorities, plan programs, and take action to promote and protect the public's health.

The various tools used for recording of immunization data at various levels were listed as follows by the participants.

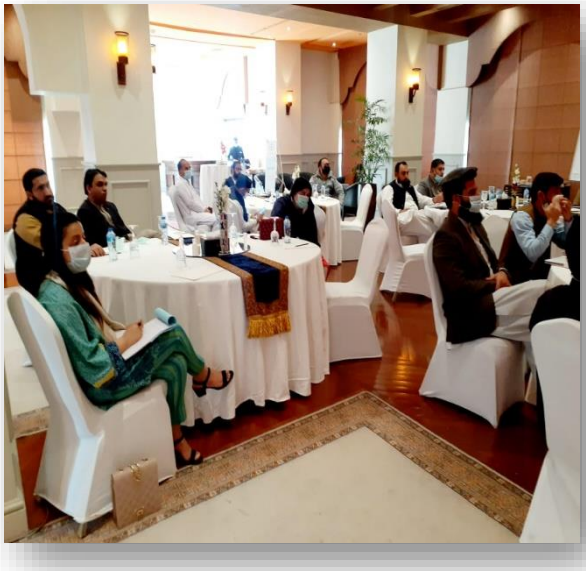
1. Immunization card
2. Stock register
3. EPI register
4. Tally sheet.
5. Vaccine temperature monitoring chart
6. Defaulter register

The participants were asked to list the problems related to their respective

districts, which are identified during the monitoring and might be the immunization barriers in achieving the targets of immunization program.

The key problems identified were as follows and were discussed in detail.

1. High risk and remote populations
2. Lack of proper mechanism of birth registration
3. Vaccine stock-out
4. Lack of awareness about importance of immunization
5. Socio-cultural factors
6. Inadequate number of female vaccinators
7. Timings of the EPI center in health facility
8. Lack of motivation for health seeking behavior
9. Poor follow-up on vaccination schedule



The presentation is attached herewith as annex 7a.

Session 6: Supply management

Dr. Poonam Durdana, Snr. Technical Advisor for the project shared the types of vaccines required for immunization program, vaccine wastage and the importance of appropriate planning and monitoring to avoid vaccine shortage and stock-outs. The role of EPI staff in cold chain maintenance was also elaborated.

It was discussed that while making estimates for annual vaccine needs the key elements to be considered are:

1. Size of the target population
2. Previous consumption levels
3. Size of immunization sessions.

The participants were distributed in 3 groups and advised to estimate vaccine requirement based on a sample size of 50,000 target population, annual vaccine needs and to also calculate vaccine wastage factor if the wastage rate is 30%.

Each group presented the work and shared the calculations.

The presentation is attached herewith as annex 8.

Session 7: Infection Prevention and Control for Immunization during COVID-19 pandemic

Dr. Mudassar, Medical Officer, Field Epidemiology and Surveillance Division NIH brainstormed abut importance of infection prevention and control measures and the participants listed following:

1. Prevent spread of infection
2. Part of health system strengthening
3. Critical for quality health service delivery
4. Early detection of infection results in isolation and prevent further spread
5. Immediate testing and referral of the infected case, if required
6. Adoption of early precautions and preventive measures

The main elements of standard precautions were discussed, five moments of hand hygiene were shared and a video was displayed on technique of hand hygiene and proper hand washing.

The importance of personal protective equipment (PPE) was elaborated. It was discussed that standard precautions must be used for all patient care regardless of their known or suspected infectious status. It reduces the risk of exposure to potentially infectious microorganisms in body fluids. If appropriately practiced, it will improve the standard of care for all patients rather than focusing special attention on fewer number of patients with identified infections/infectious diseases.

The national IPC guidelines and brochure on hand washing technique, developed by Mo/NHSR&C Pakistan were distributed among the participants.

Participants were asked to list infection prevention at immunization

delivery point and review the session plans based on IPC guidelines.

