COMPARISON OF SALIVARY AND BLOOD CORTISOL IN PATIENTS WITH ANXIETY IN A TERTIARY CARE HOSPITAL: PROTOCOL FOR A CROSS SECTION STUDY

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INTRODUCTION:

A mental health condition known as generalised anxiety disorder (GAD)causes fear, concern, and a persistent sense of being overwhelmed. Excessive, ongoing, and irrational concern about commonplace issues contributes to GAD. (1,2,3)

India has one of the highest prevalence of mental illnesses globally. The lifetime prevalence of GAD is 6.2% in people between the ages of 18 and 64, making it a prevalent kind of anxiety. (4,5,6)

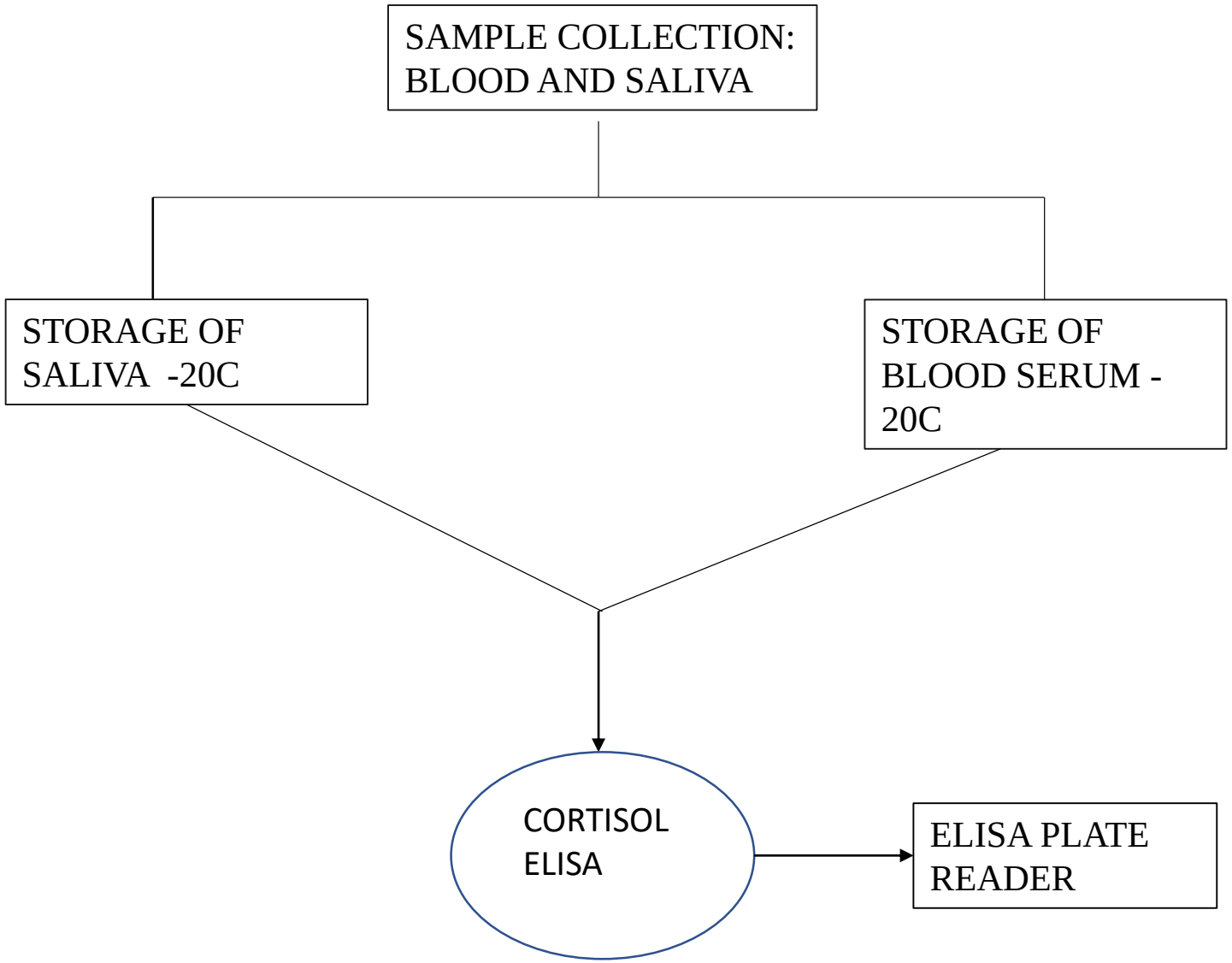
***The identification of reliable biomarkers for anxiety is crucial as it can assist in the diagnosis and management of the disorder. Salivary and blood cortisol levels have been proposed as potential biomarkers, which can provide an easily accessible method for detecting anxiety. This can enable earlier diagnosis and treatment, leading to better outcomes for individuals with anxiety*.**

OBJECTIVE:

- To compare the accuracy level of salivary and blood cortisol in anxiety disorder patients?
- To study whether salivary cortisol is a potential biomarker for anxiety disorder

METHODOLOGY: OPD PATIENTS
(TERTIARY CARE HOSPITALS)

The study is an observational cross-sectional one, and will be done in the Psychiatry OPD, SMIMS which includes anxiety patients diagnosed on International Classification of Disease -1. Patients are rated with Hamilton Anxiety Rating Scale (HAM-A) and Hamilton Rating Scale for Depression (HAM-D).



