Introduction

Trust for Vaccines & Immunization (TVI) is a Non-profit organization and its mission is to assess and fulfill the immunization needs of the population and to fight against Vaccine Preventable Diseases in Pakistan. The Vaccine Indicator and Reminder Band Community Engagement Intervention objective is to strengthen routine immunization and improve vaccination timeliness and completion among infants. The intervention uses a two prong approach to achieve its objectives firstly by distributing VIR bands which remind parents/caretakers when it is time to take their child to the vaccination center. Secondly by engaging parents, community members and healthcare workers increase demand for vaccines and to promote the importance of vaccination timeliness and completion among children. The VIR band is an innovation by a Pakistani, Dr. Noor Sabah Rakhshani.

Key Messages

- In Pakistan, Vaccine Preventable Diseases are a major cause of child mortality.
- Timely and complete vaccination is a proven and effective intervention to reduce child mortality and disability.
- The Expanded Program on Immunization (EPI) Pakistan is striving to achieve Universal Coverage and provide all vaccines Free of Cost.
- Ensuring Children are Vaccinated is Everyone’s Responsibility: The State, Healthcare System, Community and Parents Must Do their Share to Better the Health of All Children.
- Children not getting vaccinated, either due to parental compliance or lack of access is a violation of their right to health and exposing them to death and disability from vaccine preventable diseases.

Timely Completion of the Six Visits Schedule: Parents want the best for the health of their children but at times they are unable to vaccinate their children on time and or forget to complete all the six visits.

Role of VIR Band: Facilitating Vaccination Timeliness and Completion
VIR band: How it Works

- VIR Band is an easy method for reminding parents when their child vaccination visit is due.
- It is secured on the ankle of the child and serves as a visual clue for the entire family.
- The VIR band is made of silicon and has a band and chamber containing the timestrip. Inside the chamber is a blister containing vegetable based dye; pressing the blister releases the dye thus activating the VIR band. The red dye progresses on the white timestrip at a specific rate to fill whole window in exactly 6 or 4 weeks.
- 1st VIR Band (Yellow Band) is issued by the healthcare staff at the vaccination center after administration of BCG vaccine. The window in the VIR band turns red in exactly 6 weeks and reminds parents of the second round of vaccines. BCG vaccine should be given soon after the birth.
- 2nd VIR Band (Purple Band) is issued after administration of Penta-I Vaccine (2nd visit). The window in the Purple VIR band turns red in exactly 4 weeks and reminds parents of the third round of vaccines. Penta-II vaccine is administered at 6 weeks of age.
- 3rd VIR band (Aqua Band) is issued after administration of Penta-II Vaccine (3rd visit). The window in the Aqua VIR band also turns red in exactly 4 weeks and reminds parents of the fourth round of vaccines. Penta-II vaccine is administered at 10 weeks of age.
- Penta-III vaccine is administered at 14 weeks of age.
- Once the child has received Pent-III vaccine he/she is given a unique ID number which can be used any time to access the digital immunization record of the child.

Upon completion of four rounds of vaccines a child is protected against 9 Vaccine Preventable Diseases namely TB, Polio, Diphtheria, Pertussis, Tetanus, Hepatitis B, Hib Meningitis, Pneumococcal Infection (Pneumonia, Bacteremia and Meningitis) and Rota Virus.

Measles vaccine first dose is administered at 9 months of age and booster does at 15 months of age thus completing the routine immunization schedule and protecting children from 10 deadly diseases.
First Time: Right After Birth
- **Vaccine**: BCG
- **Disease**: Childhood TB
- **OPV Drops**: Polio
- **Vaccine Administration Site**: Yellow VIR Band
- **Injection in Right Arm and Oral Drops**

Second Time: Six Weeks of Age (One and half Months)
- **Vaccine**: Penta-valent I
- **Disease**: Diphtheria, Pertussis, Tetanus, Hepatitis B and Hib Meningitis
- **OPV I**: Polio
- **PCV I**: Pneumococcal Disease
- **Rota I**: Rota Virus
- **Vaccine Administration Site**: Purple VIR Band
- **Injections in Right and Left Thighs and Oral Drops**
### Third Time

