Evaluation of Knowledge of Hepatitis B Virus Infection among Pregnant Women Attending Antenatal Clinic at University of Port Harcourt Teaching Hospital

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Abstract

Backg*round:* *Hepatitis is a liver disorder marked by the inflammatory cells existence in the organ's tissue (Ryder & Beckingham, 2001). While it may appear with or without signs, it often causes jaundice (yellowish of the skin), malaise and anorexia (appetite problems). Hepatitis B virus (HBV) is a DNA virus with a core antigen encased in a shell comprising hepatitis B surface antigen and partially double-stranded DNA. It belongs to the Hepadnaviridae family and hepatitis B surface antigen (HBsAg), hepatitis B core antigen (H12BcAg) and hepatitis B e antigen have all been discovered to be its antigenic components (Gasim & coworkers, 2013).*

Furthermore, surveys have shown a broad lack of knowledge, with residents of high-risk regions having medium to poor knowledge of HBV infection and the hepatitis vaccine (Eni et al., 2019).

HBV infection is a foremost public health concern around the world that induces substantial morbidity and mortality notwithstanding the existence of a vaccination and antiviral treatment. WHO estimates that over 1.5 billion individuals are suffering from HBV, with >350 million permanently infected people and 500,000–700,000 people dying per year from HBV-related liver ailment such as liver cirrhosis, end-stage liver disease, or hepatocellular carcinoma, with the bulk of these deaths happening in developing countries (Gasim et al., 2013).

HBV research has been conducted in other parts of the nation, but information on the HBV knowledge among pregnant women attending the University of Port Harcourt Teaching Hospital's antenatal clinic is rare. As a result, guidelines and other possible information on deterrence and control strategies are scarce.

The study's objective is to determine the knowledge of hepatitis B virus infection among pregnant women attending University of Port Harcourt Teaching Hospital's antenatal clinic.

Methods: *The study was conducted with the usage of a descriptive cross-sectional study at the prenatal care clinic of University of Port Harcourt Teaching Hospital. All pregnant women attending the clinic were taken as the population with the sample size of 268. Systematic sampling was used with questionnaires and folders as tools. Data was entered into separate template in Microsoft Excel 2010 version 10 and checked for completion, cleaned, then imported into SPSS version 23.0 for analysis. On scoring system, each correct answer attracted 1mark and each incorrect answer attracted zero, those who scored 10 marks and above (≥ 10) were*

categorized as having good knowledge while those who scored 9 and below (≤9) were regarded as having poor knowledge.

Results: *Findings revealed low knowledge of HBV infection of 60.82% and low prevalence of HBV of 0.75% among the participants. Also, there was no association between socio-demographic factors and Hepatitis B infection (HBsAg) among the pregnant women as all the variables proportions were >0.05.*

Table 1: Knowledge of Hepatitis B Virus

Variables	Frequency (n=268)	Percentage (%)
Level of knowledge of Hepatitis B		
Poor (=9)	163	60.82
Good (10-14)	105	39.18

Prevalence of Hepatitis B

Variables	Frequency (n=268)	Percentage (%)
Hepatitis B		
Positive	2	0.75
Negative	266	99.25

Table 2: Association between Socio-demographic characteristics and the prevalence of Hepatitis B

Socio-demographic characteristics	Hepatitis B		Total	*Fishers exact p*	OR (95% CI)
	Positive Freq (%) n=2	Negative Freq (%) n=266			
Age					
> 30	1 (0.66)	150 (93.34)	151 (100.0)	1.00	0.77
=30	1 (0.85)	116 (99.15)	117 (100.0)		(0.05-12.49)
Educational Level					
=Secondary	1 (1.12)	88 (98.88)	89 (100.0)	1.00	2.02
Tertiary	1 (0.56)	178 (99.44)	179 (100.0)		(0.12-32.72)
Monthly Income					
=50,000	1 (0.59)	168 (99.41)	169 (100.0)	1.00	0.58
50,001 and more	1 (1.01)	98 (98.99)	99 (100.0)		(0.04-9.43)
Marital Status					
Married	2 (0.76)	262 (99.24)	264 (100.0)	1.00	0.00
Single	0 (0.0)	4 (100.0)	4 (100.0)		(0.00-1.80)
Spouse Educational Level					
=Secondary	1 (1.14)	87 (98.86)	88 (100.0)	0.549	2.05
Tertiary	1 (0.56)	179 (99.44)	180 (100.0)		(0.13-33.28)
Spouse Monthly Income					
=50,000	1 (1.35)	73 (98.65)	74 (100.0)	0.549	2.64
50,001 and more	1 (0.52)	193 (99.48)	194 (100.0)		(0.16-42.83)
Number of people living in household					
>3	1 (0.75)	133 (99.25)	134 (100.0)	1.00	1.00
=3	1 (0.75)	133 (99.25)	134 (100.0)		(0.06-16.16)

Discussion: The result of this research presented low knowledge of HBV among pregnant women attending antenatal clinic (ANC) at University of Port Harcourt Teaching Hospital (UPTH), this is related to the finding of Abdulai et al., (2016) who reported 76% poor knowledge of HBV among 643 pregnant women in a research in Nigeria.

Also, the research presented low prevalence of HBsAg among pregnant women attending ANC at UPTH, this is in contrast to a similar research in Zaria, North West, Nigeria, which reported 8.3% prevalence of HBsAg among pregnant women (Mac et al., 2019). The different could be due to variation in the geographical location, socio-cultural practices, study design, level of care for the study facility, sample size and test methods employed. However, the result is in conformity with a similar research in a health care centre at Dehloran in Iran where 5 (0.59%) out of 850 pregnant women were

positive for HBsAg after their medical records were assessed (Kheiri et al., 2015).

Conclusion: This research work revealed a low prevalence of 0.75% among pregnant women attending University of Port Harcourt Teaching Hospital, also there was no statistical significant association between socio-demographic factors and prevalent of Hepatitis B virus infection ***but low knowledge of Hepatitis B virus infection among the respondents was recorded***. Therefore, it is important that mode of transmission and methods of prevention of HBV be included in the daily health talk at antenatal care clinics.

Keywords: Knowledge, Hepatitis B virus, Pregnant women.

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