

**Review of Neonatal Death Audit Among Syrian
Refugees from Zaatari and Azraq Camps
April – October 2016
Supported By UNHCR**

**The Eastern Mediterranean Public Health Network –
EMPHNET**

October 2016

- Defined as any death that occurs in the first 28 days of life, currently account for approximately 44% of all deaths of children under 5 years of age in low and middle income countries. (UNHCR)
- Approximately three quarters of neonatal deaths occurs during the first week of life, our review showed that 79.3% of neonatal deaths occurred on the first week of life.

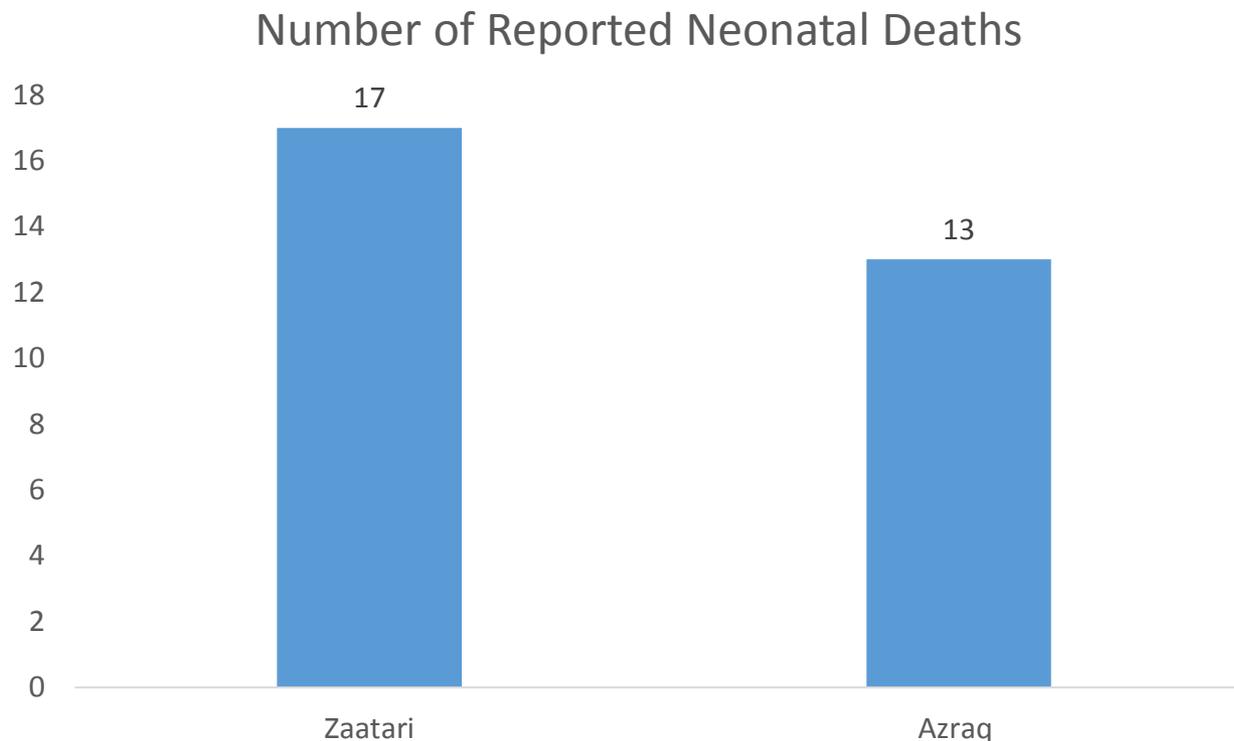
- Neonatal death audit is the process of systematically capturing information on the number and causes of all neonatal deaths and the potential avoidable factors linked to deaths, in order to affect change.
- These are conducted in a no-blame, interdisciplinary setting in order to improve the care provided to all mothers and babies.
- UNHCR Jordan approached EMPHNET to assist in conducting the neonatal mortality audits in conjunction with JHAS and other providers in Zaatri camp and IMC in Azraq camp.

- To have Periodic review meetings with all stakeholders about the findings of the audit and recommendations in a manner that is acceptable to all.
- To investigate possible causes of death/ and factors affecting the coverage and quality of babies care.
- To improve neonatal care in refugee camps and to prioritize action to save live of babies

