

# Assessment of Public Awareness for Guinea Worm Disease (GWD) Reporting, Nigeria, 2010

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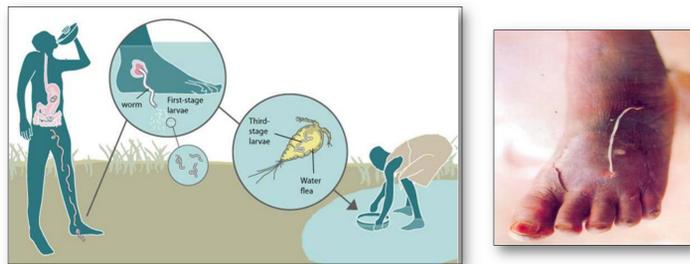
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## Background

- GWD is a nematode infection of subcutaneous and deep tissues earmarked for eradication by WHO<sup>1,2</sup>
- Transmitted by ingestion of contaminated water

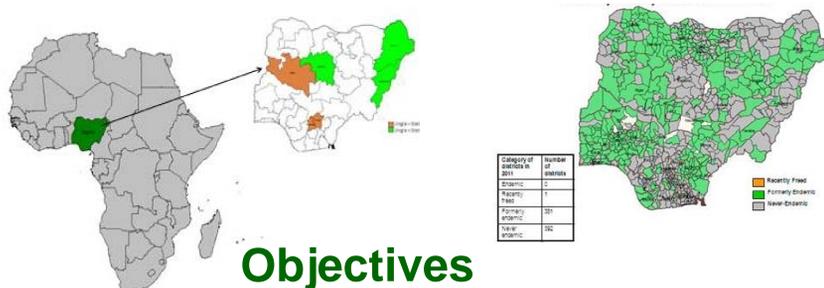
**Figure 1: (Left) Life cycle of the Guinea worm, *Dracunculus medinensis*; (Right) Photo showing Guinea worm infestation of a man's foot**



Source: <http://www.cnn.com/2010/HEALTH/04/05/guinea.worm.lifecycle/index.html>

- 1988 Nigerian GWD eradication programme established
- 2008 Nigeria achieved zero case status
- Country goals:
  - Maintain zero case status
  - Intensify surveillance and reporting
  - Obtain WHO certification as a GWD-free country
- 2009 Social mobilization and publicity intensified using radio jingles in three states

**Figure 2: (Left) Map of Africa showing Nigeria and states where questionnaires administered; (Right) GWD foci in Nigeria, 1998 to 2008.**



## Objectives

- To assess the impact of the addition of radio jingles on general public awareness for GWD reporting
- To make recommendations for public health action in Nigeria to accelerate WHO GWD-free certification status

## Methods

- Cross-sectional study conducted in six states in Nigeria from August to October, 2010
- Questionnaires administered to 2,400 people > 15 years of age
- Information obtained about knowledge of GWD, reporting practices, and cash reward awareness
- States were classified as:
  - Jingle+ states: intensified mobilization, publicity and radio jingles
  - Jingle- states: intensified mobilization, publicity without jingles
- Conducted Chi-square analysis to determine significance of difference in states

## Results

**Table 1. Socio-demographic characteristics of questionnaire respondents from states with GWD publicity jingles and without, Nigeria, October, 2010**

Characteristics of interest		Jingle+ (%)	Jingle- (%)
Age	15-24 (n=363)	161 (44.4)	202 (55.6)
	25-34 (n=1000)	505 (50.5)	495 (49.5)
	≥35 (n=1032)	530 (51.4)	502 (48.6)
Sex	Male (n=1679)	931 (55.4)	748 (44.6)
	Female (n=716)	264 (36.9)	452 (63.1)
Residence in community	<5 yrs (n=209)	97 (46.4)	112 (53.6)
	5-10 (n=422)	203 (48.1)	219 (51.9)
	>10 (n=1763)	895 (50.8)	868 (49.2)
Educational status	Informal (n=678)	438 (64.6)	240 (35.4)
	Primary (n=304)	137 (82.0)	167 (54.9)
	Secondary and Tertiary (n=126)	52 (41.3)	74 (58.7)

## Acknowledgements

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## Results (cont.)

- Respondents from states that included GWD radio publicity jingles were significantly greater than those in states without jingles to correctly describe the disease, reporting procedures, and know about cash rewards (Table 2)

**Table 2. GWD awareness and reporting among respondents in states that included GWD radio jingles compared to states without jingles, Nigeria, October 2010**

Responding factors	No. (%) Jingle+	No. (%) Jingle-	P values
Saw and heard of GWD (n=1191)	654 (54.9%)	283 (23.6%)	<0.001
Described GWD correctly (n=949)	655 (69.0%)	454 (41.7%)	<0.001
Described correct reporting procedure for suspected GWD (n=1091)	576 (52.8%)	203 (17.0%)	<0.001
Heard about cash reward (n=1174)	292 (24.9%)	79 (6.7%)	<0.001

## Conclusions

- Using radio jingles resulted in increased public awareness for GWD, its reporting and the cash reward
- Using radio jingles should be scaled up nationwide to complement GWD surveillance and reporting in Nigeria

## Public Health Recommendations

- Scale up publicity using radio jingles
- Sponsorship by government at all levels to sustain awareness
- Need for implementation of GWD eradication communication for behavioural impact (COMBI) plan –January 2011 onwards
- Advocacy for improved access to safe water supply in rural communities
- Strengthen routine GWD surveillance using the national Integrated Disease Surveillance and Response (IDSR) strategy

## References

- WHO (1996): Certification of Dracunculiasis Eradication: Criteria, Strategies, Procedures- A Practical Guide, WHO/FIL/96.188 REV.1
- WHO (1986) WHA39.21 Guinea worm disease eradication, WHA39.21