Symptomatology of Mpox in Kwara State, North-Central, Nigeria: Is absence of fever enough to rule out mpox?

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Outline

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Introduction

- Mpox, formerly known as monkeypox, is a zoonotic viral disease caused by the mpox virus
- First human case recorded in 1970 in the Democratic Republic of Congo (WHO, 2022).
- Nigeria had the highest burden in 2022 with 1.5% case fatality rate (CDC, 2022)

- The Africa Centres for Disease Control and Prevention and World Health Organization declared Mpox a Public Health Emergency of Continental Security and Public Health Emergency of International Concern respectively in August 2024

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History of Mpox in Nigeria

1971
2 Cases.
1st Outbreak

1978
1 Case

2017
88 Cases.
Resurgence

2018
49 Cases

2019
47 Cases

2020
8 Cases

2021
34 Cases

2022
762 Cases

2023
98 Cases

2024
67 Cases
As @ week 36

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Mpox in Kwara State

First Mpox outbreak

21 confirmed cases

No Mpox outbreak since 2022

2022

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Objectives

To describe the symptoms of Mpox in Kwara State

To determine if the absence of fever is enough to rule out Mpox

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Methods

We investigated all Mpox cases in Kwara State in 2022

Case definitions of Mpox as obtained from the Nigeria Centre for Disease Control was used

Data were extracted from patients' case notes and Surveillance, Outbreak Response Management and Analysis System

Analysed using frequency tables, bivariate and multivariate analysis

We used logistic regression to determine if the absence of fever can predict the absence Mpox.

Mpox case definition

Suspected case

- An acute illness with fever > 38.3˚C (101˚F), intense headache, lymphadenopathy, back pain, myalgia, and intense asthenia followed one to three days later by a progressively developing rash often beginning on the face (most dense) and then spreading elsewhere on the body, including soles of feet and palms of hand.

Confirmed case

- A case that is laboratory confirmed.

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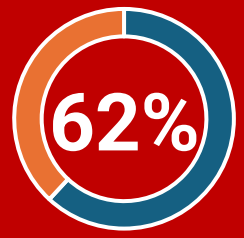
Results

64
Suspected cases

21
Positive cases

43
Negative cases



of the positive cases were females

of the positive cases <18 Years

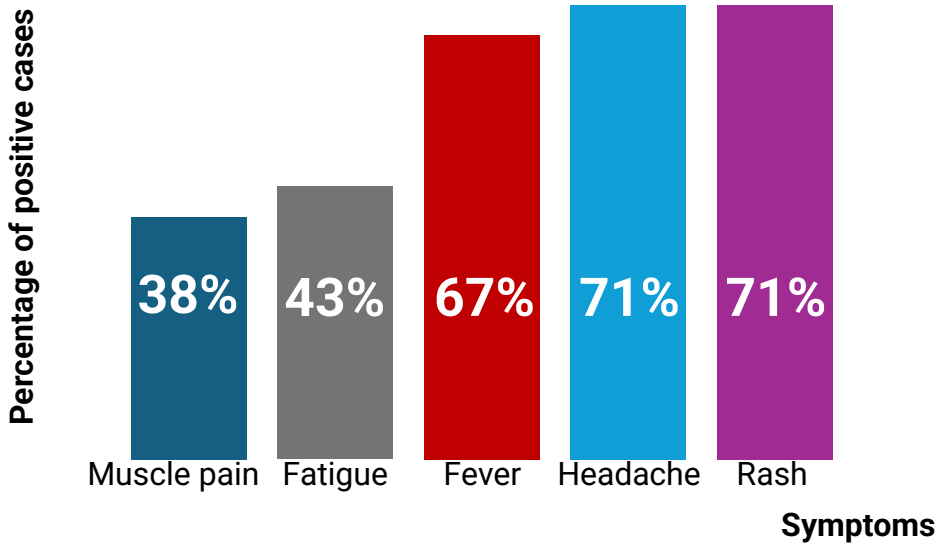


Fig 1: Symptoms among mpox positive cases in Kwara State, Nigeria, 2022

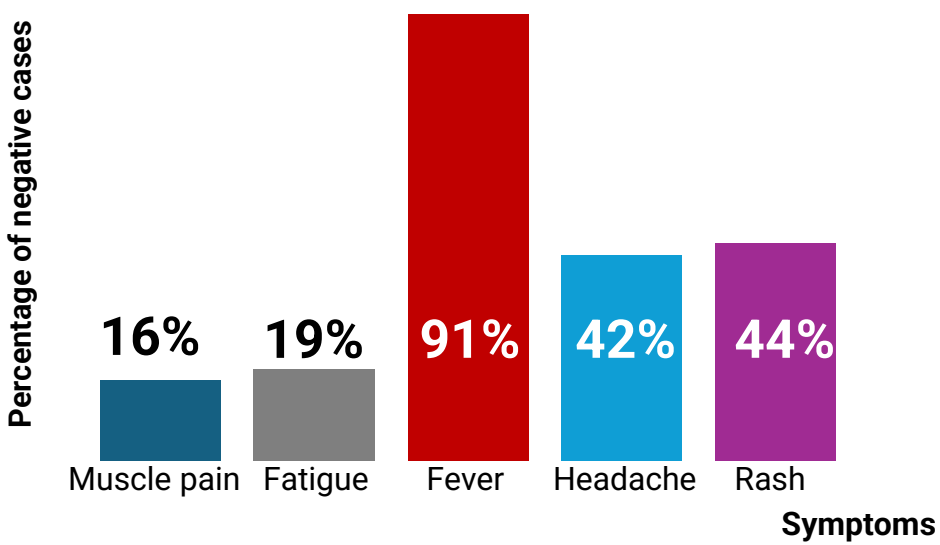


Fig 2: Symptoms among mpox negative cases in Kwara State, Nigeria, 2022

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Symptoms predicting Mpox

Symptoms	Odds Ratio	95% C.I	P-value
Fever	0.2	0.04-0.97	0.045
Fatigue	2.6	0.70-9.31	0.154
Headache	2.3	0.58-8.92	0.032
Rash	2.0	0.57-7.11	0.281
Muscle pain	1.7	0.42-7.20	0.442

Among cases with fever, the odds of having Mpox is 80% less than those without fever, OR=0.2(CI=0.04-0.97)

Conclusion/Recommendation

The absence of fever is not enough to rule out Mpox

The index of suspicion in exposed individuals without fever should equally be high especially if there is rash, headache, fatigue or muscle pain.

Acknowledgements

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