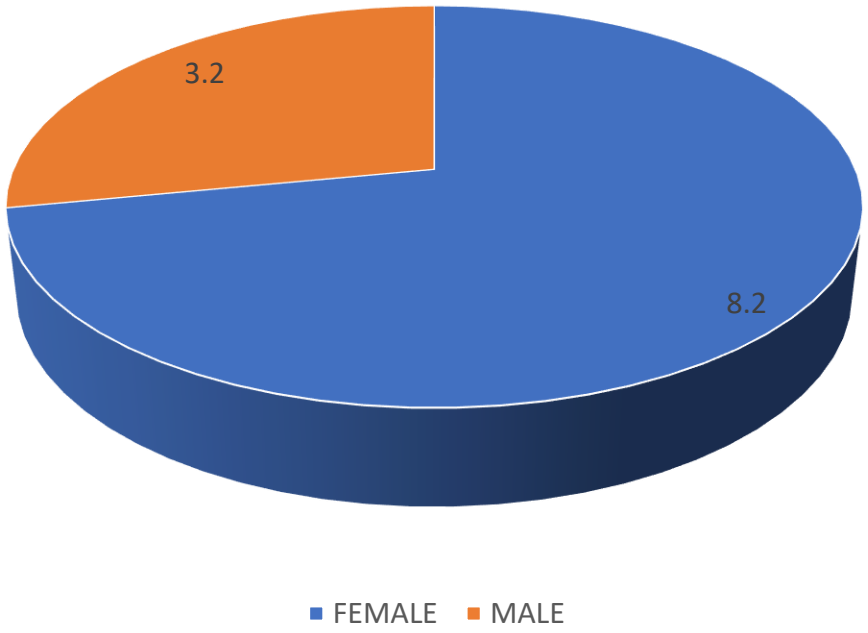
SUBJECTION OF HAM-A AND HAM-D SCALES FOR CONTROLS

Initially, to find normal control, HAM-A and HAM-D forms were distributed among the students of various departments of Sikkim Manipal University. Written consent was collected from each participant.

HAM-A SCALE
Clinicians utilise the Hamilton Anxiety Rating Scale (HAM-A) measuring both psychic anxiety (mental agitation and psychological distress) and somatic anxiety

HAM-D SCALE The most frequently used clinician-administered depression evaluation scale is the HDRS (commonly known as the Ham-D)

