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EFFECT OF HEALTH EDUCATION ON AVOIDING SHARING OF SHARP OBJECT AS A STRATEGY FOR PREVENTION OF HEPATITIS B AMONG PREGNANT WOMEN IN YOLA, ADAMAWA STATE - NIGERIA.

BY

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ABSTRACT

This study examined the effect of health education on avoiding sharing of sharp object as a strategy for prevention of hepatitis b spread among pregnant women in Yola, Adamawa state - Nigeria. The population for this study comprises of one hundred and forty-three thousand six hundred and eighty-nine (143,689) pregnant women registered in Adamawa State, Nigeria. Out of which one thousand one hundred and ninety-four (1,194) pregnant women was used as a target population from the three (3) selected health facilities. The sample size for this study consisted of sixty (60) pregnant women who were drawn from the target population of pregnant women, thirty (30) experimental group and thirty (30) control group for the purpose of generalization. A multi-stage sampling technique that involved stratify sampling, simple random sampling, proportionate sampling and systematics sampling techniques were used for this study. The instrument used for data collection is researcher developed questionnaire and hepatitis B modules (manual). The questionnaire was score using a 4-point modified Likert scale. Pilot study was conducted to ascertain the reliability of the instrument, a reliability index of 0.919 was obtained which means that the instrument is reliable. Data were collected as pre-test scores, after the intervention another round of questionnaire was re-administered and data were again collected from the two groups (experimental and control). Data collected were analyzed with the Statistical Package for the Social Sciences (SPSS), IBM version 26. Statistical procedures used included frequencies and percentages, means and standard deviation. Inferential statistics of analysis of covariance (ANCOVA) was used in the test of the hypotheses at the fixed probability level of 0.05. Findings revealed that six weeks health education programme has encouraged avoidance of sharing sharp objects among pregnant women in Yola Adamawa State, p- value is > 0.05. Based on the findings, the study recommended that pregnant women in Yola Adamawa State should improve on

their behaviour on avoiding sharing sharp object through health education as preventive measures for hepatitis B.
Key word: Hepatitis B, Sharp object, Pregnant women.

INTRODUCTION

Nowadays, there is a massive increase in health facilities at different level of health care systems in Nigeria. According to Nigerian Health Facility Registry (2022). Nigeria has 39,439 registered hospital and clinics in 2019, as of 2022 the number was increased to 39,914. Despite the increase in hospitals, still the number of HBV infection keep on increasing. Approximately 370,000 newborns are pre-natally infected with HBV in sub-Saharan Africa annually, and over 20 million people estimated to be infected with Hepatitis B virus around the world. Nigeria has the largest number of people living with HBV infection in sub-Saharan Africa and ranks third after China and India, globally (Olakunde, Adeyinka, Olakunde, Uthman, Bada, Nartey, &Ezeanolue 2021). The increase rate of HBV spreads through mother to child is of great concern.

The researcher being the lead author and a Certified Community Health Extension Worker, consulted patients while working in his home town Ngurore, a suburb of Yola-South Local Government Area of Adamawa State during Covid 19 pandemic lockdown in March, 2020. Among patients consulted at home between March and May, 2020, eighteen (18) patients were sent for laboratory investigation of which 6 (33.3%) tested positive of hepatitis B Virus. 3 (16.7%) of the patients tested positive were pregnant women, 1 (5.5%) was not pregnant mother and 2 (11.1%) were young men between the ages of 18 and 35 years. For the fact that HBV is among the communicable disease affecting the area under study, it is eminent that HBV is transferable during birth which place the babies at risk of contracting the virus.

This study therefore, assessed the effect of health education on avoidance of sharing sharp object as a strategy for prevention of hepatitis B spread among pregnant women in Adamawa State, Nigeria. The researchers assumed that six weeks health education programme may have effect on avoidance of sharing sharp object among pregnant women attending antenatal clinic in Yola, Adamawa State, Nigeria, hypothesizing that, there is no significant effect of six weeks health education intervention programme on avoidance of sharing sharp objectas a strategy for prevention of hepatitis B among pregnant women attending antenatal clinic in Yola, Adamawa State, Nigeria.

Methodology

Pre-test post-test experimental research design was used for this study. This is because same assessment measures were given to participants both before and after they have received a treatment or been exposed to a condition, with such measures used to determine if there are any changes that could be attributed to the treatment or condition given. The population for this study comprised of one hundred and forty-three thousand six hundred and eighty-nine (143,689) pregnant women registered in Adamawa State,

Nigeria. Out of which twenty-one thousand one hundred and sixty-nine (21,169) pregnant women are from Yola the study area out of which, one thousand one hundred and ninety-four (1,194) pregnant women were target population from the three (3) selected health facilities. The sample size for this study consisted of sixty (60) pregnant women who were drawn from the target population of pregnant women in Yola, Adamawa State. A multi-stage sampling technique was used in data collection. The instrument used for data collection was a researcher's developed questionnaire with intervention programme.

Simple random sampling techniques was used to select two tertiary hospitals in the state by writing all names of tertiary hospitals on a piece of paper, folded and drop in a container, shuffled it, and the selection will be made by one of the research assistants.

Purposive sampling technique was used to select the respondents (pregnant women) attending antenatal clinic in each hospital.

Proportionate sampling was used to determine the number of respondents per each hospital selected.

