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 31st 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.