Proceeding

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Reducing neonatal mortality at Satkhira district hospital by quality improvement interventions

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Background

a. District Hospital, Satkhira is a 100 bedded hospital with 10 pediatric beds.

b. Pediatric ward is managed by consultant pediatrics, MO, 8 SSNs with other support staff.

c. JICA is providing technical support to improve quality of services at District Hospital, Satkhira since 2012.

QI interventions undertaken in Satkhira DH

Staff training

a. Neonatal resuscitation.

b. Essential newborn care.

c. Emergency Triage Assessment and Treatment (ETAT).

d. Infection control.

e. Kangaroo Mother Care.

Protocolized management of neonatal sickness

Renovation of hospital by government

Health education to the attendants

5S-Kaizen-TQM

Regular analysis and sharing of data with pediatric service providers.

Initiatives taken after introduction of 5S-Kaizen-TQM in pediatric ward:

a. Developed baby management corner.

b. Visitor control (one attendant for one baby).

c. Shoe free ward.

d. Health education to patients' attendants (hand washing, exclusive breast feeding etc.).

e. Central oxygen supply system.

f. Updated neonatal register.

Objective of data collection and analysis

Objectives

a. To assess the impact of QI interventions on neonatal admissions and outcome at district hospital, Satkhira.

Data collection

a. Data on neonatal admissions (case by case) were collected from the pediatric ward register from March 2011 to December 2014 and analyzed.

Results

Total neonatal admissions in 2014 was 2,632, which is about 48% higher than 2011.

The main causes of hospital admissions were

i. Perinatal asphyxia (39.6%).

ii. Prematurity and low birth weight (16.3%).

iii. Pneumonia (11.9%).

iv. Sepsis (10.0%) (Figures 1-11).

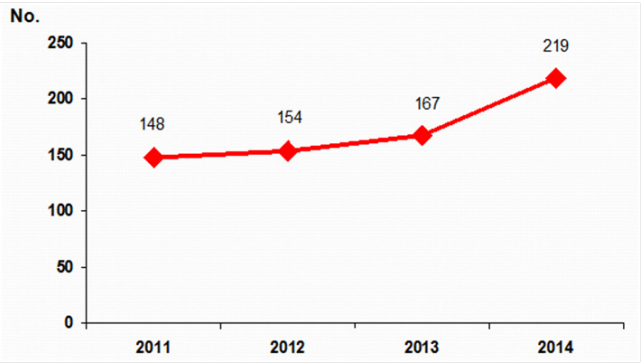

Figure 1 Trend of neonatal admissions: Average per month (No.).

Future plan

a. Initiate SCANU at the district hospital (work is going on).

b. Initiate KMC in pediatric ward (staff have been trained and service will start soon).

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c. Orient the Upazila doctors and nurses for emergency management of neonates and timely referral (initiative undertaken).

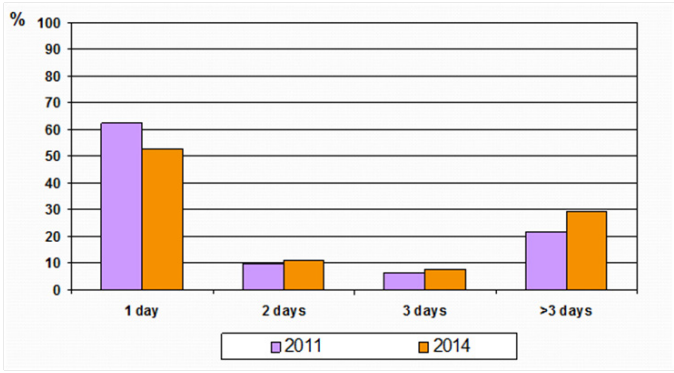

Figure 2 Neonatal admission (%) by age: 2011 & 2014.