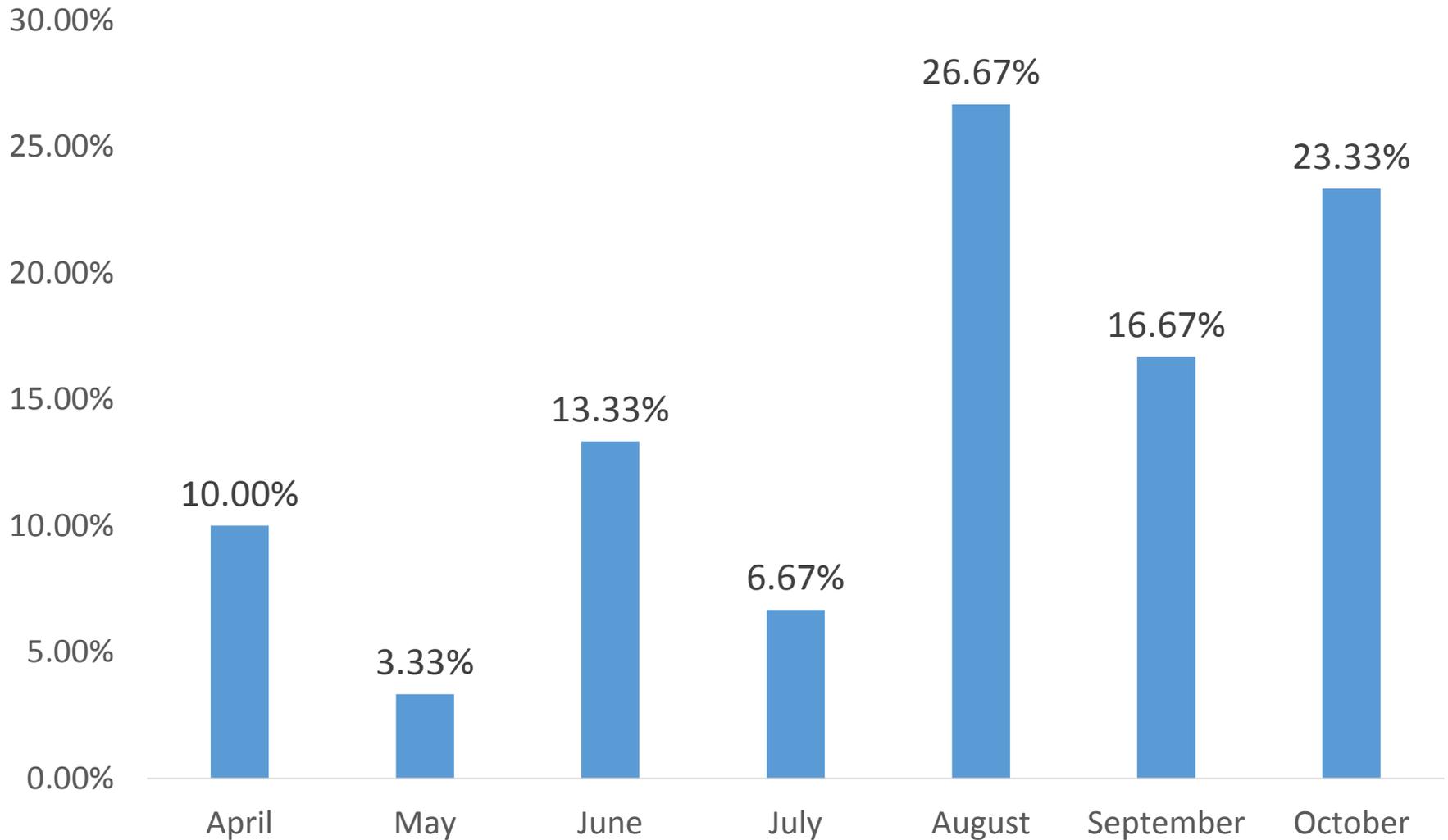
- A neonatal mortality cases are reported by JHAS in Zaatari Camp or IMC in Azraq Camp to EMPHNET.
- EMPHNET conducts interview with family members especially mother, review of antenatal records, review of delivery records, interviews with health facility staff, review of death certificates and referral hospital records, within 72 hours of death.
- UNHCR developed questionnaire to fill in the required information about neonatal death (age at death, place of death, gestational age, maternal age, birth weight, apgar score, maternal antenatal history, type of delivery, length of labor, symptoms/signs prior to death, treatment given, cause of death etc.)
- Medical records of the babies are reviewed
- Completed forms are submitted electronically to UNHCR.
- Data analysis is done on epi info 7

