

A Case Investigation of Human Rabies in Outapi District Hospital, Omusati Region, Namibia, April 2023

P3-B17

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Rabies death was confirmed. Two contacts identified. Total of 225 animal bite cases recorded in the district, 64.9% aged 0-14 years.

BACKGROUND

- Rabies, a fatal viral vaccine-preventable
- Spreads through scratches, bites, or infected saliva into direct contact with mucosa; 99% of cases are dog-mediated
- Causes about 59,000 annual deaths worldwide
- Children under 15 years are at greater risk, especially in rural areas
- Namibia reported 242 human rabies deaths in the last two decades
- A 2-year-old suspected of rabies in Outapi District Hospital on 19 April 2023
 - with fever, hydrophobia, hyperactivity, aggression, restlessness, nausea and dehydration
 - Patient demised early hours on April 20, 2023
- One Health Approach, we investigated to:**
 - confirm the diagnosis
 - identify exposed individuals
 - determine the burden of animal bites

METHODS

- Descriptive case report
- Suspected case:** any patient with one or more specific rabies symptoms at Outapi District Hospital.
- Confirmed case:** suspected case laboratory confirmed with rabies virus
- Contact:** any person who came in contact with rabies infected saliva
 - District population of 76 810 people, 40% under 15 years.
 - Saliva sample was collected and sent to laboratory for Reverse Transcriptase Polymerase Chain Reaction (RT-PCR) analysis
 - Reviewed patient's medical records and interviewed patient's caregivers
 - Analyzed district's animal bites surveillance data, December 2022-May 2023
 - Ethical principles compliance considered

