CLINICAL PRESENTATION, RISK FACTORS, AND OUTCOME OF LASSA FEVER AMONG PREGNANT WOMEN IN SOUTHERN NIGERIA.

P2-F8

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The study found that exposure to rodents and Lassa fever patients is associated with higher risks of premature delivery, low Apgar score, presentations in obstetrics emergency, and vaginal bleeding with Lassa fever in pregnancy. However, Lassa fever in pregnancy was not associated with maternal death.

BACKGROUND

- Lassa fever in pregnancy has remained an important public health concern in West Africa with predictable trends.
- Clinically presents with an undefined picture as found in non-pregnant patients, though with limited available data to guide clinical management and improve outcomes.
- In pregnancy, the true incidence, prevalence rates, and outcomes of this deadly virus are unknown as infections are asymptomatic, and transmission rates are high.
- We retrospectively reviewed the clinical presentations, risk factors, and outcomes among 186 respondents in the Ebonyi and Ondo states of southern Nigeria from January 2018 to December 2022.

METHODS

Study Design:

- A retrospective health facility-based case-control study was conducted between 2018 and 2022.
- Of the respondent, 43 cases and 143 controls aged ≥ 15 years were managed at the two centres in Ebonyi, and Ondo states of Southern Nigeria using a purposive sampling technique.

Data Collection:

- The Google tool Kobo Collect was used to collect client information on the demographic and baseline characteristics of all women who had Lassa fever confirmed as cases; otherwise, they were controls.

Data Analysis:

- Descriptive Statistics (Univariate analyses (Mean ± SD) / Proportions (%)
- Test of Associations (Chi-square tests) at 1% significance level

RESULTS

- The mean ages of the respondents were 0.14 ± 0.35 and 0.20 ± 0.40. 37 (86.0%) and 114 (79.7%) of the respondents were ages ≤35 years. Risks-related outcomes are premature delivery (RR=3.581; 95 % CI 1.83-7.02), Apgar score (RR=1.312; 95 % CI 1.15-1.5), obstetrics emergency (RR=61.29; 95 % CI 8.43-445.71), and vaginal bleeding (RR=2.85; 95 % CI 1.01-8.03).

Table 1. Clinical presentation of cases and controls

Variables	Cases n = 43 (100)	Controls n = 143(100)
Fever		
No	27 (62.8)	114 (79.7)
Yes	16 (37.2)	29 (20.3)
Breast pain/Engorgement		
No	37 (86.0)	133 (93.0)
Yes	6 (14.0)	10 (7.0)
Cough		
No	41 (95.8)	138 (96.5)
Yes	2 (4.7)	5 (3.5)
Vomiting		
No	41 (95.3)	136 (95.1)
Yes	2 (4.7)	7 (4.9)
Body weakness		
No	34 (79.1)	127 (88.8)
Yes	9 (20.9)	16 (11.2)
Headache		
No	41 (95.3)	143 (100)
Yes	2 (4.7)	0 (0.0)
Sore throat		
No	43 (100.0)	136 (95.1)
Yes	0 (0.0)	7 (4.9)
Vaginal Bleeding		
No	37 (86.0)	136 (95.1)
Yes	6 (14.0)	7 (4.9)
Chest pain		
No	38 (88.4)	141 (98.6)
Yes	5 (11.6)	2 (1.4)
Abdominal pain.		
No	38 (88.4)	128 (89.5)
Yes	5 (11.6)	15 (10.5)
Convulsion, Loss of Consciousness		
No	42 (97.7)	141 (98.6)
Yes	1 (2.3)	2 (1.4)

RESULTS CONTINUED

Table 2. Exposure characteristics of cases and controls

Exposures	Cases n = 43 (100)	Controls n = 143 (100)
Exposure to rodents in the last 6 months		
No	23 (53.5%)	100 (69.9%)
Yes	20 (46.5%)	43 (30.1%)
Exposure to Lassa Fever patient in the last 6 months		
No	41 (95.3%)	142 (99.3%)
Yes	2 (4.7%)	1 (0.7%)
History of Fever during pregnancy		
No	16 (37.2%)	77 (53.8%)
Yes	27 (62.8%)	66 (46.2%)
History of Malaria during pregnancy		
No	18 (41.9%)	79 (55.6%)
Yes	25 (58.1%)	63 (44.4%)
Travel history in current pregnancy		
No	43 (100.0%)	137 (95.8%)
Yes	0 (0.0%)	6 (4.2%)

CONCLUSIONS

- There is an association between Lassa fever in pregnancy and rodent exposure in the last 6 months, as well as exposure to Lassa fever patients in the last 6 months. In contrast, there were no significant associations between maternal death and Lassa fever in pregnancy. Moreso, positive associations with a higher risks of premature delivery, low Apgar score, presentations in obstetrics emergency, and vaginal bleeding. These are necessary for consideration, especially a high index of suspicion with Lassa fever in pregnancy. Holistic approaches are required to strengthen existing control measures. Also, highlights many of the experienced difficulties in response to infectious disease threats, including late hospital presentations, poor documentation, comorbidities, and poor infection prevention control compliance.

ADDITIONAL KEY INFORMATION

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