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HEPATITIS
ELIMINATION

Hepatitis B Birth Dose Vaccine Implementation in Enugu State, Nigeria

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Presentation outline

- Background: HBV infection in Nigeria
- Maternal knowledge and uptake of timely HepB-BD, Enugu State
 - Maternal reason for non-receipt of valid HepB-BD
- Health workers knowledge and practice
- Health system barriers to HepB-BD vaccination
- Recommendations to improve uptake of HepB-BD

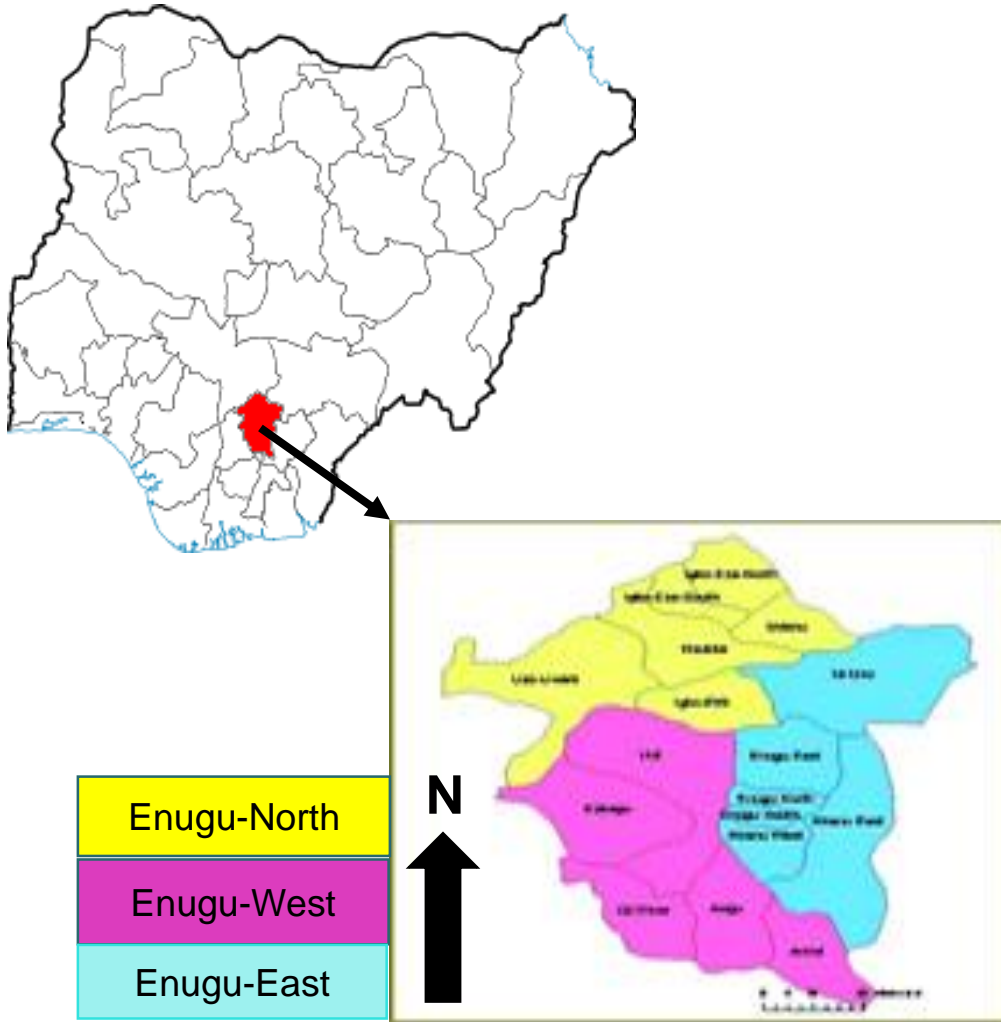
Background: HBV infection in Nigeria

- Prevalence of HBV in Nigeria is 8.1% (19 million); amounts to 23.5% of those living with hepatitis B in Africa
- Hepatitis B birth dose (HepB-BD) was introduced in Nigeria in 2004
- In same, 2004, the National policy for the control of viral hepatitis in Nigeria recommends that all newborns be given monovalent HepB vaccine birth dose free of charge
- National Primary Health Care Development Agency (NPHCDA) recommends that all infants should receive their first dose of HepB vaccine as soon as possible (less than 24 hours) after birth and up to 2 weeks

Maternal knowledge and other factors influencing uptake of timely HepB-BD, Enugu State



