Parents and other caregivers play a critical role in determining children’s chances for survival and development, and they can empower children to become architects of their own lives.

Inequities in Early Childhood Development: What the data say, UNICEF 2012

Turkmenistan
Monitoring of bottlenecks and barriers for equitable results.

Improving skills of primary health care providers on early detection of child growth and development difficulties and family counselling.
Background

The quality of services directly contributes to important health outcomes. The effective Home Visitation system is an efficient channel of improving maternal and child health status, improving outcomes for children with developmental difficulties and supporting their families at the Primary Health Care (PHC) level. Small changes in screening and referral practices have the potential to greatly improve the effectiveness of developmental surveillance. This, in turn, has the potential to improve lifelong outcomes for children.

UNICEF has provided strategic technical and policy support to the Ministry of Health and Medical Industry in strengthening the quality of the primary health care services. As a result of this cooperation, in 2013 the “WHO Standards for child growth monitoring” were adapted into the national language and distributed nationwide to primary health care facilities. MOHMI and MCH experts also received practical knowledge on the Lot Quality Assurance Sampling (LQAS) methodology and learned about the possibilities of its application for the assessment of the quality of services at the PHC level during the workshop in Tashkent, Uzbekistan organized by the UNICEF Regional office for Central and Eastern Europe and the CIS.

However, there was a need to educate family health workers on new screening tools and parents of young children on ECD, prevention and management of cases on developmental difficulties in children. In 2014, UNICEF continued its support in strengthening the health care system in the area of maternal and child health, and introduction of new approaches for early detection of growth and development delays in young children to be able to timely initiate interventions and correct delays at the level of primary healthcare. The screening tool on the management and monitoring of child development (GMCD), developed by the Department of Pediatrics of the Medical University of Ankara, was adapted in the country, training module was designed. Total 365 family doctors, nurses and feldshers at pilot PHC facilities of Turkmenabad city and Sakar etrap of Lebap velayat and health house #3 of Ashgabat city underwent training on the use of screening tools for assessment of child growth and development difficulties. Three months later, quality of services provided by the trained medical personnel to population were assessed using LQAS sampling methodology.

Methodology

A technique involving a sample size (lot) of 19 was used to assess whether objectives and targets were achieved within a specified geographical area and unit of interest/indicator. The upper threshold is the coverage target (80%), which is the proportion of the health workers ought to provide quality services. The lower threshold (50%) is an unacceptably low level of coverage. Questionnaires’ and indicators were adopted from the standard tools of LQAS Household Surveys for Maternal, Newborn, and Child Health Programs.

The assessment was conducted following a training course on enhancing specific skills and directed at health care personnel ranging from family nurses to feldshers and family physicians. Interview took place with health professionals of 38 health facilities and 228 families with children under 5 years age (six families per selected facility, selection made using the list of children who recently visited the facility). Immediate on-site feedback and initial recommendations were provided to the local health department based on the hand tabulation results.

Equity Focus

- Rural (Sakar strap) and urban (Turkmenabad and Ashgabat cities) supervision areas with a “satisfactory” and areas with “unsatisfactory” performance indicators of ECD Programme implementation at PHC level were identified;
- The level of knowledge of parents on child care for children from 0-59 months in households assigned to the catchment area in rural Sakar etrap was determined;
- Facility and community levels data was generated and made available to the local health management to support evidence based planning and decision-making.
Key Findings

LQAS methodology provided grassroots information to measure whether an ECD Program’s modeling catchment area has reached performance targets. Despite the fact that all health workers (HW) in the assessed areas have received training, the results of this assessment identified high and low performing catchment areas in respect to several indicators.

**Box 1**

- Proportion of HWs who have reported that carried out health promotion activities in last 1 month on at least one of the key health messages
- Proportion on HWs who can state what advice should be given to a mother caring for a sick infant in the home
- Proportion of trained HWs who can state the five critical moments one should wash one’s hands
- Proportion of HWs who can state what are the current recommended infant and young child feeding practices
- Proportion of HWs who can perform quality growth monitoring

The substantial knowledge and practice gaps among PHC health workers of Lebap velayat identified in the domains related to the promotion of key health messages (box1), feeding of low birth weight infants, treatment and referral of sick children (boxes 2 and 3), including performance of weight and height measurements of children (box1).

