

# CHALLENGES OF FLUOROSIS IN ORAL HEALTH AROUND RURAL PART OF BATU/ZEWAY, ETHIOPIA

## AUTHOR

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## INTRODUCTION

- Fluorosis is one of the significant enamel defects that cause teeth, bone, kidney and other systemic problems with concomitant social life of persons (aesthetically and psychologically).

National Academies Press(2006) Washington, DC

- The dental effects of fluorosis develop much earlier than the skeletal effects.
- Dental fluorosis is characterized by mottling, staining and pitting of the teeth. In more severe cases all the enamel may be damaged.

M,C Marya(2011) A Textbook of Public Health Dentistry, Haryana, India,

## RESULTS

- Addressing the social effects, 43 (61%) children with fluorosis feel shame and cover their mouths with their hands while laughing in an effort to hide their teeth. They are uncomfortable to their peers (both male and female) while talking, laughing and hide out their face or look down in order to put out of sight.
- The persistence of the indications of fluorosis in 33 (47%) children could be due to either
  - unreliable quality of water
  - additional usage of highly fluoridated water in the homes of the children.

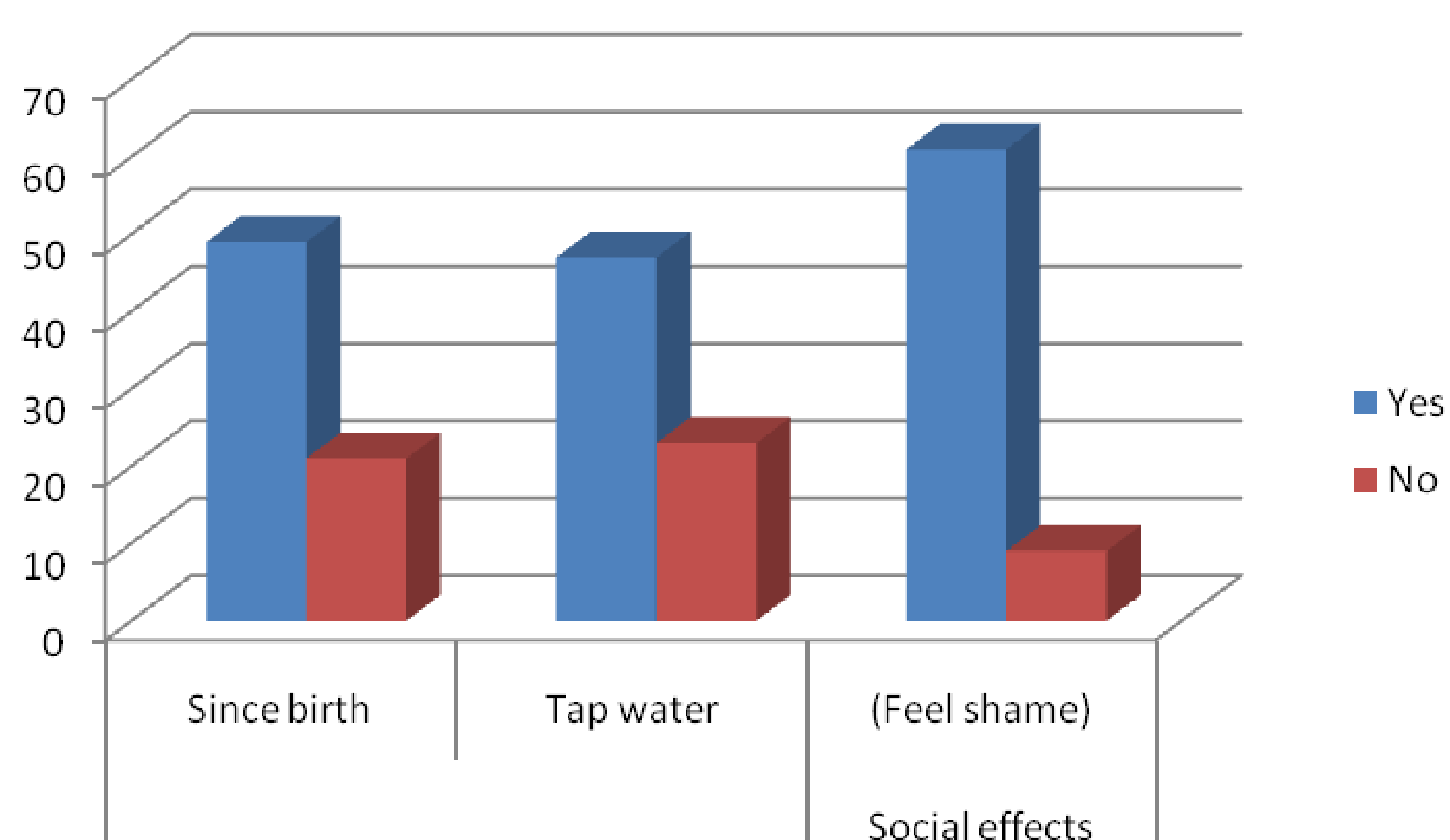
This needs to be further investigated.