The groups listed the following prevention at vaccination delivery point:

- Well-ventilated room
- Preferably outdoor
- Physical distancing
- Adequate distance between chairs
- Hand sanitizer
- Wash basin for hand washing
- Screen persons with cough and other flu like symptoms

The presentation is attached herewith as annex 9.

Session 8: Situation analysis & Immunization barriers

Dr. Poonam Durdana, Snr. Technical Advisor for the project shared the template developed for the situation analysis of the districts. It comprised of the following:

1. District profile
2. PHC facilities and human resource
3. Names of UCs with less then 80% PENTA III coverage
4. Name of EPI facilities with respective cumulative (Jan-Dec 2020) population target and PENTA III coverage
5. Total number of LHWs
    a. No. trained in routine EPI
    b. No. of untrained LHWs
    c. No. of LHWs attached to each health facility
6. Total number of LHS attached with each health facility

It was agreed that all the district level information will be filled in the provided template. However, later it was agreed that due to other prior commitment for the district level activities and specifically COVID vaccination, the situation analysis reports of the following districts will be shared along with the report of district level cascade training.

The draft situation analysis reports of the twenty districts are attached herewith as 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.7, 10.8, 10.9, 10.10, 10.11, 10.12, 10.13, 10.14, 10.15, 10.16, 10.17, 10.18, 10.19, 10,20, respectively.

1. Abbottabad
2. Bannu

3. D I Khan
4. Dir Upper
5. Hangu
6. Karak
7. Kohistan Lower
8. Kohistan Upper
9. Kolai Palas
10. Manshera
11. Mardan
12. Peshawar
13. Swabi
14. Swat
15. Torghar
16. Malakand
17. Kohat
18. Chitral
19. Battagram
20. Haripur

The presentation on immunization barrier is attached herewith as annex 10.a.

Session 9: Action plan for district cascade training

Dr. Poonam Durdana, Snr. Technical Advisor for the project shared the template for action plan for district cascade training.

The participants were requested to fill in the template and submit it on the last day of the training.

1. Abbottabad
2. Bannu
3. D I Khan
4. Dir Upper
5. Hangu
6. Karak
7. Kohistan Lower
8. Kohistan Upper
9. Kolai Palas
10. Manshera
11. Mardan
12. Peshawar
13. Swabi
14. Swat
15. Torghar
16. Malakand
17. Kohat

18. Chitral
19. Battagram
20. Haripur

The filled-in templates are attached herewith as 11.1, 11.2, 11.3, 11.4, 11.5, 11.6, 11.7, 11.8, 11.9, 11.10, 11.11, 11.12, 11.13, 11.14, 11.15, 11.16, 11.17, 11.18, 11.19, 11,20, respectively.

Day III - 20th Feb 2021

Session 10 : Adult Learning

Dr. Poonam Durdana, Snr. Technical Advisor for the project explained the three main domains of learning. Participants were requested to share the best adult learning experience and mostly the interactive and participatory approach as a training methodology was identified and appreciated by the participants.

The andragogy vs pedagogy table was displayed, and participants were requested to brainstorm. The following responses were recorded:

	Pedagogy	Andragogy
The Learner	▪ Teacher responsibility ▪ Dependent on teacher assessment	▪ Self-learning ▪ Self-assessment
Role of the learner's experience	▪ Main teaching is by the instructor ▪ Learner role is minimal in terms of his/her experience	▪ Rich experiences of learners ▪ Diverse experiences promote learning
Readiness to learn	▪ The learner follows the syllabus and curriculum as designed by the teacher	▪ Mainly is like SWOT analysis where learner can evaluate his/her strengths and weakness. It can utilize the best opportunities while assessing the possible threats during the learning process.
Orientation to learning	▪ Teacher explains it according to the subject	▪ More of experiential learning
Motivation to learning	▪ Competition for grades	▪ Self-motivation

The presentation is attached herewith as annex 12.

Session 11: Role of private health care providers in routine EPI

Dr. Maqsood Ali Khan, Chief Executive Officer Health Care Commission, Khyber Pakhtunkhwa explained that KPHCC Act promulgated in January 2015 and board of commissioners were appointed in August 2015. The commission became fully functional in April 2016. He further shared that jurisdiction of HCC applies to all public and private health sector facilities in KP.