Enugu State



- Total population 5.1m
- 17 LGAs with 5 largely urban
- 612 health facilities offering immunization
- Average immunization sessions is once per week per facility

Map of Nigeria showing Enugu State and its 3 senatorial districts

Survey methods



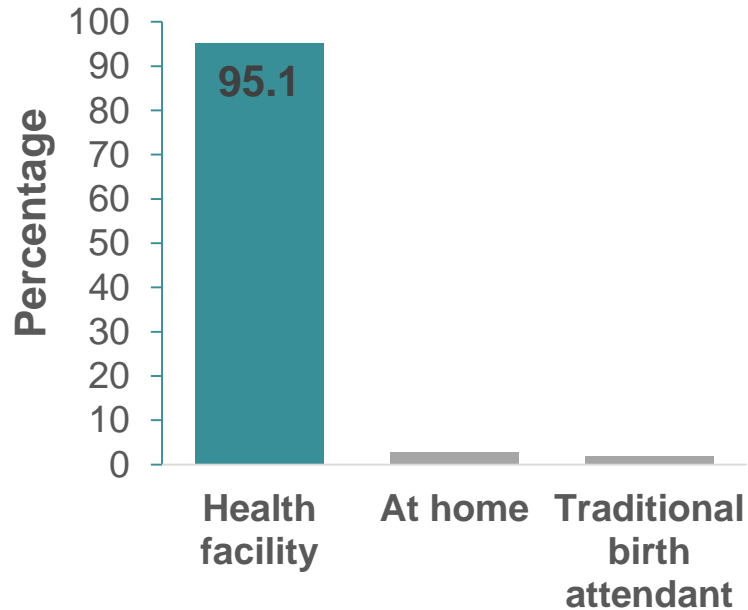
- Hospital-based cross-sectional survey among mother-infant pairs attending immunization clinics at health facilities in Enugu State
- Data on:
 - Socio-demographic characteristics
 - Delivery history
 - Mother reasons for receipt/non-receipt of timely HepB-BD
- Timely HepB-BD defined as the receipt of first dose of HepB within 24 h of birth

Results

Characteristics	Frequency N=344	Percentage
Age-group (years)		
15–24	83	24.1
25–34	231	67.2
35–44	30	8.7
Marital Status		
Single	12	3.5
Currently married	331	96.2
Divorced/Widowed	1	0.3
Education Level		
No formal education	4	1.2
Primary school	26	7.6
Secondary school	210	61.1
Tertiary school	104	30.2

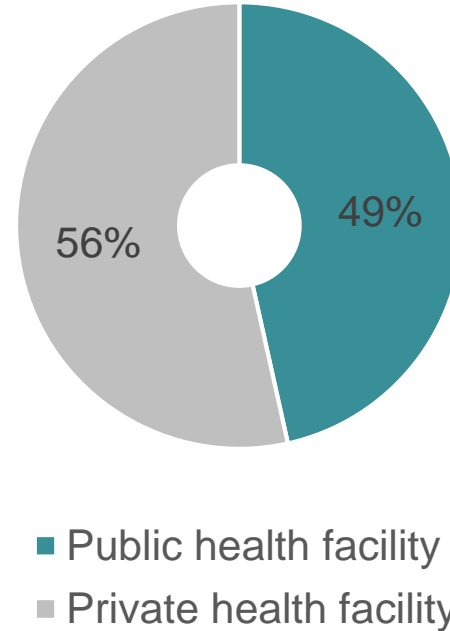
Place of delivery

Place of delivery



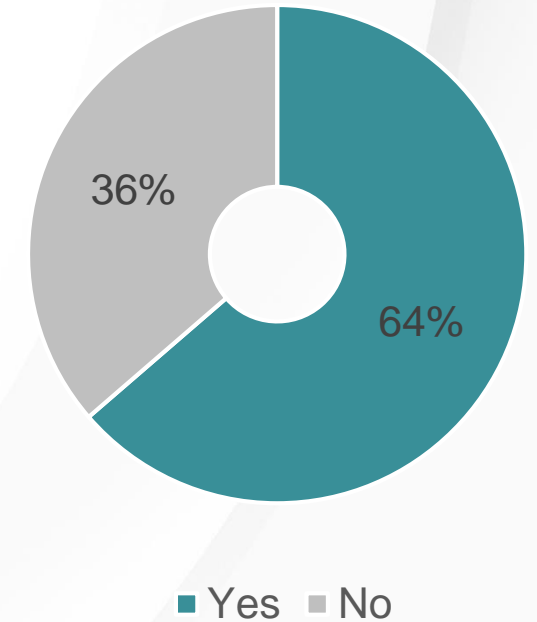
Almost all (327/344) delivered in health facilities