RESULTS FROM HAM-A and HAM-D TESTS FOR CONTROLS

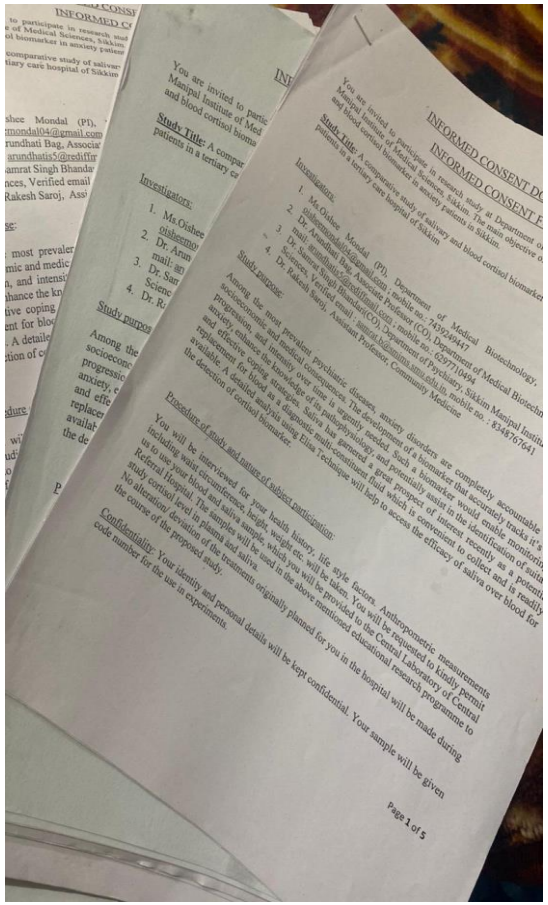


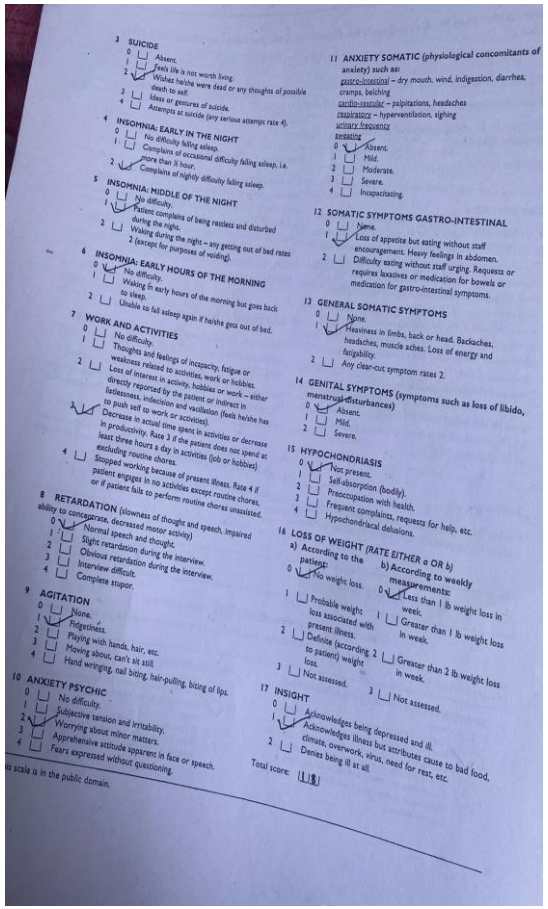
- TOTAL NO. OF SAMPLES 60
- PERCENTAGE OF FEMALES HAVING ANXIETY : 66.6%
- PERCENTAGE OF MALE HAVING ANXIETY: 33.33%
- AVERAGE AGE OF BOTH SEXES: 22
- AVERAGE HEIGHT OF FEMALES : 5’3”
- AVERAGE HEIGHT OF MALES: 5’6”

WORK IN PROGRESS

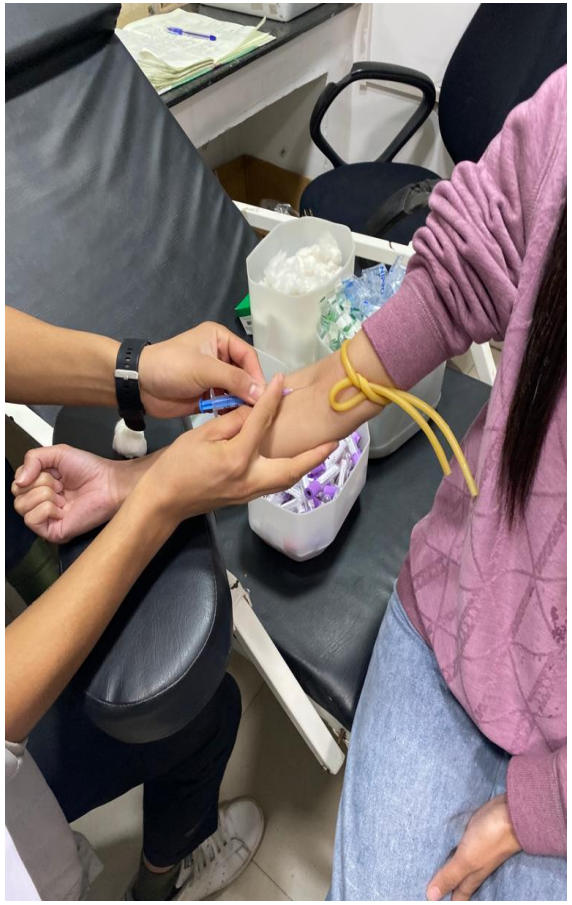
SMIMS SIKKIM MANIPAL UNIVERSITY
SIKKIM MANIPAL INSTITUTE OF MEDICAL SCIENCES

DISTRIBUTION OF HAM-A and HAM-D SCALES FORMS





SAMPLE COLLECTION IN TERTIARY CARE HOSPITAL



RESULT

It was observed that among the participants 75% students had anxiety without depression.

The study is extended further in generalized anxiety patients visiting Psychiatry OPD, SMIMS, and a comparative analysis of salivary and blood cortisol in generalized anxiety patients and controls will be carried out.

CONCLUSION

Saliva has a great prospect as a potential replacement for blood as a diagnostic fluid as it is convenient to collect and is readily available.

This study will help to access the efficacy of saliva over blood for the detection of cortisol biomarker in generalized anxiety patients.

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