KPHCC is determined to make provisions for the improvement, access, equity, and quality of healthcare services in the province, and, to ban/eradicate quackery in all its forms and manifestations and to provide for ancillary matters.

As per section 6(2.d) of KPHCC Act 2015, KPHCC has the following role in EPI program in the province.

1. Play technical and advisory role to support the registered and licensed health care establishments on EPI program.
2. Play educative role through electronic and print media.
3. Convene seminars, conferences, and meetings on developing awareness about EPI Program.

The presentation is attached herewith as annex 13.

Session 12: Role of Health Foundation in improving health care service delivery for integrated routine EPI

Dr. Janbaz Afridi, Managing Director Health Foundation explained that Khyber Pakhtunkhwa Health Foundation was established under ACT-VI of Provincial Assembly Khyber Pakhtunkhwa on 13th December 1995 and started its function in January 1996. Its mandate was revised through Health Foundation Act in 2016, with few more amendments in 2017.

According to Health Foundation Act, it is to promote and enable the development of innovative health care delivery models to achieve policy objectives of Government of Khyber Pakhtunkhwa to improve coverage through various means of Public Private Partnership (PPP) for health care delivery services. He further added that PPP refers to a contractual arrangement between public (national, state, provincial, or local) and private entities through which the skills, assets, and/or financial resources of each of the public and private sectors are allocated in a complementary manner, thereby sharing the risks and rewards, to seek to provide optimal service delivery and good value to citizens.

Health Foundation, Khyber Pakhtunkhwa can contribute in improving health care delivery for integrated routine EPI by establishing public private partnership models in high risk union councils of the province and thus operationalizing the under-served public sector health facilities.

The presentation is attached herewith as annex 14.

Concluding remarks

Dr. Niaz Muhmmad, Director General Health Services, Khyber Pakhtunkhwa, in his concluding remarks congratulated participants on completion of 3 days ToT. and expressed his confidence that the master trainers will impart district level workshops in their respective districts and will ensure integration of LHW program and routine EPI to achieve immunization targets in UCs with low coverage.

The DGHS thanked KHUDDI R&D for the capacity building support for the province and welcomed all the participants. He stressed upon the significance of integration of EPI and LHW program for strengthening routine EPI. He further added that to achieve universal health coverage (UHC) an

integrated and multi-sectorial approach for health systems strengthening is required. Therefore, such an integrated model for EPI and LHW program for strengthening of routine EPI will strengthen resilient immunization health systems capable of providing quality UHC and thus reach every district and every child across populations. While concluding his inaugural remarks he wished best of luck to the participants for capacity building activity during the next three days and ensured complete support from DGHS office in strengthening of routine EPI and other public health interventions at the district level. The DG It was the great successful event which ended in preparing the 20 master trainers fully equipped with training skills.

Dr. Janbaz Afridi, Managing Director, Health Foundation shared that Pakistan EPI program is making the best efforts with an approach to reach every child and every district. The role of public private partnership is pivotal and that integration of EPI and LHW program will result in concerted efforts by lady health workers (LHWs), who work at the grassroots level to promote healthy behaviors and provide basic health services for both female and male children, without any discrimination.

Dr. Maqsood Ali Khan, Chief Executive Health Care Commission, Khyber Pakhtunkhwa congratulated the participants. He expressed that such diverse capacity building opportunity in which the district participants are able to interact with the national level public health experts and also learnt about the initiatives in KP is commendable.

Dr. Muhammad Akram Shah, National Program Manager, EPI Pakistan during his closing remarks appreciated the capacity building support of KHUDDI R&D to strengthen routine EPI in Khyber Pakhtunkhwa province. He expressed that integration of LHW program and routine EPI might be able to address the challenges which are related to community engagement at the grass root level and associated demand creation for immunization services health service this system. He shared that collective effort from district, provincial, national, and global stakeholders is required for improving the immunization status of Pakistani children, global health security and thus achieve sustainable development goals. He congratulated the master trainers and expressed his confidence that capacity building of district staff involved in immunization activities as well as of the LHW program will further strengthen the efforts to strengthen routine EPI.