The researchers employed a systematic sampling procedure to select the respondents at the hospitals. The researchers and the research assistant selected every second pregnant woman that visited the hospital as they come.

Inclusion Criteria and Exclusion Criteria

1. Pregnant woman that can read and write
2. Pregnant woman who concented to participate.
3. Pregnant woman that register for antenatal clinic in selected health facilities and in her first or second trimester (1 – 7month pregnancy).
4. Any pregnant woman who did satisfied these conditions was excluded from the research.

Ethical approval was obtained with the following number (MAUTHY/SUB/S.128/251) from the area of the study before commencement of the intervention programme. Data collected were analyze with the help of Statistical Package for the Social Sciences (SPSS), IBM version 26. The Analysis of Covariance (ANCOVA) procedure was used to evaluate whether there is a significant difference between experimental and Control group after the health education intervention session.

Result

Table 1.1: Effect of six weeks health education intervention on avoidance of sharing sharp objects as a preventive measure against HBV.

The responses of the participants before and after the six weeks health education intervention programme on sharing of sharp object as a risk factor of HBV spread among the pregnant women were computed in means and standard deviation in comparison of the two groups' scores in Table1:

Table 1: Comparison of responses between control and experimental groups on avoidance of sharing sharp objects as a preventive measure against HBV.

			Experimental		Control		
S/N	Avoid sharing of sharp object	Status	Mean	Std. Dev.	Mean	Std. Dev.	Mean Diff.
1	Sharing of sharp objects can lead to the spread of HBV among pregnant women	Pre-test	3.14	0.789	3.96	0.196	-0.82
		Post-test	3.13	0.900	3.14	0.639	0.00
2	Avoiding sharing sharp objects prevention and control of HBV from mother to child	Pre-test	3.28	0.649	3.04	0.196	0.24
		Post-test	2.97	0.718	3.48	0.829	-0.52
3	Disposing sharp objects in an open environment is likely causes HBV infection among pregnant women	Pre-test	3.38	0.862	3.08	0.272	0.30
		Post-test	3.07	1.048	3.17	0.468	-0.11
4	Avoiding sharing sharp objects can reduced the chance of getting HBV infection among pregnant women	Pre-test	3.28	0.922	3.96	0.196	-0.69
		Post-test	3.23	0.817	3.17	0.658	-0.06
5	Unsterilized sharp objects can lead to the spread of HBV among pregnant women	Pre-test	3.28	0.797	3.04	0.344	0.24
		Post-test	3.27	0.868	3.24	0.577	0.03
	Aggregate	Pre-test	3.27	0.505	3.42	.0149	-0.15
		Post-test	3.13	0.539	3.24	0.458	-0.11

(Decision mean = 2.50)

The rating of the two groups in Table 1 revealed a positive respond of the subjects in the experimental and control group on avoidance of sharing sharp objects as a preventive risk factor against HBV spread. The subjects in both groups (Control and Experimental) agreed that sharing of sharp objects can lead to the spread of HBV and that avoiding such sharing of sharp objects could help in prevention and control of HBV from mother to child. They both agreed that disposing sharp objects in an open environment haphazardly along with unsterilized sharp objects could increase the spread of HBV. The aggregate mean scores for the table before and after for the two groups were 3.27 and 3.13 with

standard deviation of 0.50 and 0.539 for participants in the experimental group. For the control group the aggregate mean scores before and after the health education intervention were 3.42 and 3.24 with standard deviations of 0.149 and 0.458 respectively. The mean differences were relatively low as indicated in the table. The mean scores for participants in the experimental and control groups were all higher than the 2.50 used as the benchmark, which implied that both participants have same view, that avoidance of sharing sharp objects could be a preventive risk factor against hepatitis B virus spread among the pregnant women which implied that use of health education could be considered as having a positive impact on the participants. The post-test mean score for control group was low which may be attributed to high expectation from the researcher on welfare as a result of economic constraint, which may had brought about changed in attitude that affected their respond thereby caused inattentiveness to read and understand the questionnaire well before providing answers.

Discussion

This study found that the six weeks health education had some discouraging impact on sharing of sharp object among pregnant women attending antenatal clinic as a preventive measure against the spread of hepatitis B virus. Subjects in both groups (Control and Experimental) agreed that sharing of sharp objects can lead to the spread of HB and that avoiding such sharing of sharp objects helps in prevention and control of HB from mother to child. They both agreed that disposing sharp objects in an open environment haphazardly along with unsterilized sharp objects could increase the spread of HB. The impact of the health education programme was however not significant since no significant difference was observed between subjects who were exposed (experimental) to the programme and those who were not exposed (control). The finding here supported previous study by Daka and Hailemeskel (2020) who conducted research on sero-prevalence of Hepatitis B surface antigen and associated factors among female sex workers in hawassa, Ethiopia. He reported that, Hepatitis B virus infection is one of the most serious infections and concluded that the prevalence of HB among subjects in the study area was high. The study itemized that condom use, history of genital ulcer, sexes during menses and sharp material sharing were highly associated with HB infection among the subjects.

Conclusion

Six weeks health education intervention programme encourage avoidance of sharing sharp object as a strategy for prevention of hepatitis B among pregnant women attending antenatal clinic in Yola, Adamawa State.

Recommendation

Pregnant women in Yola Adamawa State should improve on their behavior on avoiding sharing sharp object as preventive measures for hepatitis B.

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