## ANALYSIS

- Data collection was done manually and the bar graph and pie charts were developed using Microsoft Excel 2016.

## CHARTS

### EXPOSURE, CAUSE AND IMPACT OF FLUOROSIS



- Bar graph showing people that were born in the area, that consume tap water, and those who feel shame.

## OBJECTIVE

- To investigate the impact and perception created by fluorosis in rural community of Batu/Zeway area

## METHODOLOGY

- A cross sectional study of the area was done using questionnaires and interviews of 70 children with their families from three (3) different schools in the month of December, 2022
  - A clinical data collection from three different schools were done by Redeat Zeryhun a clinical Dental Medicine student of Addis Ababa University, Mandia A. Duressa an intern from Menelik Hospital, Ayalew Duressa, Lali A. Duressa and Takuma Fetene Duressa (the last three are researchers). The data was collected for 4 weeks in the month of December 2022. This data along with clinical screening is the primary source used in the study.

## CONCLUSION AND RECOMMENDATIONS

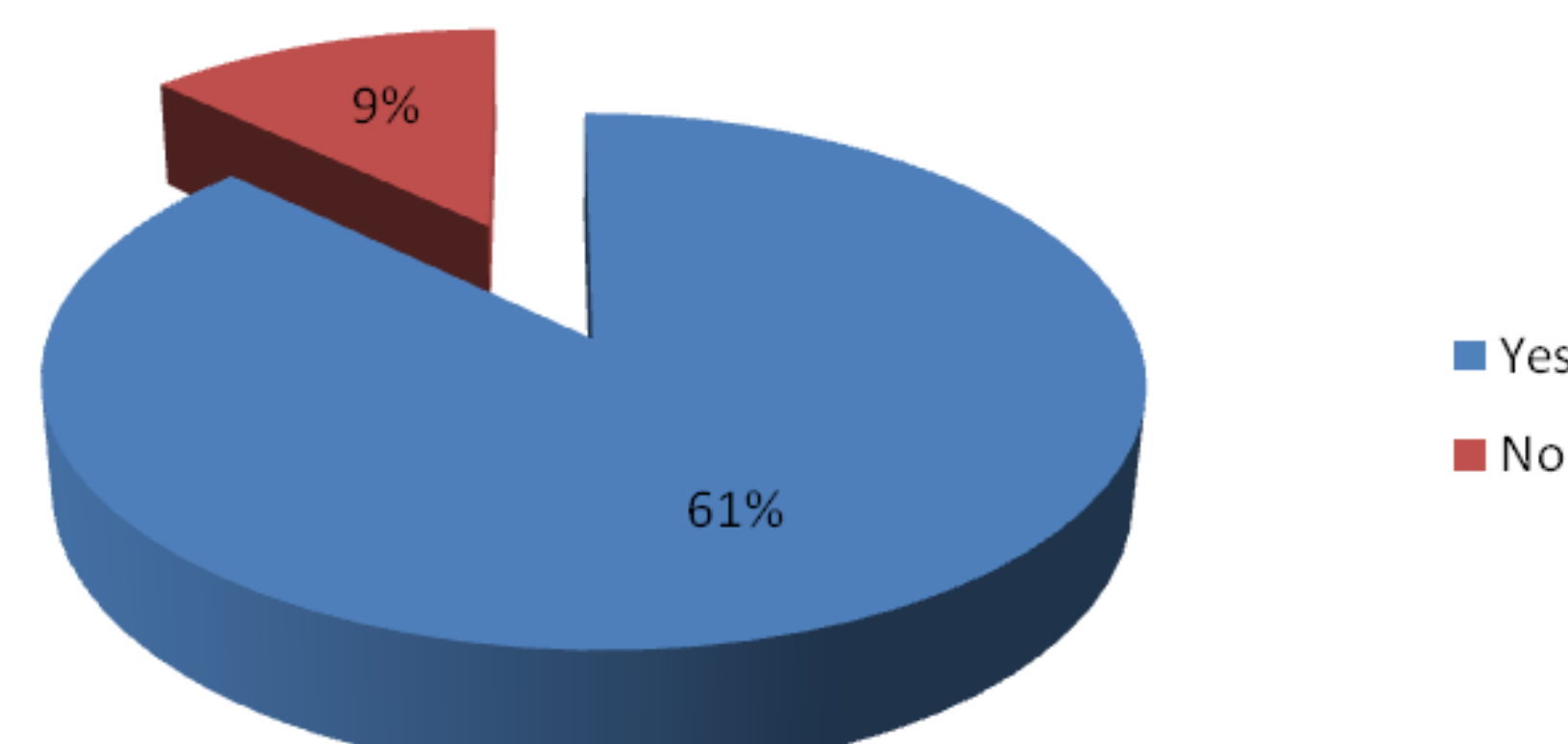
- All of the fluorosis affected persons show that they feel shame in social life.
- Despite the government claims that the community's tap water is cleaned/purified, fluorosis is still a problem that affects people who use both tap and well water for washing, cooking, and drinking.