In Lebap 40% of medical workers cannot name, at least, three reasons to send a sick child to a health facility (box3) and 35% do not know where to refer, if problems in child development are determined.

**Box 2**

- Proportion of HWs who know the recommended treatment for diarrhea
- Proportion of HWs who know the recommended management of a low birth weight infant

**Box 3**

- Proportion of HWs who can give 3 reasons to refer a sick child to a health facility
In addition, it has been an “eye opener” in identifying the priority areas for intervention such as hygiene promotion, diarrhea prevention and management. Although, hand washing universally promoted in all health and ECD interventions, the assessment has revealed that there is lack of focus on hand hygiene practices among health workers (box 1) and interviewed mothers (box 4) in both surveyed supervision areas.

Despite the fact that all households have water, soap and a designated place for hand washing, the proportion of mothers who do not know about when they should wash their hands is high (Ashgabat - 57%, Lebap region - 67%).

In Lebap 57% of mothers do not know, at least, the two danger signs of diarrhea; for danger signs of pneumonia the level of knowledge is even lower (29.8%).

The majority of mothers of children 9-59 months do not read books to their children (Ashgabad-62%, Lebap - 70%).

In addition, application of the GMCD Tool during the workshop, as well as the follow-up monitoring demonstrated the lack of attention to child stimulation by parents and caregivers (table 1).

### Table 1. Evaluation of child development using GMCD screening tool.

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Ashgabat</th>
<th>Lebap</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No delays</td>
<td>delay</td>
<td>No delay</td>
</tr>
<tr>
<td>Receptive language</td>
<td>99,9</td>
<td>0,1</td>
<td>92,1</td>
</tr>
<tr>
<td>Expressive language</td>
<td>82,2</td>
<td>17,8</td>
<td>84,6</td>
</tr>
<tr>
<td>Gross movements</td>
<td>87,5</td>
<td>12,5</td>
<td>92,1</td>
</tr>
<tr>
<td>Fine movements</td>
<td>80,2</td>
<td>19,8</td>
<td>90,3</td>
</tr>
<tr>
<td>Play</td>
<td>86,5</td>
<td>13,5</td>
<td>85,5</td>
</tr>
<tr>
<td>Making relations</td>
<td>81,1</td>
<td>18,2</td>
<td>85,5</td>
</tr>
<tr>
<td>Self-dependent actions</td>
<td>66,7</td>
<td>33,3</td>
<td>77,6</td>
</tr>
</tbody>
</table>

### Lessons Learned

- LQAS based assessment fits well within real time (L3) monitoring and UNICEF’s Monitoring Results for Equity System (MoRES) approach.
- The technical skills required to implement LQAS are simple and low cost, and velayat/health facility staff can acquire/adapt those.
- Taking into account that LQAS cannot answer the ‘why,’ it only indicates a problem in service delivery; the follow-up in-depth studies on low performing indicators have to be conducted.
Equal weight needs to be given to micro planning through dissemination of results and development of local operational action plans to address identified bottlenecks.

Conclusions and Recommendations

The primary health care providers should be watchful in identifying those children who require immediate assistance, further evaluation and referral. The lower threshold, which is an unacceptably low level of coverage, should provoke managers to identify the problem causing the failed service delivery and to resolve it with a focused investment of time and resources. Specifically:

- More attention need to be given to supervisory visits involving an observation of quality of services;
- Health workers identified as performing below standard should receive additional training through supportive supervision/coaching.
- Family health workers should be supplied with basic equipment essential for growth monitoring, updated guidelines and operationalize protocols for home visiting services.
- More attention should be paid to counselling skills of home visitors focusing on priority performance indicators and case management issues accordingly.
- Development and dissemination of informational materials for parents on early childhood development with recommendations on prevention and management of child growth and development disorders could provide guidance for better parenting and improve childcare.
- After the first monitoring, performance benchmarks for the next six months need to be established.
- The subsequent periodic LQAS assessments need to be recommended to local health managers as a routine activity in the district planning process to monitor improvements in performance.