Vote of thanks

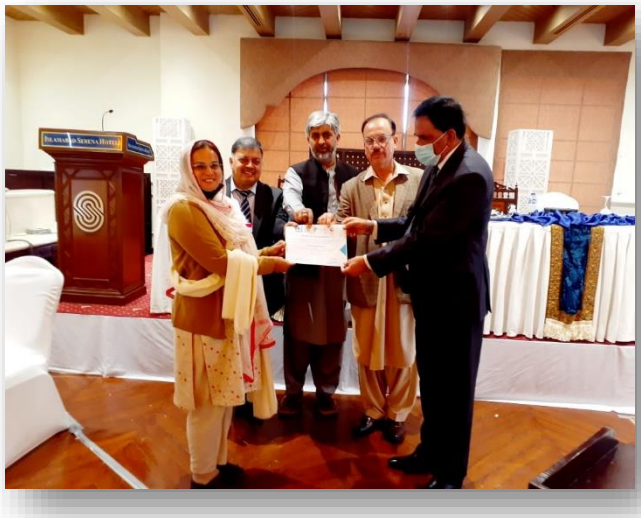
Dr. Poonum Durdana, Founder & CEO KHUDDI R&D congratulated all the participants on successful completion of the 3 days training of trainers on strengthening of routine EPI. She also thanked facilitators for taking time out from their committed schedule. She expressed her gratitude for the DGHS support and guidance and shared that KHUDDI R&D is committed to contribute to the capacity

building opportunities in child health and look forward to a long term partnership with Department of Health, Khyber Pakhtunkhwa.

Certificate distribution ceremony

Dr. Poonam Durdana, Founder & CEO Khuddi R&D presented flowers to the honorable guests. The ToT completion certificates, and the facilitator certificates were distributed by Dr. Niaz Muhammad, Director General Health Services Khyber Pakhtunkhwa, Dr. Akram Shah, National EPI Program Manager, Mo/NHSR&C, Dr. Maqsood Ali Khan, Chief Executive Officer Health

Care Commission and Dr. Janbaz Afridi, Managing



Director Health Foundation, Khyber Pakhtunkhwa.

KEY

Pre-Test – Post-Test

Training of Trainers for Strengthening of Routine EPI Microplanning, Khyber Pakhtunkhwa

The pre and post-test were administered prior and post sessions of the training of trainers to assess the knowledge of the participants regarding routine EPI. The responses were recorded anonymously, and the results are attached as annex 16.

Please encircle/tick the correct response/s

1. **Active immunity is acquired when?**
    a. Person get vaccination
    b. Person own immune system is stimulated to produce antigen specific antibodies and immune cells
    c. Person is suffering from chronic disease
    d. Person is re-infected with the disease
    e. All of the above

2. **The EPI program beneficiaries are:**
    a. Children under 5
    b. Children under 15
    c. Pregnant and lactating women only
    d. Women of childbearing age
    e. All of the above

3. **Situation analysis for microplanning involves:**
    a. Knowledge about eligible populations
    b. Past immunization trends
    c. Updated catchment area maps
    d. Population data
    e. All of the above

4. **Migratory populations include:**
    a. Temporary harvesters
    b. Construction labourers in large construction
    c. Nomadic sites

d. Internally displaced populations
e. Refugees
f. All of the above

5. Catchment area is:

a. Geographical area being served
b. Villages and communities covered under fixed sites
c. Outreach sites mobile
d. Eligible populations in the village
e. All of the above

6. The micro-map is developed in consultation with:

a. Concerned community members
b. Potential stakeholders
c. Police authorities
d. Deputy Commissioner Office
e. All of the above

7. ADS in EPI stands for:

a. Auto Disable Syringe
b. Auto Disease Surveillance
c. Autoimmune Disease Syndrome
d. Acute Distress Syndrome
e. All of the above

