NICU and Neonatal Unit of Alzahra Teaching Hospital of Tabriz

The entire floor on level 1 of Alzahra teaching hospital of Tabriz is dedicated to obstetric and neonatal care, with a modern, purpose-built 60 bed neonatal facility. 30 NICU bed in a level 3 NICU and 30 Neonatal beds in neonatal ward. About 800 neonates per year are admitted to the Alzahra teaching hospital NICU and over 200 neonates receive Nasal CPAP and assisted ventilation annually. At Alzahra teaching hospital NICU infants will have the benefit of the latest advances in evidence-based treatments combined with extensive family support to help build early bonds, even for ill infants.

There is a strong emphasis on clinical research which is directly relevant to improving medical care for preterm or sick infants. Based on work carried out in the Alzahra teaching hospital Neonatal Unit, 15 articles have been accepted for publication in Europe, Asia and IRAN.
In addition, over 50 abstracts have been published based on scientific papers presented at various international and national conferences.

A postgraduate training program was established in 2009 for pediatricians who wish to work as neonatologists.

The Alzahra teaching hospital Neonatal Unit offers postgraduate training which is accredited by the Tabriz University of Medical Sciences to advanced trainees in Neonatal/Perinatal Medicine.

The Neonatal Critical Care Nursing Course has to date graduated over 24 specialists in neonatal nursing who are now working throughout national university of medical sciences and private hospitals.

Alzahra teaching hospital of Tabriz has a crucial role in Perinatal and neonatal regionalization program of east Azerbaijan province because it is the main Perinatal center for referring of high risk pregnancies and a leader for training of midwives and nursing staffs of other hospitals which contribute in maternal and neonatal care. A number of pediatrician and nursing staffs who work in other NICUs of east Azerbaijan province trained a Graduated Diploma of Neonatal Critical Care (for pediatricians) and Nursing (Neonatal Care) here.

The Alzahra teaching hospital Neonatal Unit has a strong Perinatal programme with close links to the Department of Obstetrics and Gynecology, Centre for Early Human Development and Institute for Reproduction and Development.

This hospital has been chosen as the core center of Perinatal Regionalization Program in East Azerbaijan province. Arrangement for Perinatal Regionalization Program in East Azarbayjan began in 2002 based on innovation of Dr. Heidarzadeh (Neonatalogist) and was supported by chancellor of Tabriz University of Medical science and the gynecology, health and pediatric departments. In 2004 Dr. Mohammad-bagher Hosseini associated with this organization and on the basis of practical experiences of this province, a global Perinatal Regionalization Program was arranged by MOHME of Iran and has notified to all medical universities.

Alzahra Teaching Hospital has been performing the under-mentioned activities from 2004 up to now:

- establishment coordination between level 1, 2 and 3 hospitals to transfer the mother and baby
- forming Perinatal consulting center in province for high-risk pregnancies
- training nurses and midwives to provide high-level service
- develop training programs for physicians and families, professionals and resident people in the area
- developing caring programs in main villages and around by health workers correlated with the project (with collaboration with the health deputy)

Applying the Perinatal Regionalization Program in East Azerbaycan province, the rate of pregnant women and Infant mortality has been reduced significantly over the past few years.
According to the statistics, the neonatal mortality rate in East Azerbaycan has been 11.81 per 1000 life births at 2005, the average rate in other places was 15 per 1000 life births.

In the light of the continuing efforts of NMR in East Azerbaijan province in 2011, this rate reached to 7.5 per1000; this figure of average rate of infant mortality is compared with 10.5 per 1000 in the country.

**Red line is the NMR in East Azerbajian province and the black one is NMR in country (Iran)**

**Neonatal Mortality Rate (NMR) in East Azerbajian (1998-2010)**

<table>
<thead>
<tr>
<th>Year</th>
<th>1998</th>
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<th>2002</th>
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<th>2004</th>
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<th>2007</th>
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<tbody>
<tr>
<td>NMR in Province</td>
<td>17.9</td>
<td>18.3</td>
<td>17.6</td>
<td>17.1</td>
<td>16.08</td>
<td>15.82</td>
<td>11.59</td>
<td>11.81</td>
<td>11.3</td>
<td>12.48</td>
<td>10.75</td>
<td>8.11</td>
<td>7.59</td>
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<tr>
<td>NMR in Country</td>
<td>17.9</td>
<td>18.3</td>
<td>18.1</td>
<td>17.39</td>
<td>17.66</td>
<td>16.87</td>
<td>16.43</td>
<td>14.64</td>
<td>15.54</td>
<td>13.33</td>
<td>12.53</td>
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</table>

**Alzahra teaching hospital** with cooperation of nursing and midwifery school and Perinatology and Neonatology department of university were playing a vital role in giving lessons to nursing and Midwifery students of neighboring countries such as Erbil, Soleimaneh
and Kirkuk of Kordish part of Iraq. (In 2005 and 2006 three separate groups of nursing students from Iraq learned about maternal and neonatal care in this hospital)

There was also 5 pediatric residents and 2 gynecology residents from Houlleier university of Erbil who worked there as visitor for about 2 weeks in 2006. Pediatric residents learned about respiratory care of preterm infants.

We plan to arrange several workshops with the title of "Toward safe pregnancy and reducing mortality of neonates" for neighboring countries with cooperation of "National Public Health Management Center" of Tabriz University of Medical Sciences which is NOW a collaborative center of WHO. (In 24 February 2013, National Public Health management Center has been designated as a WHO collaborating center for Training and Research on health management)

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3) Nursing Staffs:

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Staff of neonatal ward
Research programs undertaken in NICU and Neonatal unit

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