Findings

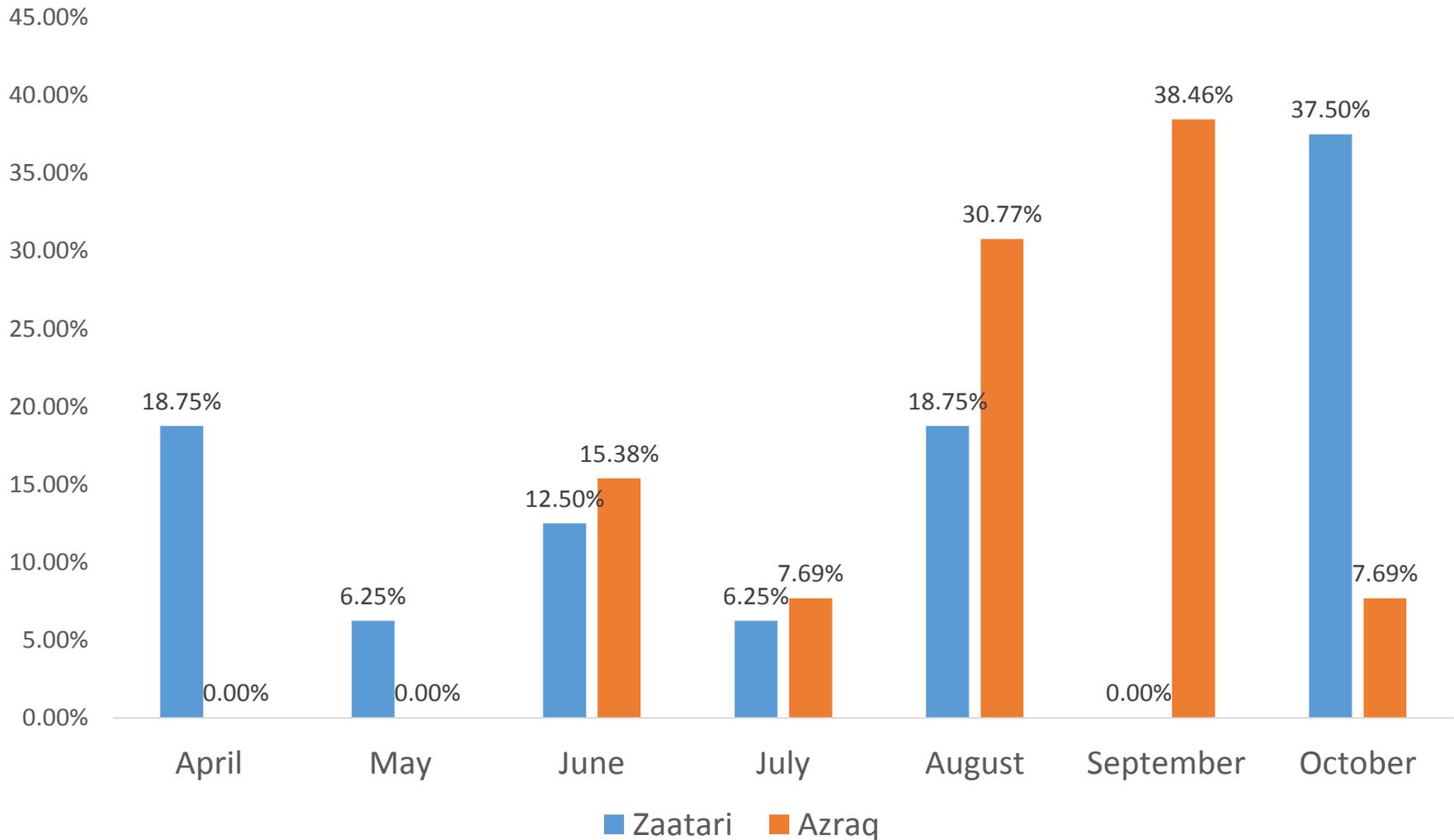
- A total of 30 neonatal deaths were reported From April – October 2016. one baby was excluded From Zaatari Camp because the mother was married and lived outside the camp. Hence, this baby was not included in the analysis.



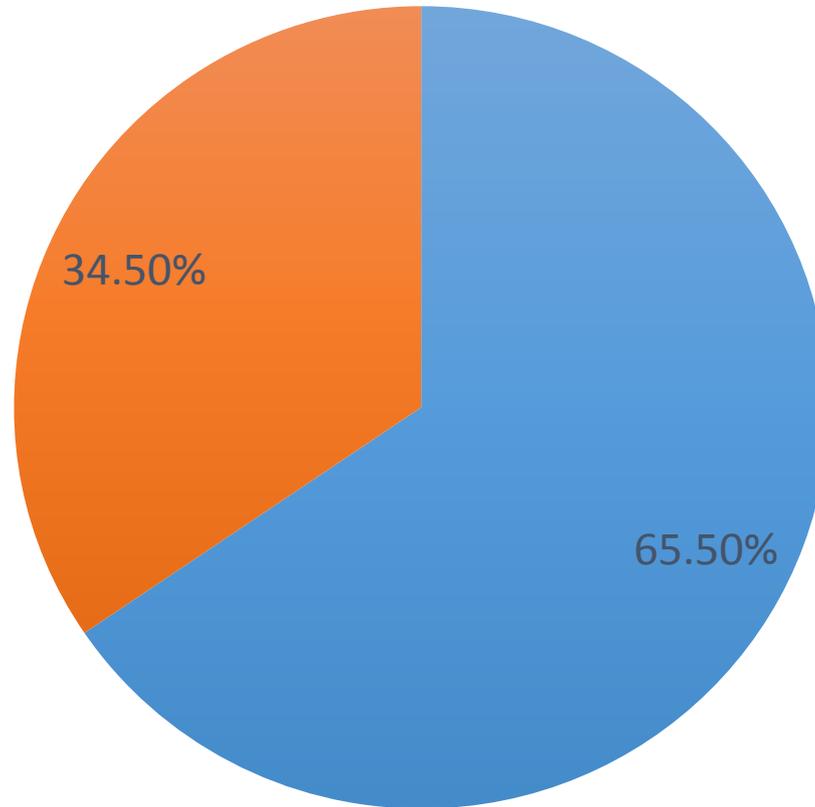
Distribution of Reported Cases Per Month



