CHAPTER - V

SUMMARY AND CONCLUSION

The present work is based on the investigation conducted from January 2009 to December 2012, among the Pategarh community of Dharwad, Karnataka. Pategarh are spread all over India. A few families are living in Dharwad District. A group of 100 alcohol dependent patients and 100 controls (nonalcoholic) were selected from a Pategarh community of Dharwad, and written informed consent was obtained from each of them. The screening evaluations of all participating individuals were conducted by interview and clinical examination. Those were based on Structured Clinical Case Taking Proforma. Men who consume more than 360 ml of alcohol per day and women who consume more than 180 ml of alcohol per day were classified as alcohol dependents. Inclusion criteria for the healthy control group were; (1) diagnosis of nonalcoholic (controls), (2) absence of any severe medical conditions, (3) absence of pregnancy, and (4) informed consent. Inclusion criteria for alcohol dependent patients were as follows; (1) diagnosis of alcohol dependence, (2) no history of severe medical conditions, (3) absence of pregnancy, and (4) informed consent.
The SPSS programme package was used for statistical analysis. The sensitivity, specificity, positive predictive value and negative predictive value were calculated.

There is no single test to represent accurately the long term and short-term consumption of alcohol. The best device is to use a combination of consistent state and trait marker tests. The following laboratory tests were conducted among alcohol dependent patients and controls before administering homoeopathic treatment to understand the significant differences.

1. Total serum bilirubin

2. Blood Alcohol Content (% BAC)

3. Total cholesterol

4. Mean Corpuscular Volume of erythrocytes (MCV)

5. Gamma Glutamyl Transpeptidase (GGT)

6. Serum Glutamic Pyruvic Transaminase (SGPT)

7. Serum Glutamic Oxaloacetic Transaminase (SGOT)

8. Carbohydrate-Deficient Transferrin % (CDT).
In this research Total Serum Bilirubin, BAC per cent, Total Cholesterol, MCV, GGT, SGPT, SGOT and CDT per cent were significant clinical laboratory tests among alcohol dependent patients. These tests are considered as biological markers among alcohol dependent patients.

In the present study the Alcohol Use Disorders Identification Test (AUDIT) and Michigan Alcoholism Screening Test (MAST) questionnaires proved as momentous screening tests for the detection of alcohol dependency.

The stature and weight measurements were recorded from all the subjects and Body Mass Index (BMI) was calculated for comparison. It is clear from the study that, there is no relation between BMI and alcoholism as anthropometric measurements are insignificant.

The case study includes Socio-demographic profile of the patients. Homoeopathic medicines, namely Quercus Glandulosa Spirosus - Q (mother tincture) and Chelidonium majus - Q (mother tincture) were administered, till they stop consuming alcohol or up to nine follow ups to alcohol dependent patients, to find out the efficacy on alcoholism. Homoeopathic treatment on alcohol dependent patients’ shows the tendency of reducing alcohol consumption in quantity but not abstaining of alcohol dependency.
Hence, it implies that, the alcohol dependent patients with taking homoeopathic medicines consume less quantity of alcohol, and craving for alcohol is reduced.

The whole blood was collected in vacutainers containing ethylene diamine tetra acetic acid (EDTA). Each vacutainers contained 5 ml of blood sample. About 40-50 Microns DNA/ml was extracted from each sample. The DNA was extracted manually from the blood sample. The SDS-proteinase -K method was used for extraction of DNA from a blood sample. This method dissolves the sample, and digests the protein component without affecting the DNA. The Dopamine active transporter gene (DAT1) polymorphism was amplified by using polymerase-chain reaction (PCR). PCR reaction was performed to check the intactness of the genomic DNA. It was also used to determine the inhibitory materials which are interfering with reaction.

In this scrupulous study, the researcher has analysed natural variation in the DAT1 40-bp VNTR locus in the Pategarh community of Dharwad. This locus is extremely polymorphic, and significant diversity has been found in allele spectra were observed, also assayed DAT1 VNTR diversity in the Pategarh community of Dharwad. It is clear from the present findings that, there is an influence of the Dopamine active transporter gene (DAT1)
variable number of tandem repeats (VNTR) polymorphism in the aetiology of alcoholism among Pategarh community. This study also shows that, the most frequent nine and ten-repeat allele deviate significantly from alcohol dependent patients. The present research establishes the association between allele A9 carrier status of DAT1 and alcoholism. The heterozygosity indices were observed comparatively low in the controls. These results demonstrate the variability of the DAT1 40-bp VNTR polymorphism in alcohol dependent patients, and controls among the Pategarh community.