Delivery facility type



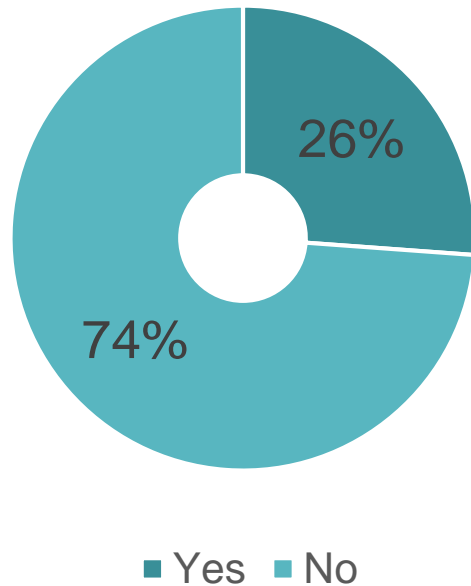
More than half (184/327) delivered in private health facilities

Immunization centre

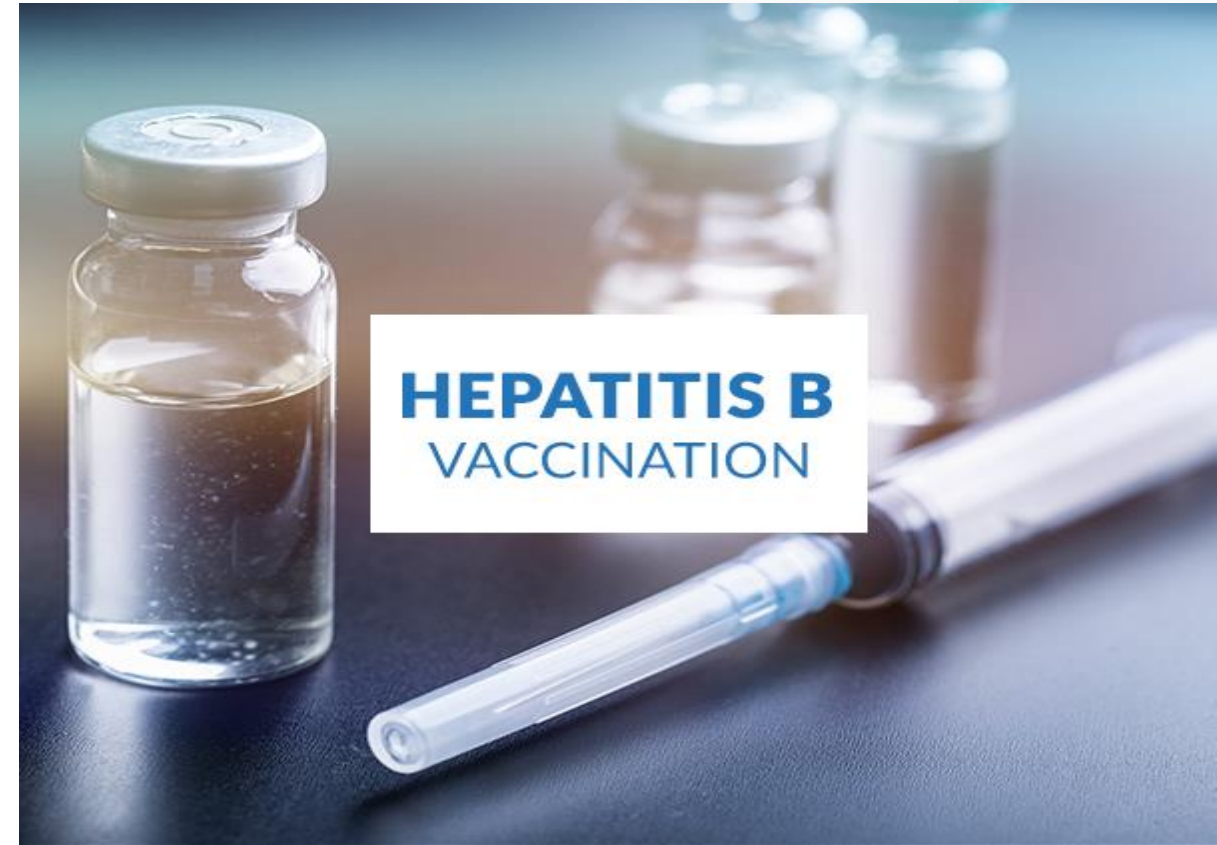


Almost two thirds of delivering facilities (219/344) were immunization centres