Distribution of Neonatal Deaths by Place and Month

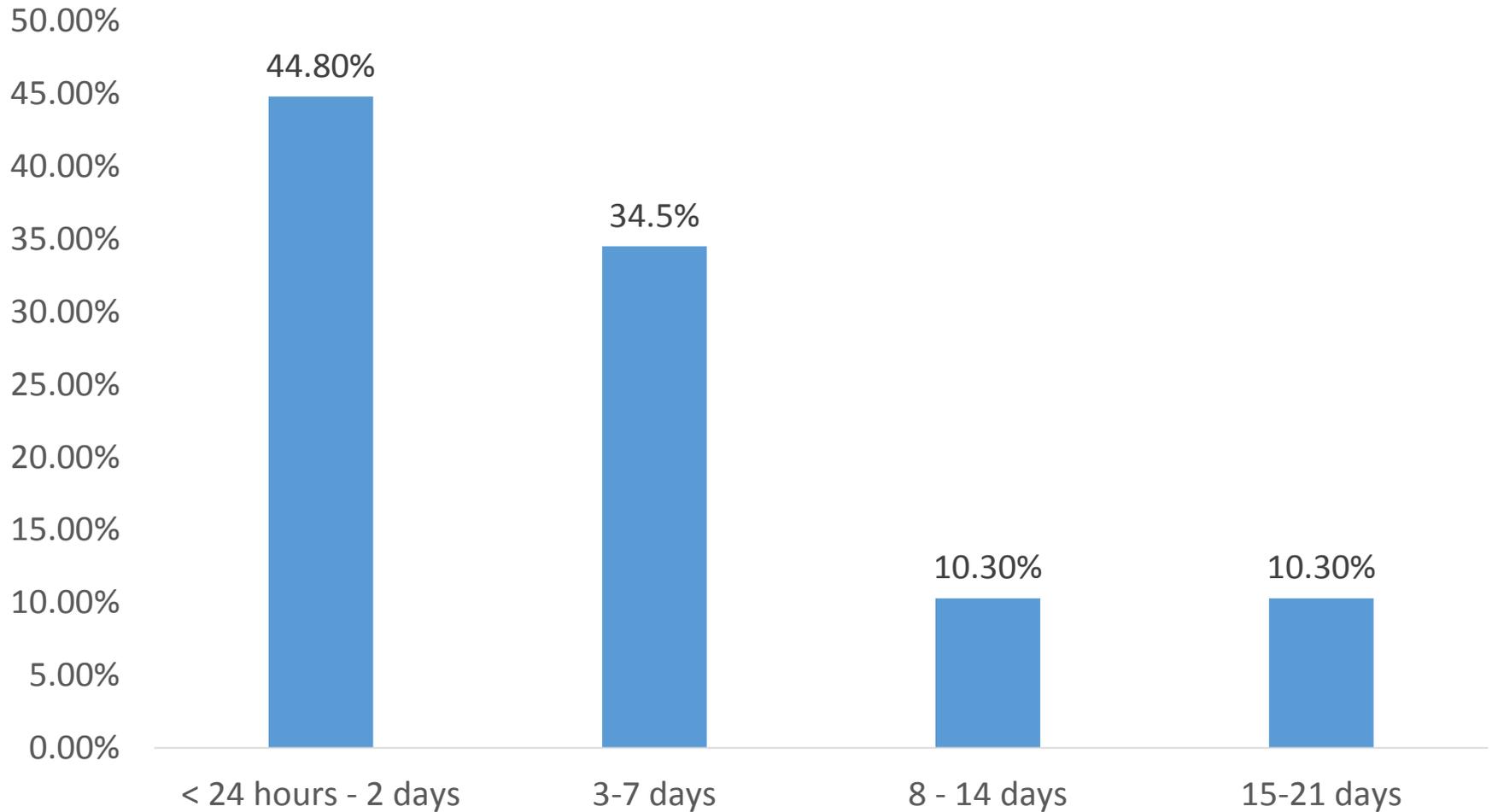


Distribution of Neonatal Deaths by Gender