8. AEFI is abbreviation of

a. Acute Events Following Investigations
b. Acute Events Following Immunization
c. Adverse Events Following Immunization
d. Adverse Events Following Investigations
e. All of the above

9. UHC stands for:

a. Universal Housing Scheme
b. Universal Health Company
c. Universal Health Coverage
d. Universal Human Cure
e. All of the above

10. HSS stands for:

a. Health System Strengthening
b. Health System Services
c. Health Services System

d. Health Services Strengthening
e. All of the above

Results Batch 2

Pre-Test – Post-Test

Training of Trainers for Strengthening of Routine EPI Microplanning, Khyber Pakhtunkhwa

The pre and post-test were administered prior and post sessions of the training of trainers to assess the knowledge of second batch of participants regarding routine EPI. The responses were recorded anonymously, and results are as follows.

1. Active immunity is acquired when?

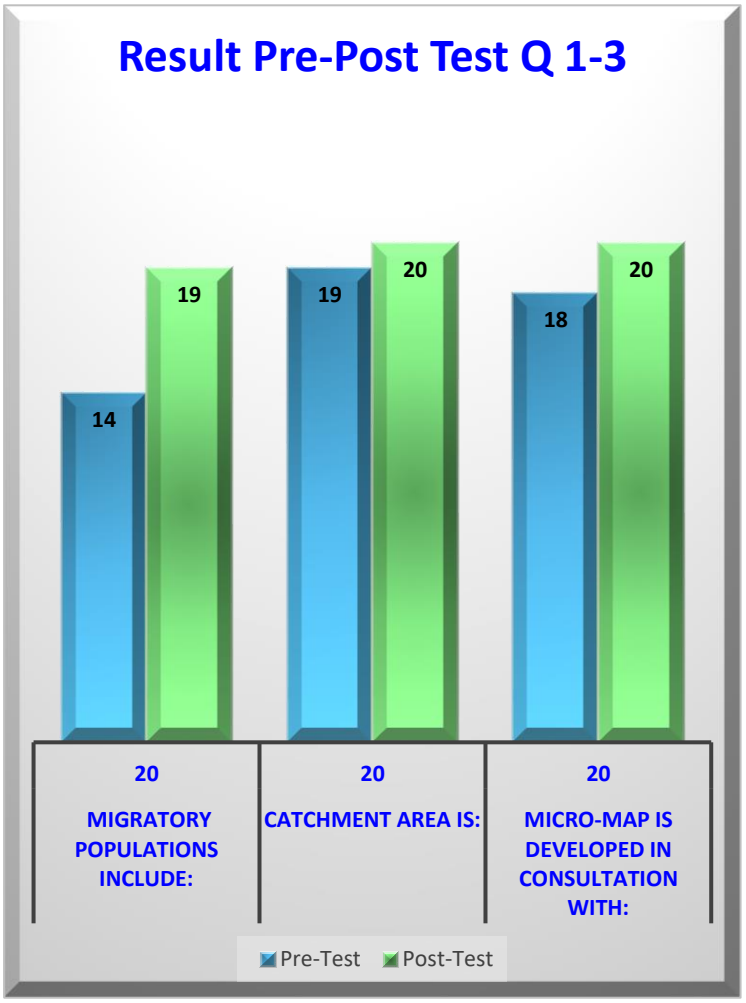
a. Person get vaccination
b. Person own immune system is stimulated to produce antigen specific antibodies and immune cells
c. Person is suffering from chronic disease
d. Person is re-infected with the disease
e. All of the above

2. The EPI program beneficiaries are:

a. Children under 5
b. Children under 15
c. Pregnant and lactating women only
d. Women of childbearing age
e. All of the above

