Rajasthan [6] reported deficiencies in the presence of equipment related to essential newborn care services. Only 3 out of 13 (23.1%) had radiant warmers, 4 out of 13 (30.8%) had resuscitators, and 9 out of 13 (69.2%) had suction pumps available in the facilities. None of the included CHCs in this assessment had fully-equipped newborn care corner [6]. In another facility-based survey in rural area of Lucknow District, Uttar Pradesh in 9 community health and 9 primary health centers, availability of essential newborn care equipment and trained personnel was grossly inadequate in almost all the PHCs [7].

This study revealed that, despite availability of NBCCs, these were not fully equipped. This calls for a change of mindset and provision of adequate sensitization of care providers using the NBCCs. Availability and functionality of necessary equipment and NSSK-trained staff to use the equipment will be important to realize the potential gains that can be achieved through provision of neonatal resuscitation – an important intervention for reducing neonatal mortality.

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Respiratory Morbidity Following Pediatric Orthotopic Liver Transplantation

We evaluated the pulmonary complications following orthotopic liver transplantation in 45 children (age <18 y). 22 patients (49%) developed respiratory complications. Pediatric end-stage liver disease (PELD) score >25 and positive fluid balance were independent risk factors. Patients with respiratory complication had significantly higher mortality and intensive care unit stay.

Keywords: *ARDS, Complications, Pneumonia.*

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Orthotopic liver transplantation (OLT) is the treatment of choice for children with end stage liver disease. Despite advances in intensive care and surgical techniques, respiratory complications are frequently associated with pediatric OLT [1,2]. We retrospectively analyzed medical records of children (age <18 y) who underwent OLT during 2009-14 in a tertiary-care referral hospital in Bangalore, India.

Respiratory complications were assessed from clinical and radiological features. Pediatric end-stage liver disease (PELD) score was calculated using online calculators. Fluid balance was calculated as percentage of body weight using formulae: (total fluid in [L] – total fluid out [L] / (admission weight [kg]) × 100%. Patients were dichotomized as those with pulmonary complications and those without. Chi-square test was used to evaluate categorical data and Mann-Whitney U test for continuous data. Statistical significance was defined as $P<0.05$. Univariate analysis was performed and variables with $P<0.05$ were entered into a multivariate logistic regression analysis to determine independent predictors. Odds ratio

TABLE I VARIABLES IN PATIENTS WITH POSTOPERATIVE PULMONARY AND NON-PULMONARY COMPLICATIONS AFTER TRANSPLANT (*N*=45)

Variable	*Pulmonary complication (n=22)*	*Non pulmonary complication (n=23)*
Age (mo)*	48.7 (45.9)	36.9 (29.8)
Female gender	11	6
Weight-for-age *Z* score <-3SD	11	12
Height-for-age *Z* score <-3SD	12	11
Preoperative massive ascites	10	8
Preoperative INR*	2.35 (1.1)	2.02 (0.6)
#Preoperative PELD score >25	20	8
Preoperative respiratory problem	4	3
Preoperative sepsis	6	2
Preoperative ventilation requirement	3	1
Intraoperative transfusion >40ml/kg	16	14
Intraoperative positive fluid balance >10% body weight	18	17
‡Positive fluid balance in first 3 post- operative days	17	6
Oliguria in first 7 post- operative day	3	1
Acute kidney injury in first 7 post- operative day	12	10
Acute graft rejection	5	2
Re-laparotomy	8	3

*Values in numbers or *mean (SD); #P<0.001; ‡P=0.001.*

was calculated for significant factors. Outcome compared included mortality and duration of intensive care unit (ICU) stay.

Forty-five children (28 boys) with median (range) age of 27 (7,143) months were included. Commonest indication of OLT was biliary atresia (*n*=23) followed by cryptogenic cirrhosis (*n*=4). Twenty-two patients (48.9%) developed significant pulmonary complications. Commonest of them was pulmonary edema (*n*=11; 24.4%) followed by pneumonia (*n*=10; 22.2%). Although 22 (48.9%) patients had pleural effusion, 8 (17.8%) were significant enough to required thoracocentesis or intercoastal drainage tube. Five (11.1%) patients developed acute respiratory distress syndrome (ARDS). Seven (15.5%) patients died during the post-operative period; all had pulmonary complications. Operative mortality (7 *vs* 0; *P*=0.003) and mean (SD) length of ICU stay [22.9 (11.8) *vs* 12.7 (52); *P*=0.014] were significantly higher in patients with pulmonary complications. PELD score >25 (*P*=0.001) and positive fluid balance in first 3 post-operative days (*P*=0.001) were independent risk factors (***Table* I**) associated with complications with odds ratio (95% CI) of 11.4 (1.8, 71.6) and 5.7 (1.2, 26.8), respectively.

