

## Hospital IMCI – Improving Care for Children in Uzbekistan

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Doctors and nurses are working together in teams to provide high quality, evidence-based, medical care for sick young children in a friendly and efficient manner. With the help of the USAID-funded ZdravPlus Project this is what parents and caretakers of children in Ferghana Oblast, Uzbekistan, can now expect - not only from their Primary Health Care (PHC) doctor but also at all Central Rayon Hospitals (CRH).

### *Primary Health Care Links to the Hospital Level*

The previous ZdravPlus Project (2000-2005) trained rural PHC doctors in Ferghana Oblast in the techniques of the WHO's Integrated Management of Childhood Illnesses (IMCI) techniques. In contrast to Soviet-era medical practices, which focused on curative care and invasive, hospital-level treatments such as enemas for children suffering from diarrhea, the IMCI strategy calls for counseling the caretakers of young children and specifies simple treatments that may be given in the home. However, it became increasingly apparent that not including hospital doctors in the training was negatively impacting the implementation of IMCI by the rural doctors. This was partly because the higher-level staff did not understand the principles of IMCI, and therefore did not encourage the rural doctors to use it, at times even disparaging its use.

In addition, while IMCI is an incredibly useful tool for PHC level doctors, if their patients are severely ill with an acute respiratory infection (ARI), diarrhea, or any of the other conditions that the IMCI strategy addresses, they still need to visit a hospital. It is at this next step that children continued to receive unnecessary care and medicines, becoming even more ill and sometimes dying due to improper and outdated treatments. The World Health Organization had already recognized this as an issue with the publication of their manual 'Management of a Child with a Serious Illness or Severe Malnutrition', on which ZdravPlus based the training program.

### *The Training*

This Hospital IMCI training program, adapted to the Uzbek environment by ZdravPlus together with the Tashkent Pediatric Research Institute, Healthy Family Project and WHO, is a significant departure from the Soviet style lectures that most of

the pediatricians were used to. The training encourages group participation, and utilizes clinical cases, group work exercises, a DVD with multimedia clinical cases, Objective Structured Clinical Case examinations and real-life case scenarios. The first half of the training is spent in a classroom setting while the second half requires the doctors to put their new skills to use.

In a role-play scenario, the doctors go into the emergency room of the hospital and are split into 3 groups – parents of a patient, emergency room doctors, and observers. The parents visit the hospital and present the doctors with symptoms which the doctors must use their new training to address.

Besides giving the physicians practice with the trainers present, these practical skills sessions also bring attention to ways in which the hospitals themselves can better serve their patients. For instance, if the child in the clinical case scenario needs oxygen – is the oxygen tank easily accessible? If diazepam is the treatment of choice for convulsions, is it available in the department, or at least in the local pharmacy?

One participant commented that “this program helped us to systemize all our knowledge and skills”; another commented that “it is a great shame that after many years of practicing as a physician I have only now received such clear, practical teaching”.



## Results

*“We have been admitted to this hospital before, but what I noticed is that doctors prescribe fewer injections and drugs, so it is less costly and our child gets better” - mother of a 3 year old boy brought to Tashlak CRH with pneumonia*



For patients this training is already resulting in better, less invasive, and less costly care. In the case of this three year-old boy, it is likely that this child was taken by his parents to their family doctor who, having participated in a PHC level IMCI training course, was quickly able to recognize that the child's symptoms and signs were more serious than could be dealt with in her clinic, and advised urgent hospital admission.

On arrival at the emergency room, working as a team, the nurse would have brought in the notes and taken some initial measurements while the doctor quickly assessed the situation and began the appropriate treatment to immediately improve the child's condition – such as administering oxygen.

And, as this mother found out, one of the key aspects of the Hospital IMCI training was learning the use of evidence-based medical treatment, generally calling for fewer drugs and injections to be administered, which the hospital were now convinced was more effective than the 10-15 different types of sometimes unsafe drugs previously prescribed. This is particularly important in Uzbekistan where many patients are asked to provide their own medications.

Since the inception of this course, 18 trainers have been trained in Hospital IMCI and they have gone on to train 100 hospital pediatricians, covering every hospital in the Ferghana Oblast – a total of 15

pediatric facilities. In many facilities, the training, especially the hands-on practice, brought about immediate changes in care given to emergency pediatrics cases to bring medical treatment in line with WHO protocols. In many of the hospitals new and less expensive medications for treatment of ARIs are recommended, children with diarrhea are being treated without enemas, and patients with minor problems are being sent home after receiving counseling. At those hospitals implementing the changes, doctors agree that their patients are pleased that the costs of treatment are so significantly reduced.

## Beyond Clinical Care

As a result of the Quality Improvement principles embedded in the course, changes were made in the practice of emergency pediatrics at a number of sites where the course has been held. Such changes have included the provision of correct tubing and attachments for oxygen provision, and procurement of evidence-based medications (salbutamol, diazepam, chloramphenicol). One hospital team requested ZdravPlus to carry out a training course on counseling skills for their nurses, and as a result the nurses have designed “Health Corners” for prevalent conditions, and now educate their patients on how to self-manage some of them. These nurses report that some mothers are even bringing their husbands to make them listen to what is being said about nutrition, anemia, pregnancy, and other health topics.

In addition, when doctors compared the cost of the antibiotic they had been using (ceftriaxone) with that recommended by this course (chloramphenicol), they found that the savings would be more than 65 percent. Based on this evidence they are planning to start procuring the cheaper drugs using their hospital budget.

## Next Steps

The Uzbek government is now planning to use this initial pilot ZdravPlus training program as a basis for future courses to be funded through an Asian Development Bank health loan for 6 of the country's 13 regions. This would be a significant step forward for the hospitals of the country; it could also prove to be a substantial success for the WHO strategy in pediatric care and lifesaving for children all over Uzbekistan.

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