Introduction

Neonatal sepsis is defined as a clinical syndrome of bacteremia with signs and symptoms of infection in the first four weeks of life. When pathogenic bacteria gain access into the blood stream, they may cause overwhelming infection without much localization termed as septicemia or may get predominantly localized to the lungs resulting in pneumonia, or the meninges causing meningitis **(Khinchi et al., 2010).**

Early onset and late onset sepsis are defined on the basis of presentation within 72 hours or after 72 hours of life respectively. There are many risk factors for development of neonatal sepsis including low birth weight, unsafe place of delivery or unclean delivery, prolonged rupture of membranes more than 24 hours, maternal pyrexia, chorio-amnionitis, prolonged labor and perinatal asphyxia **(Khinchi et al., 2010).**

World Health Organization estimates that globally there are about 5 million neonatal deaths a year. Ninety eight percent of them are occurring in developing countries in first week of life **(Rasul et al., 2007).** Previously, WHO mentioned that of four million neonatal deaths all over the world every year, over 35% are due to infection in the neonatal period **(Lawn et al., 2005)**. Death rate varies in developing countries between 11-68/1000 live birth in Asia, Africa and Latin America **(Rasul et al., 2007).**

In the developing world, the neonatal septicaemia remains as the major cause of mortality and morbidity in spite of recent advances in the technology and therapeutics **(Shah et al., 2006)**. Some of the factors responsible for sepsis in newborns are immature immune system, decreased phagocyte activity of white cells, decreased production of cytokines and weak humoral immunity. The natural skin barrier is thin and weak. Various maternal, foetal and environmental factors also contribute towards sepsis in newborns. Some of the maternal factors are premature rupture of membrane, maternal fever within 2 weeks prior to delivery,

meconium stained amniotic fluid (MSAF), foul smelling liquor and instrumental delivery. The foetal factors include birth weight, gestation and Apgar score **(Shah et al., 2006).**