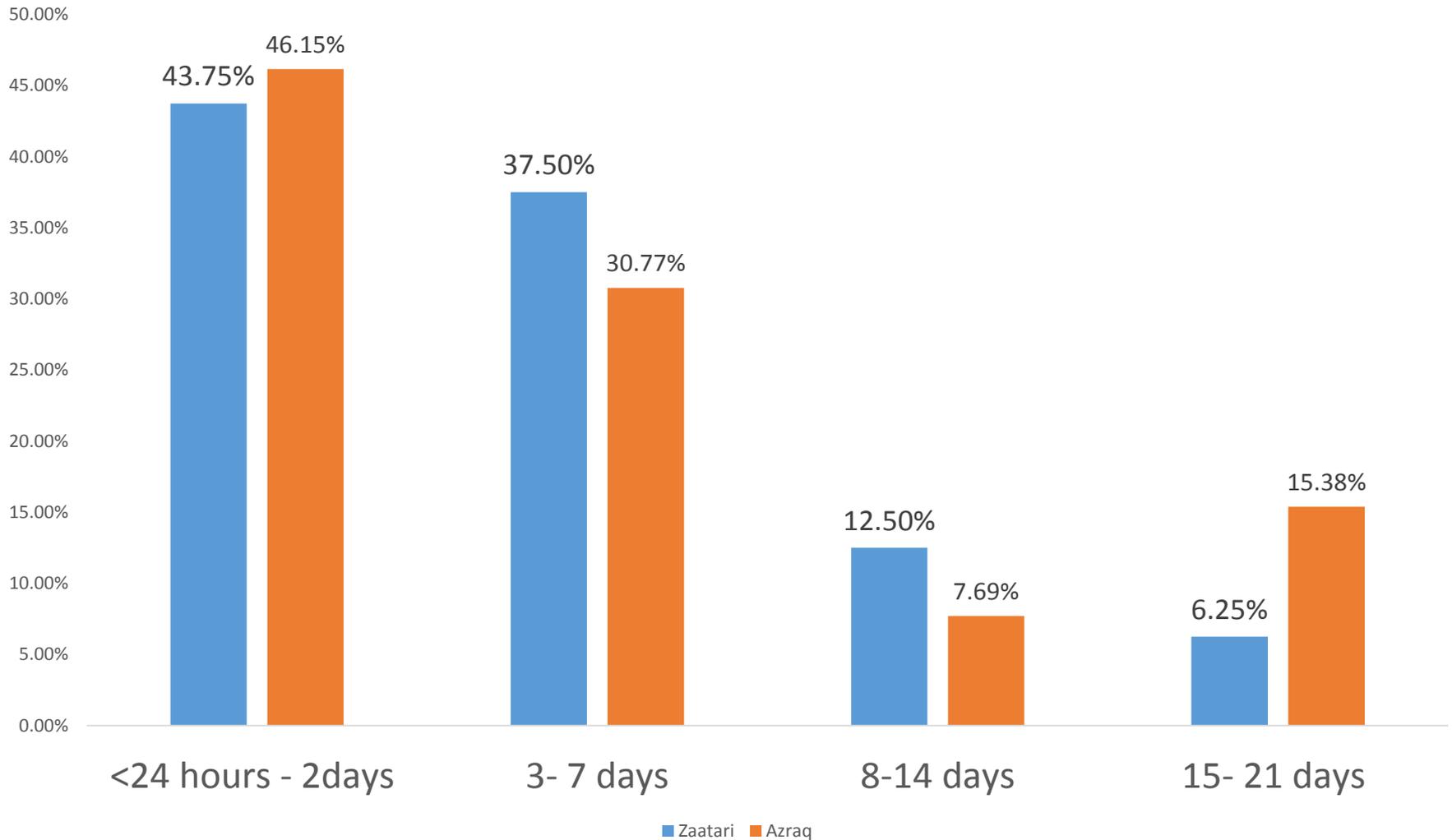


■ Male ■ Female

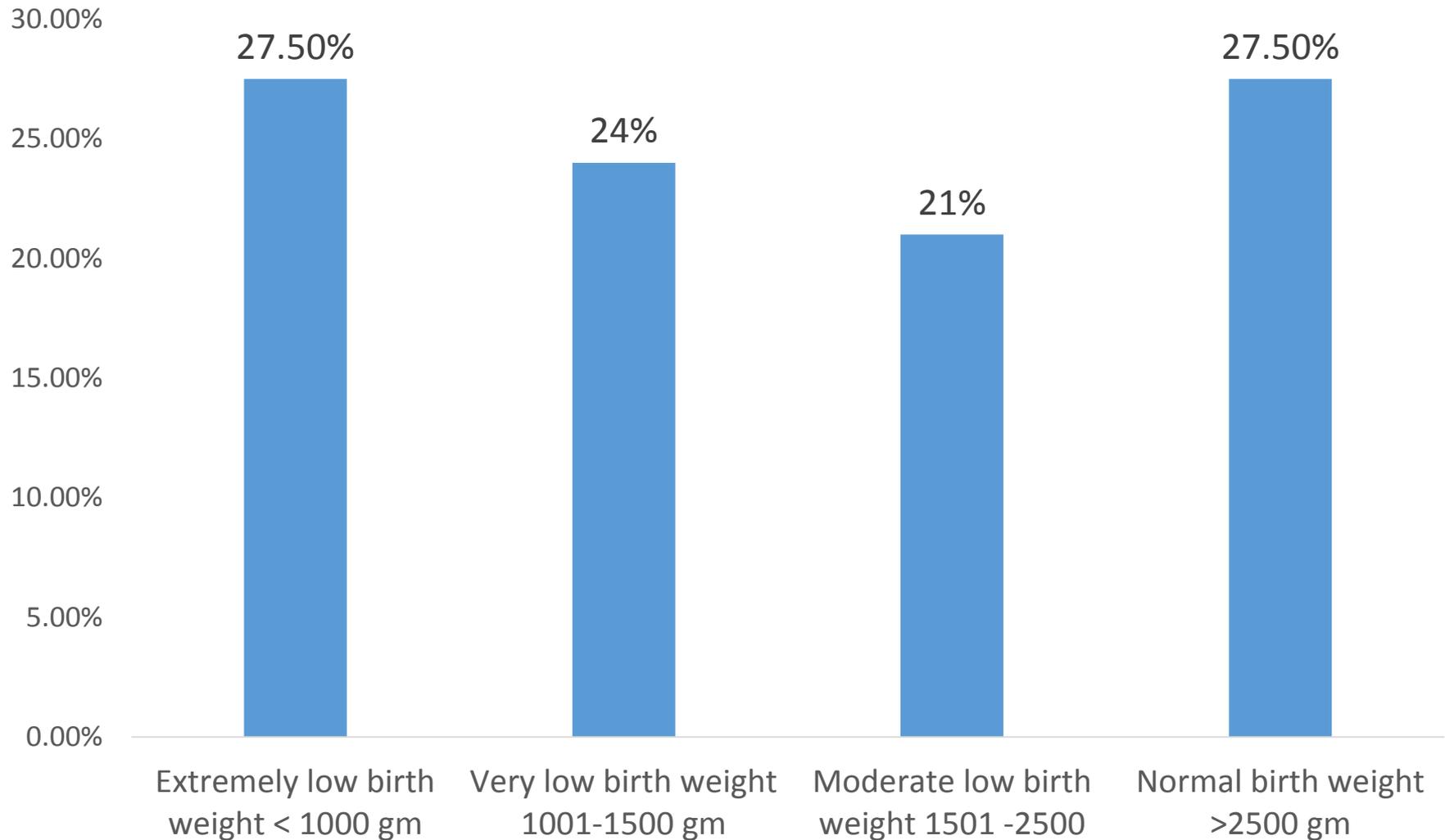
