

**Background:** Hemolytic disease of newborn due Rh incompatibility is an important cause of hemolytic anemia and jaundice in newborn.

**Objectives:** To study the prevalence of Rh isoimmunization in our society and to define its risk factors and efficacy of protective measures.

**Patients and methods:** A prospective study was conducted on 120 Rh positive neonates whom their mothers are Rh negative delivered in AL-Zahra teaching Hospital in An Najaf city during the period from the first of May; 2010 till 31<sup>st</sup> of July; 2010. A full history was taken from their close family members. Thorough clinical examination and investigations were done .

**Results:** Seventy six of study group were males (63.3%) and 44 were females (36.7%), with male to female ratio 1.7:1 and full term were 109(90.8%) and preterm were 11(9.2%).

Development of jaundice due to Rh isoimmunization has significant association with the absence of maternal knowledge of her blood group and Rh and her husband blood group and Rh , increase maternal parity, and Siblings history of previous hospital admission due to neonatal indirect hyperbilirubinemia while previous blood transfusion to the mother didn't have that association.

Regular human anti-D immune globulin administration after each delivery of Rh positive neonate and abortion and ABO incompatibility associated with decreased risk of development of jaundice due to Rh isoimmunization.

**Conclusion:** Poor antenatal care regarding Rh negative pregnant women is still a major problem in our society and it's a significant risk factor for Rh isoimmunization , regular administration of human anti-D globulin is a protective measure.