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## Strategies to Increase Coverage of Hepatitis B-Birth Dose

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If I am to talk about Hepatitis B, the figures are staggeringly high; 2billion, 240 million and 686000 deaths, for infection ,its chronic carriers and mortality due to complications of it respectively for the world; while for India carriers are 40 million with 3-4% people with HBs Ag positivity and 1,15000 die because of HepB complications.<sup>1</sup>

Amongst these chronically infected people majority of them get infection either at birth or early childhood.<sup>2</sup> Birth dose given within 12-24 hours of birth will create a safety net for newborns. This along with 3 doses will give 90-95% protection.<sup>3</sup>

By the end of 2015 Hepatitis B vaccine was introduced in 185 countries plus 96 countries also give birth dose of Hepatitis B to newborns within 24 hours, the coverage is 39% at global level.<sup>4</sup>

Though uptake of new and less familiar vaccines is increasing with increase in number of institutional d liveries, still the situation leaves a lot to be desired. Evidence exists in the form of various studies where increased coverage was found .To quote a few from those are:

Arvind Gupta concluded that if immunization services are provided daily, marked increase in immunization clinic attendance of the order of 32%, 116% and 156% from the base level was seen over a period of 3 years.<sup>5</sup>

Similar observation by Oberoi et al in their study, with daily provision of immunisation services from twice weekly found that hike from 54% to 78% for BCG and OPV zero dose coverage and also Hep B birth dose acceptance increased to 42.9% from abysmal 8.2%.<sup>6</sup>

When vaccination was conducted only during the clinic hours and not round the clock it compromised the vaccination of newborns delivered during the non- clinic hours. In their study, Taneja et al ensuring release of JSY incentives (cash maternity benefit scheme for institutional deliveries in India) only after newborn vaccination was one of the important interventions which contributed towards increased vaccine coverage.<sup>7</sup>

While it was provision of adequate access to appropriate stored vaccine in maternity units which improved coverage of Hep B birth dose, noted in a study performed in 5 Papua New Guinea Hospitals.<sup>8</sup>

Providing trainings to health workers was associated with increased coverage of Hep b; a study in Philippines found.<sup>9</sup>

While taking from recently released NFHS 4 data for Punjab; institutional deliveries are 90.5%, but when we say institutional deliveries in public facility; it is 51.7%, rest of the deliveries conducted in private sector.<sup>10</sup>

Unless the private sector is roped in, giving HepB birth dose, the coverage of all newborns with HepB is not possible. As the mothers for institutional deliveries are there in institutions, their stay can be grabbed as an opportunity to provide vaccination, which is effective if given within 24 hours standing orders for administration of birth dose in the delivery room or postnatal ward; – ensuring vaccine is available in the delivery room or postnatal ward.

Instead of compartmentalising vaccination with immunisation clinic , if the staff at maternity ward, neonatal unit and staff giving incentive s/discharge notes ensures that the newborns get due vaccinations at birth along with trained staff, availability of vaccines ; the present coverage rates can be increased.

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