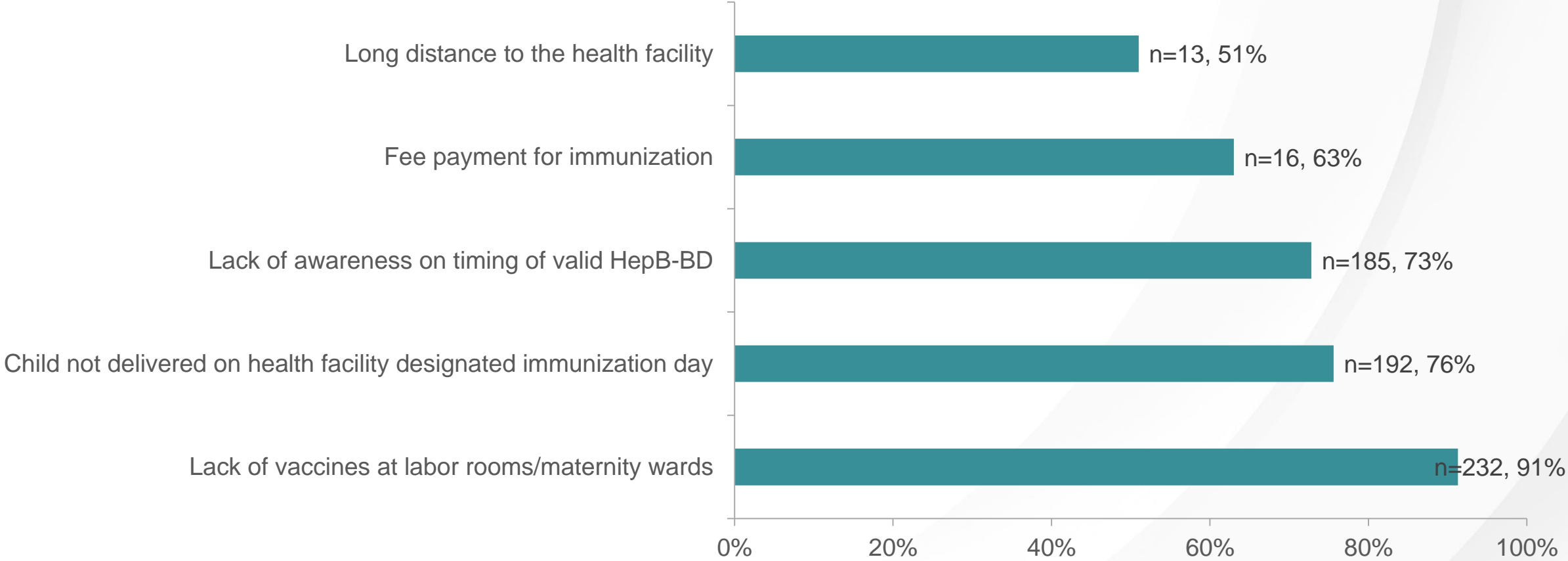
HepB birth dose uptake



Only a quarter of infants (90/344) received a timely HepB-BD vaccine

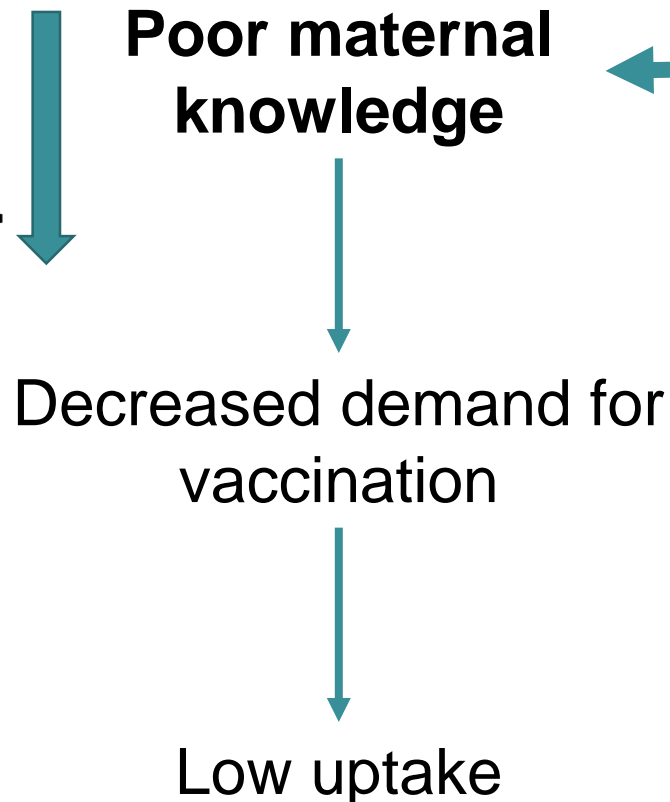
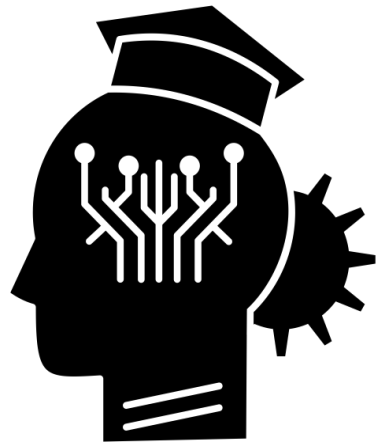


