ST FAITHS HIGH SCHOOL

SCIENCE TEAM PRESENTS
GENOMIC MEDICINE RESEARCH

THE PREVALENCE OF MENTAL ILLNESS IN MADETERE COMMUNITTY AND POTENTIAL GENETIC BASIS OF THE DISEASE

Saint Faith's

Faith and Fidelity

AiBST — African Institute of Biomedical Science & Technology

01 Question And Objectives

Q1. What Is the mental Disease
Q2 Are there any Genetic Markers

OBJECTIVES
*Administer a Mental Health Questionaire to Randomly Selected 50 Indivuals
*Collect Blood Samples From Individuals
*Carry Out Family History Analysis

02 Literature Review

Schizophrenia
*Chronic and severe mental disorder that affects how a person thinks, feels, and behaves

Bipolar Disorder
*This is Characterized by mood swings between high energy activity(known as mania or hypomania) and feelings of sadness or depression, lasting for days ,weeks or months at a time

Genetic Markers
*A readily recognizable genetic trait ,gene. DNA segment or gene product used for identification especially when closely linked to a trait.
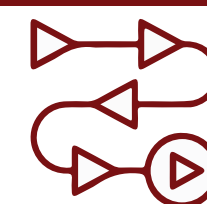
03 Hypothesis(es)

Ho: There are no genetic risk markers for mental health at population level and affected families (alternative causes CMV, Toxoplasma–Gondii, HSV).
H₁: Currently known genetic markers for risk of mental disease are present in the Madetere community and can explain disease prevalence in some afflicted families.
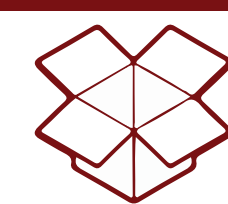
04 Procedures

*Inclusion and exclusion criteria
*Data Collections
*Blood Sample Collections
*Genotype analysis
*Data analysis

05 Materials

*Blood Collection Tubes
*Needles
*Gel Packs
*Cotton Wool
*Methylited Spirit
*Syringes
*Gloves

06 VARIABLES

Population approximately: 1000
Sample Questionnaire
*50 random people
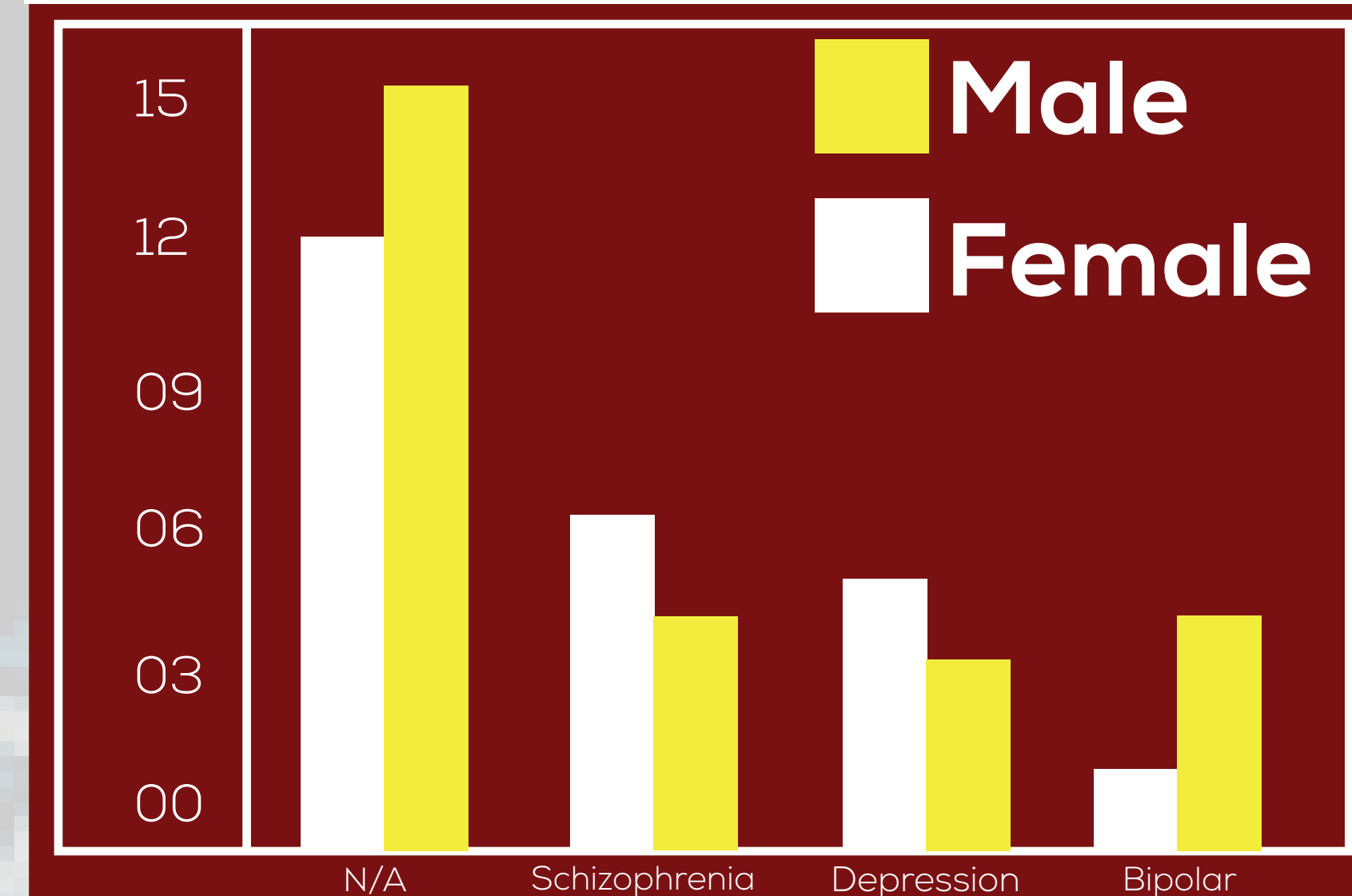*2 Sample Families
*2 Control Families

07 DATA

DISEASE	N/A	Schizophrenia	Depression	Bipolar
MALES	15	4	3	4
FEMALES	12	6	5	1

Main Source : Interviews & Questionnaires

08 GRAPHS

09 DATA ANALYSIS

100% reliability of data was difficult to obtain because...
*Some affected people were still in denial.
*Some provided false info judging from their medical history provided by local clinics
*Most data is based on interviews

10 RESULTS

As suspected some of the people showed signs and symptoms of mental illness and generations of the sample family are affected too (see pamphlet)

11 CONCLUSION

With the data at hand we concluded that the prevalence of mental illness in Madetere community can possibly be hereditary and it can be identified by the known genetic risk marker **rs2535629.** In that regard we therefore reject the null hypothesis H₀

12 APPLICATIONS

Resolution to false beliefs eg. blaming witchcraft
*Possible Abortions can be done under necessary and definite conditions