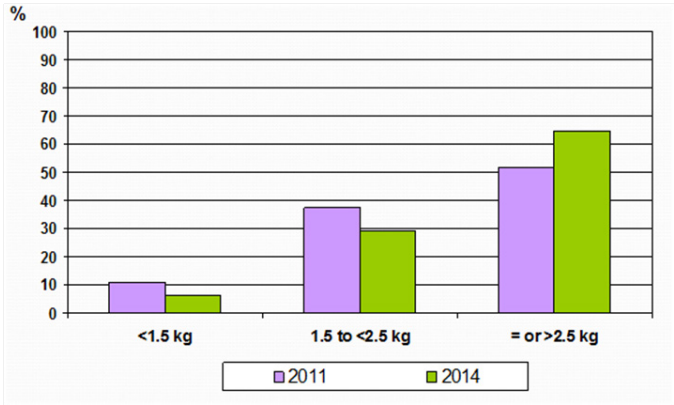

Figure 3 Admission body weight of neonates (%): 2011 & 2014.

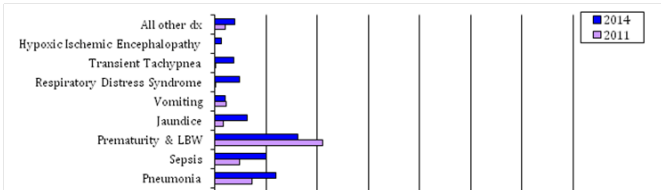

Figure 4 Causes (%) of neonatal admissions: 2011 & 2014.

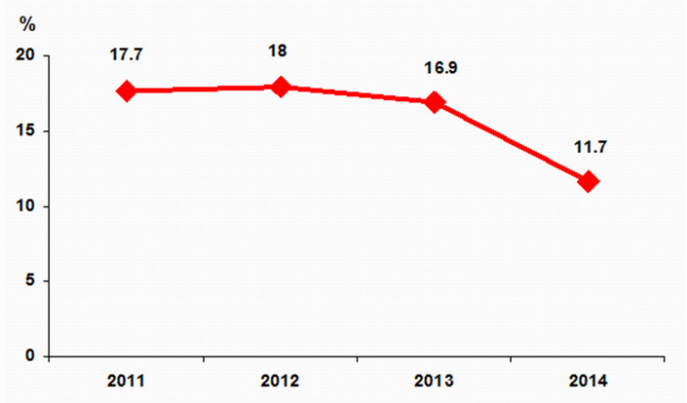

Figure 5 Trend of overall neonatal case fatality rate: 2011-2014.

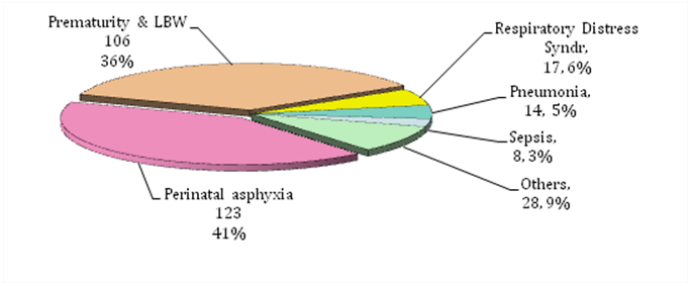

Figure 6 Causes of neonatal death: 2014.

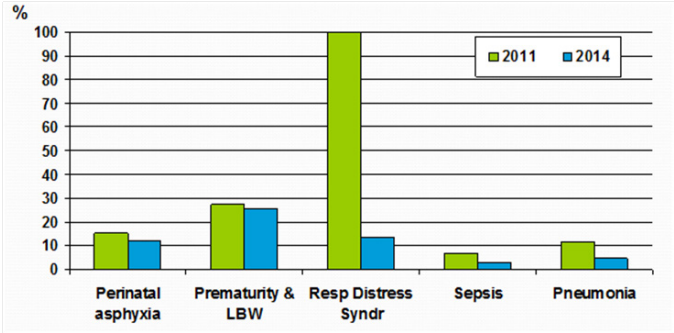

Figure 7 Disease specific case fatality rate: 2011 & 2014.