Age Distribution at time of Death



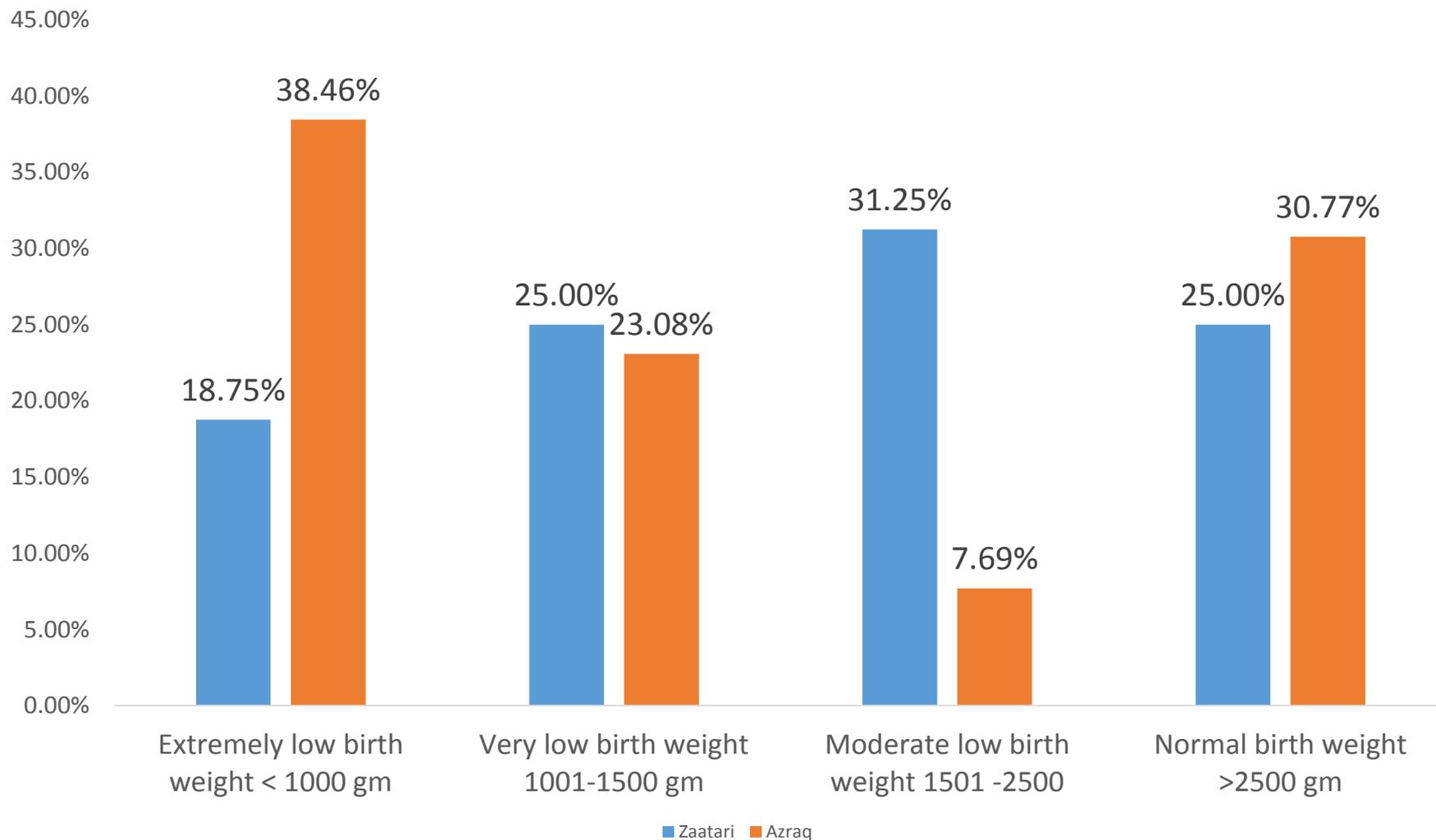
Age Distribution by time of Death and Place