RESULTS

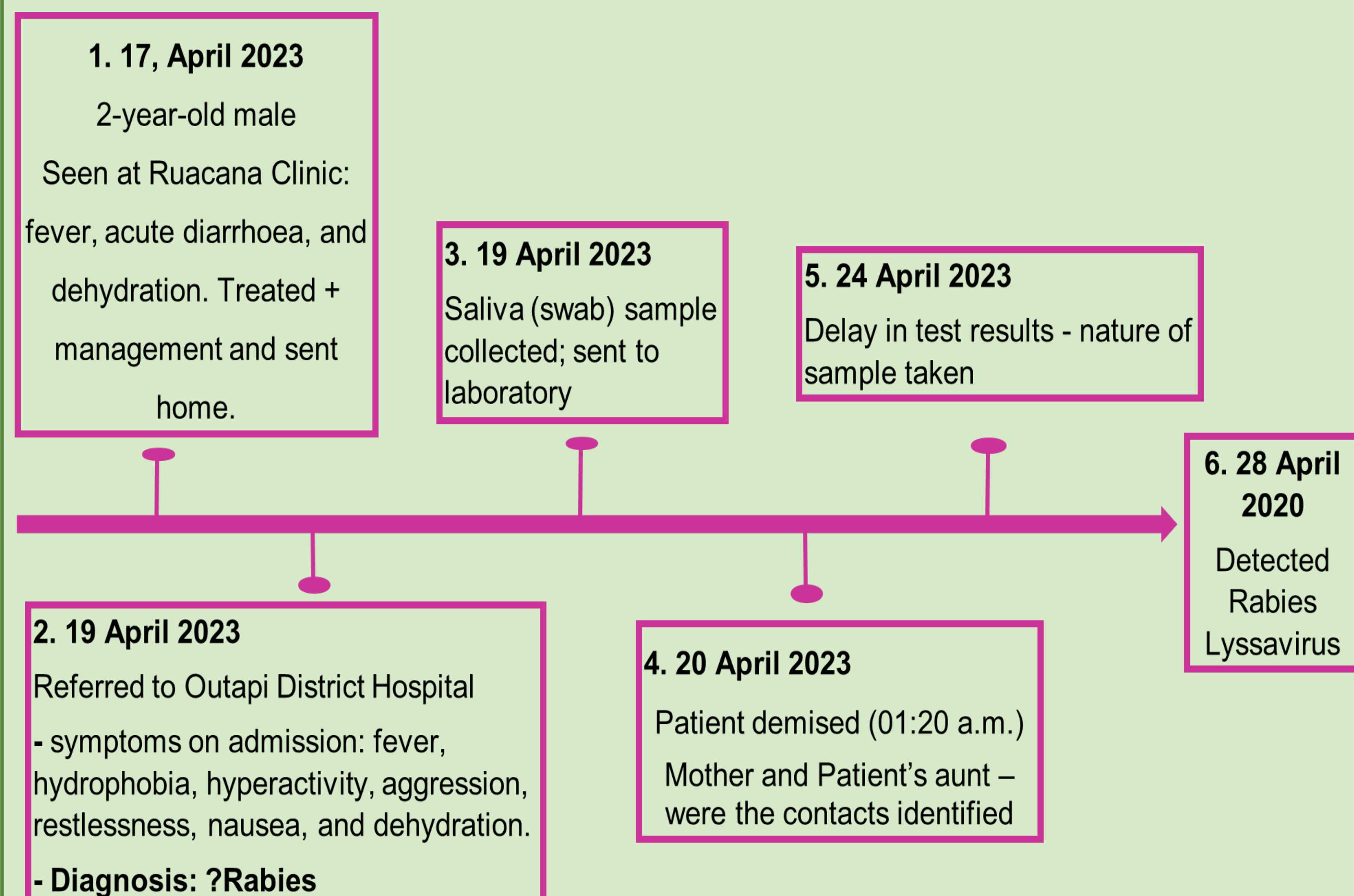


Figure 1: Timeline of rabies death case investigation, Outapi District, April 2023

- No history of animal bite or scratches observed
- A stray dog was seen at the house; no date could be ascertained

RESULTS CONTINUED

Table 1. Socio-demographic factors and rabies PEP status in animal bite cases in Outapi district, December 2022 to May 2023

Variable	Frequency (n=225)	Percent
Age group (in years)		
14 ≤	146	64.9
15 ≥	79	35.1
Sex		
Male	105	46.7
Female	120	53.3
Rabies PEP status		
Given	165	73.3
Not given	35	15.6
Unknown	25	11.1

Table 2. Characteristics of animals, Outapi district, December 2022-May 2023

Characteristics	Frequency (n=225)	Percent
Nature of animal		
Provoked	92	40.9
Unprovoked	123	54.7
Not indicated	10	4.4
Animal type		
Cat	55	24.4
Dog	168	74.7
Donkey	2	0.9
Animal immunization status		
Immunized	38	16.9
Not immunized	181	80.4
Unknown	6	2.7

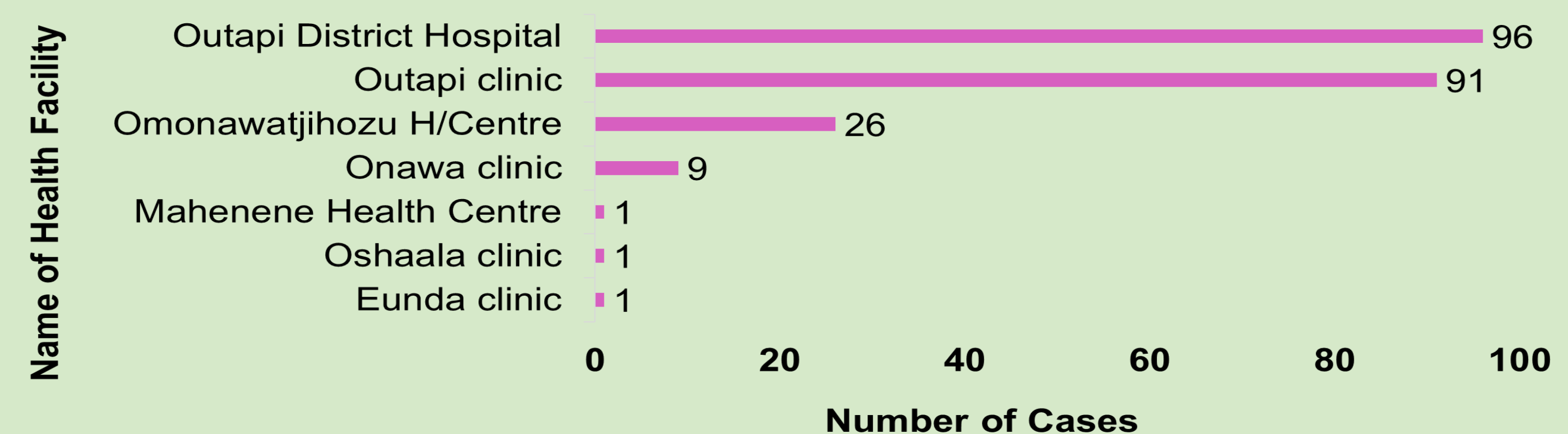


Figure 2: Health facilities reporting animal bite cases in Outapi District, December 2022-April 2023

CONCLUSIONS

- Rabies death was confirmed
- Contacts given Post Exposure Prophylaxis (PEP)
- In collaboration with veterinary services
 - Rabies sensitization campaign was conducted
 - Conducted dog mass vaccination
- In contrast to our findings, previous studies have shown more animal bite cases in males
- Laboratory personnel to conduct refresher training for healthcare workers to ensure proper sample collection
- Strengthen existing rabies control strategies, given the high unvaccinated dog population

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