There was only one case of RDS in 2011

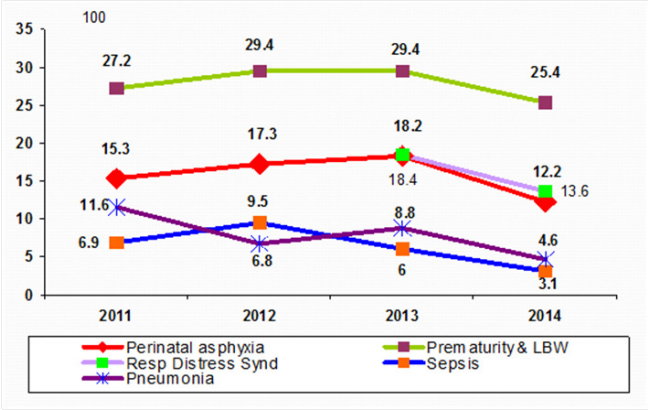

Figure 8 Trend of disease specific CFR (%): 2011-2014.

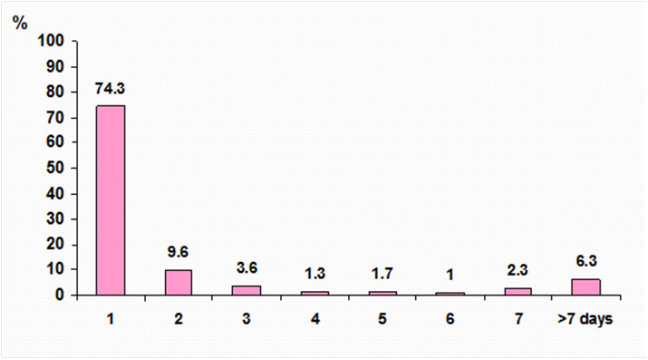

Figure 9 Distribution of age as a proportion of all deaths (n=303): 2014.

Citation: Rahman S, Islam T, Mostafa KG, et al. Reducing neonatal mortality at Satkhira district hospital by quality improvement interventions. *J Pediatr Neonatal Care*. 2016;5(5):11–12. DOI: 10.15406/jpnc.2016.05.00197

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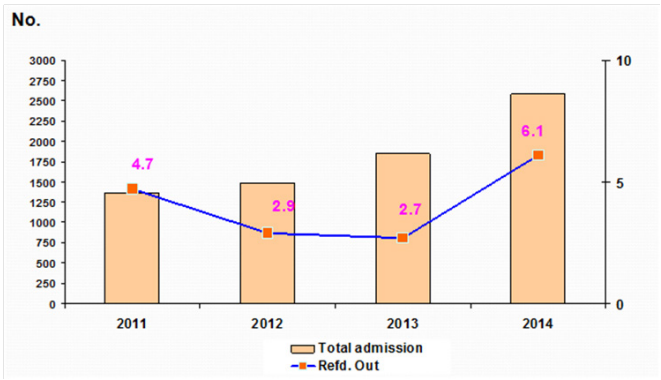

Figure 10 No. of admissions and % of neonates referred out: 2011-2014.

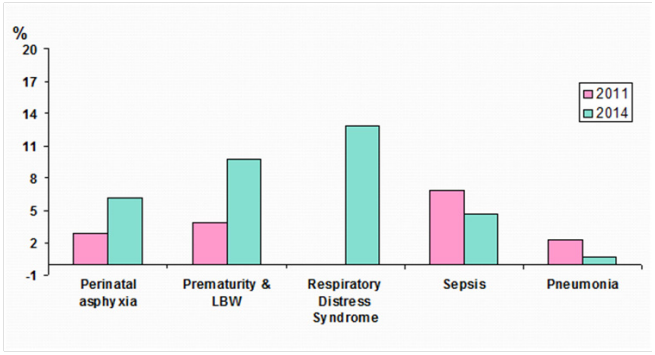

Figure 11 % of cases referred out to other hospital by diagnosis: 2011 & 2014.

Acknowledgments

None.

Conflicts of interest

Authors declare that there is no conflict of interest.

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