3. Situation analysis for microplanning involves:

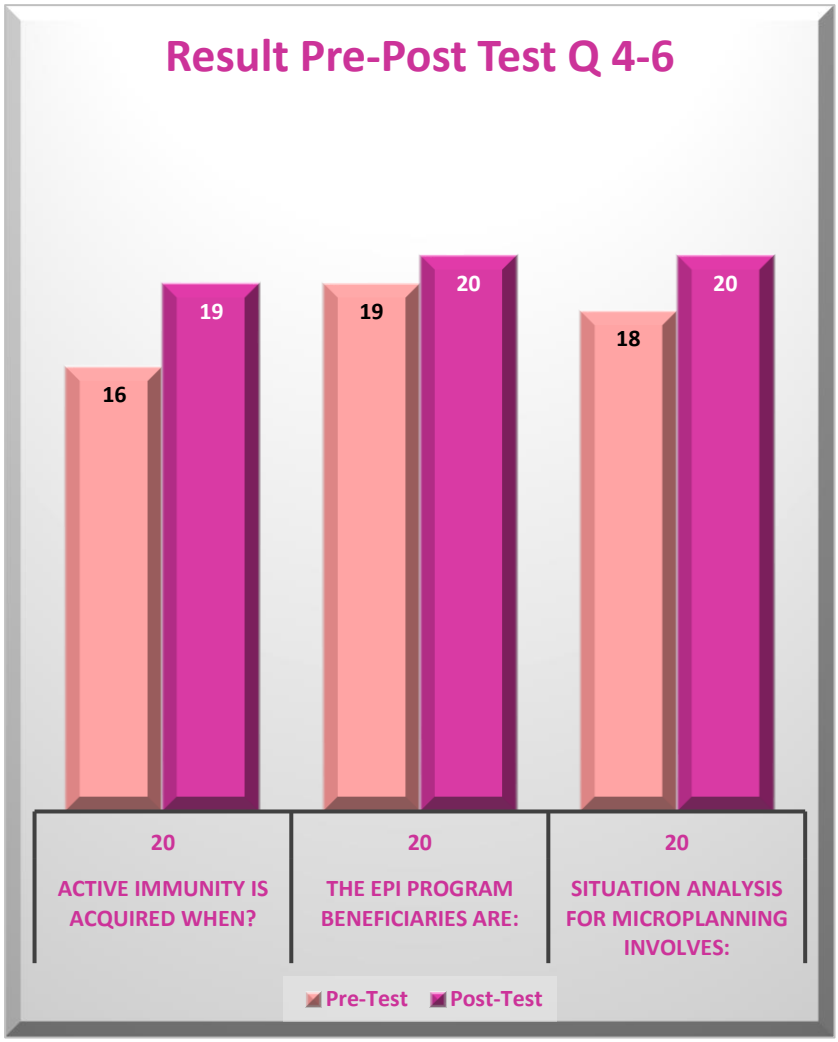
a. Knowledge about eligible populations
b. Past immunization trends
c. Updated catchment area maps
d. Population data
e. All of the above



4. **Migratory populations include:**
    a. Temporary harvesters
    b. Construction labourers in large construction
    c. Nomadic sites
    d. Internally displaced populations
    e. Refugees
    f. All of the above

5. **Catchment area is:**
    a. Geographical area being served
    b. Villages and communities covered under fixed sites
    c. Outreach sites mobile
    d. Eligible populations in the village
    e. All of the above

6. **The micro-map is developed in consultation with:**
    a. Concerned community members
    b. Potential stakeholders
    c. Police authorities
    d. Deputy Commissioner Office
    e. All of the above



7. **ADS in EPI stands for:**
    a. Auto Disable Syringe
    b. Auto Disease Surveillance
    c. Autoimmune Disease Syndrome
    d. Acute Distress Syndrome
    e. All of the above

8. **AEFI is abbreviation of:**
    a. Acute Events Following Investigations
    b. Acute Events Following Immunization
    c. Adverse Events Following Immunization
    d. Adverse Events Following Investigations

e. All of the above

9. UHC stands for:

a. Universal Housing Scheme
b. Universal Health Company
c. Universal Health Coverage
d. Universal Human Cure
e. All of the above

10. HSS stands for:

a. Health System Strengthening
b. Health System Services
c. Health Services System
d. Health Services Strengthening
e. All of the above