Distribution of Neonatal Deaths by Classification of Birth weight

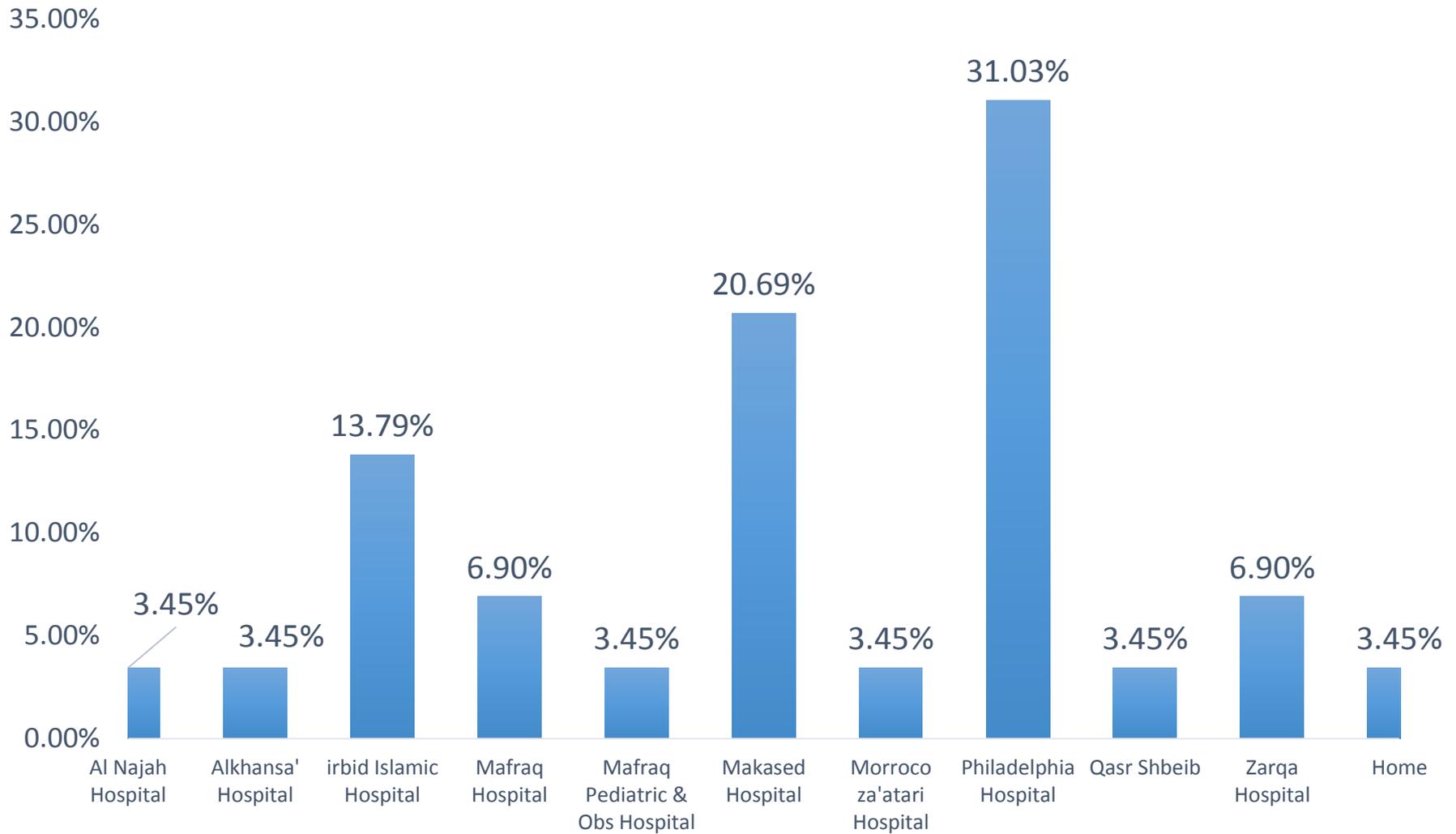


Percent Distribution of neonatal Deaths by Birth weight and Place



- Out of 29 women, five women delivered in the camps, the rest delivered in referral hospital
- 24 (83%) babies born in referral hospital and died in the same hospital (never came out).
- 19(65.5%) required Neonatal Resuscitation at time of delivery

The Place of Neonatal Death



Reasons for admissions

Reasons for admissions	Number	Percentage
Birth asphyxia	1	2.38%
Prematurity	15	35.71%
Fever	1	2.38%
Neonatal sepsis	1	2.38%
Low birth weight	9	21.43%
Congenital anomaly	2	4.76%
Jaundice	2	4.76%
Dyspnea	5	11.90%
severe PET mothers	2	4.76%
Flaccid and unresponsive	1	2.38%
meconium aspiration	1	2.38%
inguinal hernia	1	2.38%
Severe Abdominal Distension	1	2.38%
Total	42	2.38%