In a long term, expanding use of GMCD tool into PHC practice could improve early identification of development delays and initiation of timely appropriate interventions. Expanding use of LQAS into every district could lead to improvements in the monitoring and evaluation of development outcomes by local authorities throughout the entire country.

Quality of care in early years is not an option; it is a must for survival and growth

Little girl Arzuw, 15 months old, is striving hard to make up for missed opportunities during her first year of life. Now she has managed to reach 7.5 kg, which is still on the margin of the shortage in weight. On her first birthday, she weighed half the weight of an average girl child at her age. Her physical growth and cognitive development noticeably fell behind.

Normally, during the first 12 months, infants undergo regular monitoring of health and developmental milestones with family physicians and other specialists. Parents are primary sources to flag up development challenges. Early detection of potential problems is vital for a child at this time. Delayed response means missed development opportunities.

Arzuw’s story resonates with many children whose families seek for meaningful counselling and referrals with regard to young child health and development at primary healthcare level. Lack of qualified paediatricians and primary healthcare providers remain one as of the bottlenecks. According to the recent evidence, performance and quality of primary healthcare services are impacted by high workload of frontline health workers. This reduces meaningful interaction with caregivers on essential practices about health

©UNICEF/Turkmenistan/2015/Dankov: Arzuw with her mother and specialist of the Early Intervention Centre play together
and development of young children. Primary health care providers experience knowledge and practice gaps with regard to promotion of key health messages, such as feeding of low birth weight infants, referral of sick children, including performance of weight and height measurements of children.

In fact, this inter-play of barriers at various levels has impeded Arzuw’s overall development and well-being. Prematurely born at 28 weeks of pregnancy with weight of 2.5 kg, Arzuw was already vulnerable to risk and required enhanced quality care and supportive environment. Her mother Abadan (26) has assumingly also experienced lack of supportive care and services ranging from her own health due to anaemia, timely and quality antenatal counselling, insufficient skills in child’s health and development complemented by cultural beliefs.

From birth, Arzuw suffered from multiple health conditions, including frequent diarrhea and colds because of weak immune system, which resulted in overmedication at the expense of the basic but critical care, such as exclusive breastfeeding and complementary feeding. Overmedicated Arzuw was taken to a traditional healer, locally known as “tebip”, who insisted that Arzuw’s mother stopped breastfeeding her when she was 6 month old because some harmful viruses passed to her body through breast milk. Cut off the breastmilk, Arzuw did not receive adequate solid food and was merely limited to the infant formula. Unfortunately, while talking to Arzuw’s mother, it looks like she is better aware of the long list of medications she undertook rather than basic development facts such as adequate nutrition, growth and learning. Combination of these factors caused Arzuw by the age of one to be extremely underweight and developmentally lagged behind her peers.

However, this story could have a sadder ending, if it had not been for Arzuw’s grandmother who learned about a newly opened Early Intervention Centre at the Mother and Child Health Clinic in Ashgabat and brought her in in December 2014. A small but enthusiastic team of paediatricians initiated the work of the centre, which operates nationally and provides services to families with children at risk or with developmental difficulties. At present, the Centre is a unique establishment to provide early detection and intervention services. Given the fact that the Centre is located at the national MCH centre, it has access to the data of children born with some risk factors such as prematurely born children or children with developmental challenges. This allows to monitor these children and work with their families to ensure children’s optimal development.

UNICEF extensively advocates and provides technical expertise to the Ministry of Health and Medical Industry to strengthen the quality of the healthcare system overall with strong focus on early child development. For the last three year, efforts have been put to introduce the concept of development paediatrics through exposure of the key decision makers to the best internal practices and capacity building. This included introduction of the models on early intervention services in Lithuania, Belarus, Russia, Turkey and home visitation in the United Kingdom.

In the future, the Centre will serve as a national resource to train specialists in development paediatrics and will attempt to scale up these services across the country. The specialists of the Centre have already provided training to the PHC specialists in early detection of developmental difficulties and use of WHO growth monitoring charts in the selected pilot regions. At the Early Intervention Centre, Arzuw started gaining weight, learning how to crawl, walk and enjoy exploring the world. This collective action will enable children such as Arzuw to achieve the best optimal development from birth.