Global compliance with hepatitis b vaccine birth dose and factors related to timely schedule. A literature review

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Abstract

Objectives: Identify global barriers for delivery of hepatitis B vaccine birth dose. Methods: A search for cross sectional studies published between January 2001 and December 2017 was conducted using the following Mesh terms: "Vaccination"[Mesh], "Mass Vaccination"[Mesh], "Hepatitis B"[Mesh], "Hepatitis B virus"[Mesh], "Hepatitis B Surface Antigens"[Mesh]. Databases consulted included: PUBMED, SCIELO, EMBASE and BIREME. To evaluate the quality of studies, we used an adapted version of the Newcastle-Ottawa Quality Assessment Scale for cross sectional studies. Results: An initial list of 6,789 articles were generated by the combination of search terms. After reviewing titles and abstracts, they were reduced to 134 for full reading, and 22 studies were included in the barriers analysis. The region with more references was Western Pacific while eastern Mediterranean had the lowest. Being born outside of a health facility and weakness of outreach vaccination service seems to be the most important an cited factors related to underperformance of birth dose delivery. In developed countries, hospital policies on birth dose vaccination was the main factor associated to no vaccintion with the birth dose. Conclusions: New ways to deliver hepatitis B vaccines to neonates being born at home or outside health facilities should be envisaged and applied, if the goal of eliminating perinatal transmission of hepatitis B is to be achieved.