The rate of pulmonary complications in the early post-operative period is in broad agreement to the range of 13-70% in recent published reports [1-5]. Although all the patients who died had pulmonary complications; not all deaths could be directly attributed to them. Major complication associated with mortality was ARDS which could be a part of severe sepsis. Thus, respiratory complication was the major mode of death rather than cause. Association of different complications with mortality could not be determined because of the small sample size. In our series, patients with pulmonary complications had significantly longer length of ICU stay and mortality. Earlier studies [6,7] also reported higher mortality, and higher ICU and hospital stay in patients with pulmonary complications. Severity of the disease [8,9] and excessive fluid and transfusion requirement [6,8] have also been reported previously as significant risk factors.

We conclude that respiratory morbidity is common in children who undergo OLT. Optimal timing to allow OLT at lower PELD score, and meticulous attention to prevent fluid overload may reduce risk of pulmonary complications and improve outcome.

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Profile of Children Hospitalized with Acute Poisoning in New Delhi

195 cases of acute poisoning among children (age<12 y) in a tertiary hospital were identified over a period of one year. Two-thirds (63%) of them were males and 75% were below five years of age. Poisoning by medicines was most common (17%) followed by ingestion of corrosives/detergents (16%) and kerosene (14%).

Keywords: *Corrosive ingestion, Drug overdose, Toxicology*.

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Acute poisoning in children is commonly accidental in nature, with preventable morbidity and mortality. In the year 2004, more than 45,000 deaths of people under 20 years of age occurred due to poisoning. South-East Asia documented 1.7 fatal child poisoning cases per 100,000 population [1]. Such cases constitute 1-2% of total pediatric admissions in our country [2,3].

We analyzed hospital database for one year – from February 2015 to January 2016 with an objective to study the profile of acute poisoning in children (age <12 years) admitted in a tertiary hospital in New Delhi. Permission for conducting the study was taken from Institutional Ethical Committee. Telephonic consultation was sought from National Poisons Information Centre (NPIC), AIIMS whenever required.

During the study period, 195 children (123 boys) were hospitalized with a history of poisoning; 146 were below five years of age. Most common form of poisoning was due to ingestion of medicine (*n*=34, 17%). Thyroxine was the most common medicine (21%) consumed, followed by phenytoin (*n*=7, 15%) and benzodiazepines (*n*=5, 12%). Other agents of poisoning are listed given in ***Table* I**. About 79% (*n*=154) of the children with poisoning were discharged and 19% children (*n*=37) left the hospital without any intimation. Death occurred in four (2%) cases (*n*=4) – mostly due to the ingestion of unknown substance. All the children who died were below five years of age.

The mortality rate in our set up was much lower than previous reports from India [4,5]. However, the rate of leaving the hospital without intimation was higher. This might be due to fear of legal repercussions in such cases. Higher proportion cases among younger age group, as seen in our study, has been reported earlier [2,4,6]. Young children—due to their curious nature, close position to the floor and tendency to put things in their mouths—are often victims of accidental poisoning [6]. Drugs and kerosene, similar to our observations, were the most common agents leading to hospital admission for pediatric poisoning in other studies [4,6]. American Academy of Pediatrics also identified medicines, cleaning agents and kerosene among common agents implicated in such accidents [7]. Storage of kerosene/ petrol/ diesel in empty bottles of soft drinks within reach of children is often a cause of such poisoning.

TABLE I AGENTS IMPLICATED IN CHILDHOOD POISONING IN PRESENT STUDY (*N*= 195)

Agents in childhood poisoning	*Number (%)*
Drugs	34 (17)
Detergent/Corrosive/Surf/Soap water	31 (16)
Kerosene	27 (14)
House cleaner	24 (12)
Pyrethroids/mosquito repellents	19 (10)
Pesticides/Rat killer	14 (7)
Unknown	11 (6)
Others*	35 (18)

**Diesel (n=7), Thinner (n=5), Mercury (n=3), Camphor (n=3), Disinfectant (chloroxylenol + terpeniol; n= 3), organophosphorus (n= 2), petrol (n=2), acetone (n=2), sulfas (n=1), turpentine (n=1), datura (n=1), fire cracker (n=1), soda (n=1), rock salt (n=1), household mosquito repellent cream (n=1), lizard in milk (n=1).*