Approximately more than ten million die in the first month of life over all the world (with more than one hundred million born annually), also approximately 75 % of death in neonate occur in the first seven days of life and more than 25% of them occur in the first day of life, the death during neonatal life represent approximately more than 35% of death that occur below five years in the world .This study was analytical prospective study, included all the infants hospitalized in NICU of maternity and children teaching hospital in Al-diwaniah governorate from first of September 2013 to the end of august 2014. About 1466 neonate patients was admitted to the neonatal care unit directly either from the labor room or from the operation room and the neonate only in contact with health personnel; from those we study all 193 hospitalized neonates that died due to different causes. In this study, of 1466 neonates, were hospitalized in NICU (neonatal intensive care unit) in maternity and children teaching hospital from first of September 2013 through august 2014; from which 193 (13.1%) cases were died. Those infants died in the hospital with male to female ratio approximately 2:1[male 64.25% and female 35.75% respectively]; 36.8% of them were full term and 63.2 % were premature . the most common cause of the neonatal death were the RDS (respiratory distress syndrome) 93 (48.1%) and the second most common cause were the complication of prematurity other than the RDS which form 55 (28.4%) like apnea, extreme immaturity with low birth weight, hypoglycemia and hypothermia and necrotizing enterocolitis. The other causes were birth asphyxia 7.7 %, congenital anomalies 4.1% and sepsis 5.6% r, the meconium aspiration syndrome infant represent about 9 (4.6 %) and miscellaneous causes (least or rare causes) like hydrops fetalis and intraventricular hemorrhage and congenital heart disease was 3 (1.5 %). The final conclusion shows the common cause of neonatal death was sever immaturity with its complications and mainly the respiratory distress syndrome almost the death occur in sever low birth weight associated with prematurity. The study proves the relations between certain maternal and neonatal factors and neonatal mortality. Good antenatal care especially in third trimester to avoid prematurity should be provided to any pregnant