Maternal reason for non-receipt of timely HepB-BD



Factors associated with HepB-BD vaccine uptake

Maternal knowledge: Overall Good 31%



- 29.7% (102/344) aware of HBV MTCT
- 34.6% (119/344) knew infant should receive timely HepB-BD
- 2.6% (9/344) knew HepB vaccine schedule

Infants of mothers with poor knowledge of HepB vaccine were significantly less likely to receive timely HepB-BD (OR = 0.3, 95% CI = 0.19 – 0.54).

Other factors associated with timely HepB-BD vaccine uptake

- Delivery in public health facilities compared with private health facilities (OR = 2.3, CI = 1.41 – 3.79)
- Delivery in facilities that offer immunization services (OR = 6.6, CI = 3.28 – 13.36)

Health workers knowledge and practice



Results

Characteristics **Frequency N=146** **Percentage**

Age-group (years):

20–29	24	16.4
30–39	62	42.5
40 and above	60	41.1

Sex:

Female	134	91.8
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Marital Status:

Single	22	15.1
Currently married	134	91.8
Divorced/Widowed	9	6.1

Cadre of healthworker:

CHEW	66	45.2
JCHEW	35	24
Nurse	34	23.2
CHO & others	11	7.6

Results

Characteristics	Frequency N=146	Percentage
Type of facility:		
Primary health care	127	87.0%
Secondary health care	19	13.0%
Location of facility		
Rural	101	69.2
Urban	45	30.8
Duration of work (in years):		
0-4	82	56.2
5-9	39	26.7
9 and above	25	17.1

Healthcare workers knowledge on HepB vaccine

- 86.3% (126/146) of Healthcare workers knew the correct reason for 1st dose were
- Varied knowledge on birth dose timing:
 - within 24 hrs = 29.5% (43/146)
 - within 7 days = 11.6% (17/146)
 - within 14 days = 58.9% (86/146)

Healthcare workers knowledge on HepB vaccine

- 41.8% (61/146) knew the number of doses for complete HepB vaccine series
- 39% (57/146) were aware of the multi-dose–vaccine-policy (MDVP)
 - 21.2% (31/146) knew the correct application of MDVP

Health system barriers to HepB-BD vaccination



Vaccine access

- Majority [69.9% (102/146)] of routine immunization sessions including that of HepB-BD took place once a week
 - Only 1.4% (2/146) took place daily
- Majority [63.7% (93/146)] of vaccination took place at the National Programme on Immunization (NPI) unit
 - At postnatal unit = 33.6% (49/146)
 - At delivery = 2.7% (4/146)
- Stock out was reported by only 24.7% (36/146) of the health workers

Conclusion

- Mothers who brought infants to immunization clinics in Enugu State had poor knowledge of hepatitis B infection and vaccination
- Low uptake of timely HepB-BD
- Lack of the vaccines at labor rooms limits uptake
- Determinants of timely HepB-BD uptake:
 - Mother's knowledge
 - Vaccine access
- Poor healthcare worker knowledge on HepB-BD timeliness

Recommendations

- Educate pregnant women on the importance of timely HepB-BD
- Integrate immunization services with maternal health services
- Pre-position HepB-BD vaccine at labor rooms/postnatal wards of all facilities including private, that conduct delivery
- Train healthcare workers on the importance of timely HepB-BD

Thank you

