

Review Paper:

The Association Between Antibody Response to Hepatitis B Vaccination and Breastfeeding



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ABSTRACT

Background: Breastfeeding is natural nutrition for newborns and infants which may influence the immune system development and immune response to vaccination. This study was performed in order to determine the association between the breastfeeding and Hepatitis B surface Antibody (HBsAb) titers after hepatitis B vaccination in 3-5 year old children.

Methods: Participants were 120 healthy children aged 3-5 years divided into two groups of breast-fed (n=78) and formula-fed (n=42). Blood samples were collected, and then the HBsAb titers were analyzed by ELISA method. The results were evaluated by independent t-test and the P-value <0.05 was considered as a significant criterion.

Results: Although the Mean±SD HBsAb titer in breast-fed group (92.33±19.80) was lower than in formula-fed group (94.08±21.28) but, no significant statistically was found between two groups (P= 0.09).

Conclusions: There was no association between immune responses after Hepatitis B vaccination and breastfeeding; however, further study is recommended to explain this observation.

Keywords: Hepatitis B surface antibody titer, Hepatitis B vaccine, Breastfeeding
