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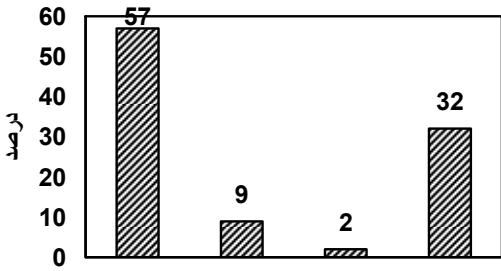
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# Survey Of Nosocomial Infection and Accompanied Factors in Neonatal Intensive Care Unit

\*Darvishpour A.(MS)<sup>1</sup>- Hashemian H.(MD)<sup>2</sup>- Faal E.(BS)<sup>2</sup>- Fasihi M.(BS)<sup>2</sup>

\*Corresponding Address: Department of Treatment Management, Guilan University of Medical Sciences, Namjoo St, Rasht, IRAN

E-mail: darvishpour\_a@yahoo.com

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## Abstract

**Introduction:** Neonatal Intensive Care Unit (NICU) is considered a major problem regarding nosocomial infection control. Considering the importance of this subject and this point which this study has never performed in this province is necessity of performe of this research.

**Objective:** To determine Nosocomial infections and accompanied factors in neonatal intensive care unit (NICU) at 17-Shahrivar hospital of Rasht, 2008-9.

**Materials and Methods:** This study was a descriptive research and data were collected prospectively through a questionnaire and a checklist. Questionnaire was included demographic characteristic and treatmental factors. Structural and personnal factors were assisted by the checklist. In this study, samples were the same as study population and all neonates who had the characteristics of the research samples were included. Inclusion criterions consist of all of neonates that aged up to 30 days, suffering from prematurity, low weighting, hyaline membrane disease (HMD), respiratory distress syndrome(RDS), congenital anomalies and also neonates who required surgical treatment that manifested clinical infection signs after 48 hours of admission. All neonates that had clinical infection signs on admision time and suffering sepsis, meningities, pneumonia, urinary tract infection and other infections or the ones who were in incubation period were excluded from research. Nosocomial infection was diagnosed by focal point physician based on the National Nosocomial Infection Surveillance system (NNIS). Data was analysed by using SPSS and by means of frequency distribution tabels and graphs.

**Results:** During the study period, 270 neonates were hospitalized, among them 44 cases (16.29%) had nosocomial infection. Most of them (70.5%) were male, weight of them was under 2Kg and age of them was between 1-3days. Also most of them (73%) were preterm and were born by cesarean section method. Assessment of the research based on treatmental factors showed that majority of patients were premature and had respiratory distress. The most common isolated pathogens were entrobacter(57%), klebsiella (9%) and E-coli (2%). Assessment of Structural factors showed that there are physical space problems in spite of adequate equipment and instruments. Regarding personality situations, it is clear that educational programs have been provided for prevention of infection.

**Conclusion:** It is recommended to pay more atention in personal heigenic, especially hand washing and using stril gloves and sterilization rules regarding in IV cathetering. Also it is advised to control and prevent infections with suitable destribution of staffing, providings standared rules in physical structures and promoting knowledge in physicians and NICU personels.

**Key words:** Cross Infection/ Infant/ Intensive Care Unit, Neonatal

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1. Department of Treatment Management, Guilan University of Medical Sciences, Namjoo St, Rasht, IRAN

2. 17 Shahrivar Hospital, Guilan University of Medical Sciences, Rasht, IRAN