- **Vaccine**: Penta-valent II
- **Disease**: Diphtheria, Pertussis, Tetanus, Hepatitis B and Hib Meningitis
- **OPV II**: Polio
- **PCV II**: Pneumonia
- **Rota II**: Rota Virus

**Process of Vaccine Administration**: Aqua VIR Band

- **Injections**: In Right and Left Thighs and Oral Drops

### Forth Time

- **Vaccine**: Penta-valent III
- **Disease**: Diphtheria, Pertussis, Tetanus, Hepatitis B and Hib Meningitis
- **OPV III**: Polio
- **PCV III**: Pneumonia
- **Rota III**: Rota Virus

**Injectable Polio Vaccine (IPV)**

**Process of Vaccine Administration**: Oral Drops

- **Injections**: In Right and Left Thighs and Oral Drops

### Fifth Time

- **Measles I**: Right at the age of 9 Months

**Injection in left arm**

### Sixth Time

- **Measles II (Booster)**: Right at the age of 15 Months

**Injection in left arm**
Take your child immediately to the vaccination center for the first dose of vaccination and secure Vaccine Indicator and Reminder (VIR) Band.

Your second visit for vaccination will be due when the window in the yellow VIR band turns red.

You always bring your child to the vaccination center on time. Now bring your child to the vaccination center when the window in Aqua VIR band turns red.

Well done! You brought your child for vaccination on time. Now your third visit for vaccination will be due when the window in this purple VIR band turns red.

VIR band: How it Works
Let’s go! It’s time to visit the vaccination center for second dose of routine vaccination as window in yellow VIR band turned red.

Congratulations! The initial vaccination of your child has been completed on time due to VIR band, exactly within 14 weeks.

Sir, keep this card in a safe place for the remaining two doses of measles immunization.

Identification and Details of VIR Band

- **At Birth’ Yellow Band**
  - Band Locking System
  - Silicon Band
  - Starting Point of Dye
  - Duration of Dye
  - Time strip
  - Holes to Adjust VIR Band on Child’s ankle

- **06 Weeks’ Purple Band**
  - Band Locking System
  - Silicon Band
  - Starting Point of Dye
  - End point of Dye
  - Time strip
  - Holes to Adjust VIR Band on Child’s ankle

- **10 Weeks’ Aqua Band**
  - Band Locking System
  - Silicon Band
  - Starting Point of Dye
  - End point of Dye
  - Time strip
  - Holes to Adjust VIR Band on Child’s ankle
Benefits of VIR Band

The VIR Band has already passed through several stages of testing to ensure its safety and effectiveness.

The dye used in the VIR Band is made of natural ingredients and safe even if it comes in contact with the infant's skin or ingested.

VIR Band is resistant to damage from water, oil and dust.

Paper-based immunization cards have no in-built reminder system but VIR Band gives visual clue to parents and caretakers to remind them when the vaccination dates are due.

Immunization records of children enrolled for VIR Band intervention are stored in a computerized database. VIR Band is approved by Government and Health Departments and is provided free of cost to the children visiting EPI vaccination centers.

Health is the Basic Right of Every Child and A Parental Responsibility

Vaccinate your child timely and completely and as prescribed by the doctor soon after birth up till 15 months of age.

Routine Immunization protects children from Ten (10) Vaccine Preventable Diseases of TB, Polio, Diphtheria, Pertussis, Tetanus, Hepatitis B, Hib Meningitis, Pneumococcal Infection (Pneumonia, Bacteremia and Meningitis), Rota Virus Diarrhea and Measles.

Timely and complete vaccination of children is important and makes their immune system stronger.

Ignoring child vaccination may be dangerous for health, life and future of the child.

If a child has low-grade fever then vaccinate as per Doctor's advice.

Hygienic environment may not be enough to prevent diseases so vaccination of a child is also necessary.