### The following recommendations are forwarded

The community should receive clean water of guaranteed quality from the government. The government should adapt defluoridation procedures from other nations, such the Nalgonda process, to the unique circumstances of the community.

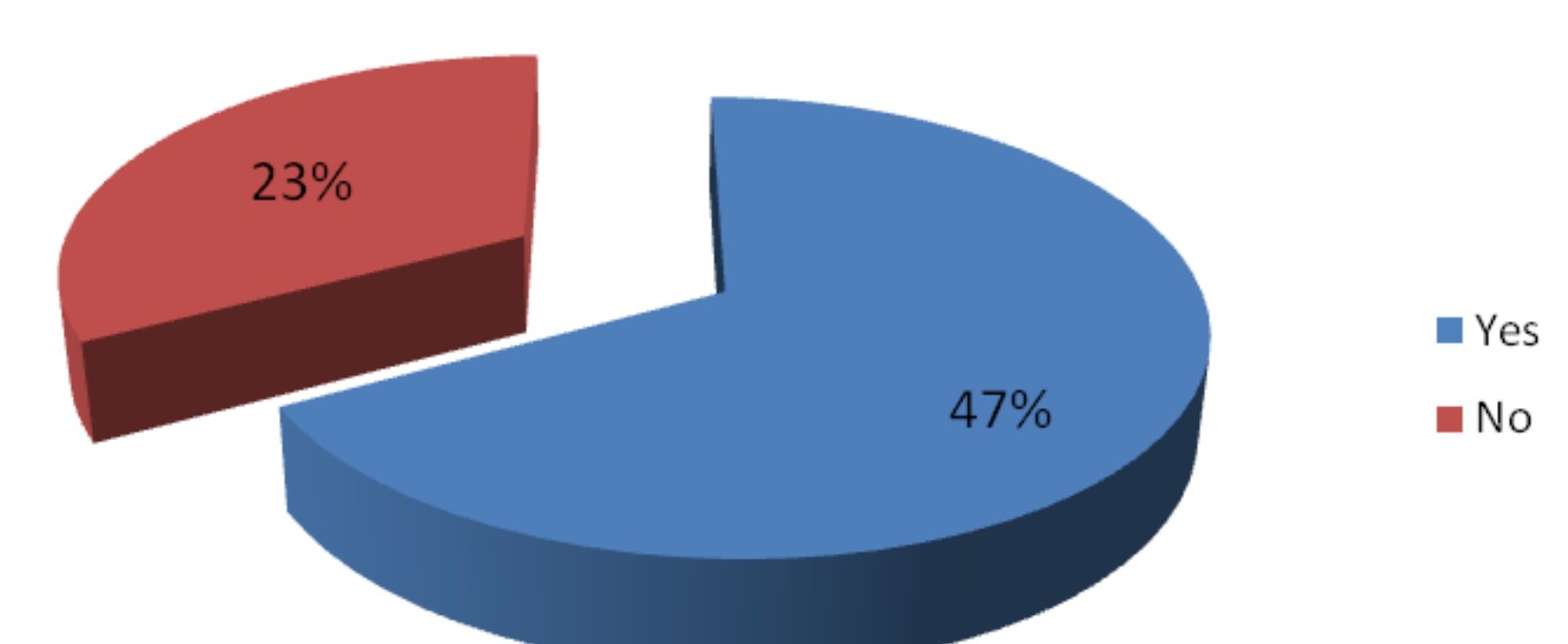
- Further study is needed on the quality of the purified "tap water" water
- The government should prioritize and give due attention to the defect as it is both socially and physically disabling

### Social effects (feel shame)



- The percentage of people that feel shame due to their teeth

### Tap water



- The percentage of people that use tap water