Intervention Provided

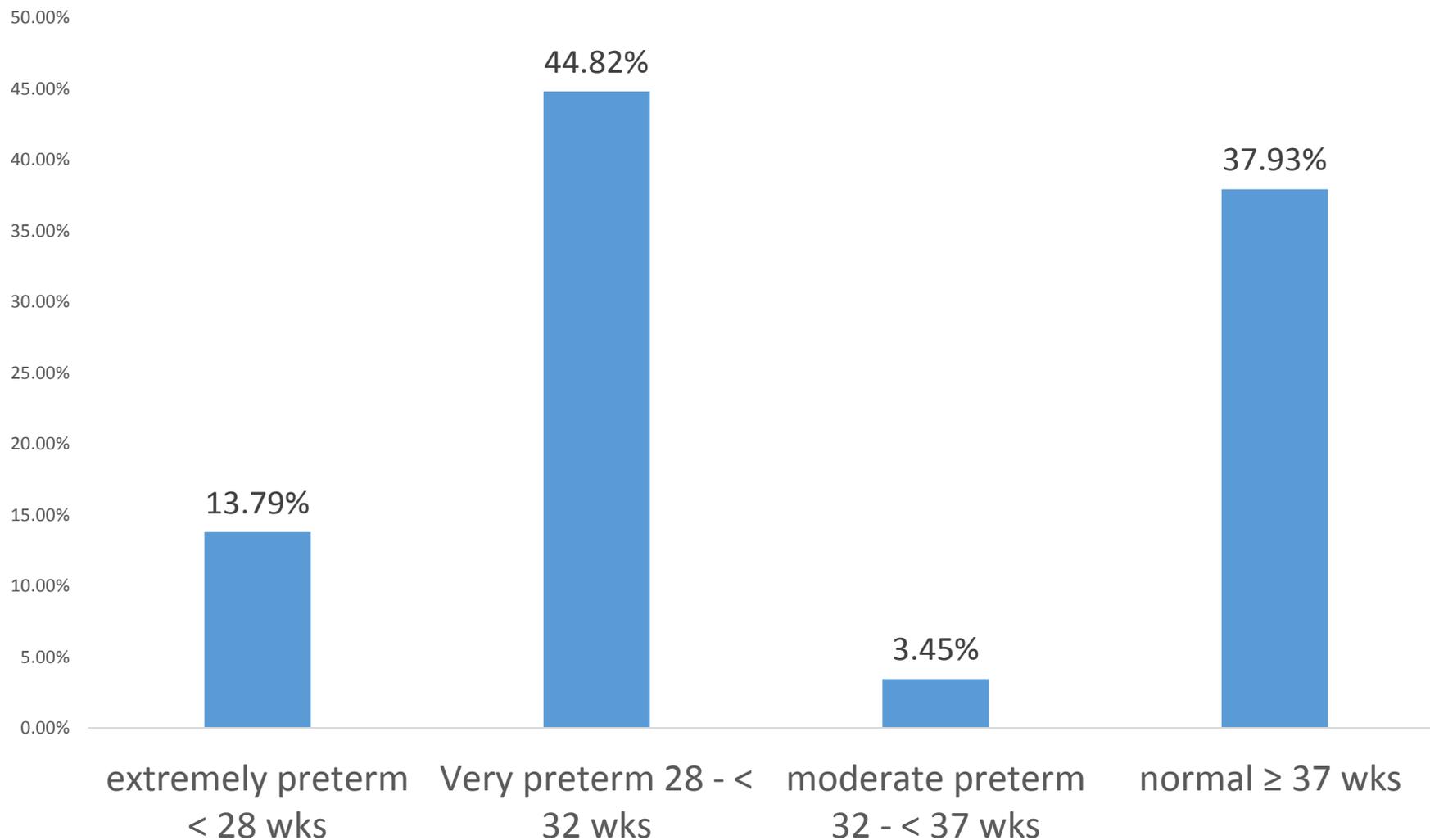
- All babies had Vitamin K at time of delivery.

Intervention provided	Number	Percent
Oxygen	16	55.2%
Parenteral antibiotics	16	55.2%
IV fluids	18	62%
Phototherapy	3	10.3%
Others (CPAP, Ventilator)	17	59%
Blood transfusion	1	3.4%
Chest tube	1	3.4%
Abdominal tapping	1	3.4%
Total Number	(29)	

Characteristics of the mother

- Mean age mother 25.6 ± 1.6 range 16-41 years old
- Mean Gestational age 32.8 ± 1.0 range 26 wks – 41 wks
- 20 women had singleton baby and 5 women had twin babies
- Only 3 babies put on breast feeding (2-48 hours)
- Mean Gravida 4.2 ± 0.5 , mean parity 3.6 ± 0.4 range (0-10)
- 96.5% Receive antenatal care in the camp facilities with a mean of 7.7 ± 1.0 visit range (0-20 times)
- 69% received tetanus vaccine and 96.5% received iron supplement

Mothers Gestational Age at time of delivery



Signs identified during Antenatal Period

Antenatal period Signs	Number	Percent
Fever	3	10.3%
Blurred vision	1	3.4%
Elevated blood pressure	5	17.2%
Vaginal bleeding	1	3.4%
Abdominal pain	6	20.6%

- 10.3% were in breech presentation and the rest were in cephalic presentation
- 10.3% had preterm rupture of membrane and 14% had PROM > 24 hours
- Mode of delivery : 62% had CS and 38% had SVD

Immediate Causes of Death

Causes of Death	Number	Percent
RDS + Prematurity	21	72.4%
Neonatal Sepsis	2	6.9%
Acute Severe Pneumonia	2	6.9%
Congenital Heart anomalies	2	6.9%
Ascitis	1	3.4%
Thick meconium aspiration and umbilical wrapped around neck	1	3.4%
Total	29	100

Challenges

- Address is not correct
- Telephone is out of service
- Visiting the camp and patient is visiting the family outside the camp
- EMPHNET underestimated the huge logistics required to do this job.