CHAPTER 3

ANTHROPOLOGY

Doctoral Theses

01. CHAWLA (Swati)

Role of Genetic Modifiers in the Clinical Severity of Beta Thalassemia among Indian Patients (Delhi-NCR Region).

Supervisor: Dr. K. N. Saraswathy

Th 23241

Contents

1. Introduction 2. Literature review 3. Materials and methods 4.Result and discussion 5. Summary and conclusion. References. Annexure. List of publications.

02. DEWANGAN (Hemlata)

Genomic Diversity among the Tribes of Odisha.

Supervisor: Prof. Gautam K. Kshatriya

Th 23232

Abstract (Not Verified)

Population genetics is the study of gene and genotype frequencies and predicting the ways, they would change under the various micro-evolutionary forces overtime. Recently, molecular genetics has bolstered the studies with the knowledge of human diversity, tracing ancestry, migration histories and population affinities. India consists of endogamous tribal communities which has restricted gene pools. This provides vast opportunity for continuing study of the extent of genetic diversity within and between populations to relate observed patterns of affinities with linguistics, cultural and demographic histories of the populations. Therefore, the present study attempts to investigate the genomic diversity among the tribes of Odisha, India. 5 ml. intravenous blood sample was taken from randomly chosen 224 individuals for genomic DNA analysis. The mtDNA sequencing was done using standardprotocol. Data was used for estimating genomic diversity, nucleotide diversity and number of polymorphic sites based on sequences were analysed for mtDNA. Various haplogroupswere constructed on the basis of mutational events. In the present analysis, three of the fourtribes (Bhumijs, Mahalis and HOs) are Austro-Asiatic speaking tribal groups while Bathudisare speakers of Indo-European language. These groups were compared with other Indianpopulations to see whether there was any relationship between language and genomicdiversity. Multi-Dimensional Scaling showed the grouping of studied populations with Austro-Asiatic speaking populations of India to a large extent and with Dravidians speakers tolesser extent. AMOVA, based on mtDNA sequences, also corroborated these findings. Austro-Asiatic speaking tribes of Odisha showed least among group variance with Dravidianspeaking tribes. Thus, the results clearly indicate that irrespective of language affiliation of the studied groups they show underlying genetic uniformity with the Dravidian speakers andthat the language shift might be a recent event. Therefore, genetic affinities may be independent of linguistic affinities.

Contents

1. Introduction 2.Area and people 3.Materials and methods 4. Results: Analysis of mitochondrial DNA 5. Discussion 6.Summary and conclusions. References. Appendices.

03. GUPTA (Sneha)

Embodiment of Addict Diaspora: Exploring Lived Experiences of Addiction Driven People in a De-addiction Center in Delhi, Inida.

Supervisor: Prof. P. C. Joshi and Prof. P. K. Ghosh

Th 23238

Contents

1. Introduction 2. Research methodology and fieldwork experiences 3. Therapeutic community in practice 4. Onset of substance use and addiction 5. Disembodied self and embodied by addiction 7. Pathways of self migration: A phenomenological discovery 8. Addict Diaspora: A conclusion or a new beginning. References and bibliography. Annexures.

04. KADAM (Chitra)

Capacity Building in Development Practice: Exploring Sustainability Through Civil Society Initiatives.

Supervisor: Prof. S. M. Patnaik

Th 23719

Contents

- 1. Introduction 2. Research methods 3.Enthnographic backdrop methods 4. Samarthan as an organization 5. Building capacities and strengthening communities 6. Agency of local actors 7. Sustainability: Ownership, Institutionalization and replicability 8. Summary and conclusion. Bibliography. Appendices.
- 05. KAPOOR (Abhilasha)

Sexual Dimorphism in Human Postcranial Bones: A Forensic Anthropological Study.

Supervisor: Prof. M. P. Sachdeva

Th 23230

Abstract (Not Verified)

This thesis investigates sexual dimorphism in human postcranial bones, which is a forensic anthropological study. The present study has been conducted on seven post-cranial bones humerus, radius, ulna, femur, tibia, fibula and scapula. In the study, the measurements pertain to linear, transverse, sagittal and circumferential dimensions on bones. The data were collected on 502 adult post cranial bones from Lady Hardinge Medical College, Delhi. Overall, 182 metric and 9 non-metric parameters were observed. The main aims and objective are i) to observe the sex-wise correlation pattern between different fragmentary bone dimensions, ii) to identify the best variables for sex determination, iii) to determine morphometric criteria for sex determination, iv) assessment and comparison of significance level of different fragmentary metric variables, v) to formulate discriminant functions and to classify female and male sex groups and vi) to identify certain new measurements

for sex determination. There are two methods employed for identification process from skeletal remains, which are; Non-metric and Osteometric methods. Data were analyzed using SPSS version 20 for mainly calculation of means, standard deviations, t-test and DFA. Results from DFA revealed that the overall classification accuracy for i) humerus is 97.1%, ii) radius is 100.0%, iii) ulna is 81.9%, iv) femur is 98.7%, v) tibia is 94.5%, vi) fibula is 100.0% and vii) scapula is 93.7%. One noteworthy point is that the success rates achieved in present study are slightly higher than those obtained in most of the previous researches on different populations. Thus, confirming the importance of discriminant function analysis in assessment of sex. Thus, it can be concluded that for the sex determination in human postcranial bones, maximum number of parameters can be taken to attain 100% accuracy for both forensic anthropological and archaeological analysis. The present study happens to be a humble attempt in this direction.

Contents

1. Introduction 2. Review of literature 3. Material and methodology 4.Results on bone of shoulder girdle (Scapula) 5. Results on bone of upper arm (Humerus) 6. Results on bones of forearm (Radius and ulna) 7.Results on bone of upper leg (Femur) 8.Results on bones of lower leg (Tibia and fibula) 9.Comparative analysis 10.Summary and conclusion.References.

06. KHUNDONGBAM GYANABATI DEVI

Household Management of Malnutrition in Manipur.

Supervisor: Prof. P. C. Joshi and Dr. M. Meghachandra Singh

Th 23231

Abstract (Not Verified)

The present study attempts to understand the differential management practices of malnutrition among children under five adopted and perceived by the mothers between three different caste groups belonging to General (Meitei), Schedule Caste (Lois) and Schedule Tribe (Kabui). Data pertaining to socio-demographic factors, anthropometric measures of children, cultural factors, beliefs and perceptions on health, foods habits, hygienic practices etc. were collected from 628 mother-child pairs from three different villages of Imphal East district, Manipur. The study revealed similar ethno-medical model of malnutrition among the communities, though significant differences in their ideologies. Nutritional, infections, supernatural etc were the parts of the model. Cultural values on breastfeeding, superstitions, have influenced the nutritional status of children. Lois children were more affected by these factors. All mothers aware malnutrition can prevented at household level, through ranges of practices like feeding nutritious food, avoid pregnant and medicating mothers' milk, etc. Majority mothers preferred to treat malnourished children at home through home remedies and religious practices and very few concern medical practitioners. Kabui and Lois children were observed to be more affected by such beliefs. Higher prevalence of underweight (39.2%) and wasting (14.3%) were observed among Lois children; and Kabui children were higher in prevalence of stunting (42.8%). The prevalence among Meitei were found comparatively the lowest, but the percentage were considerately high as nearly one in every 4 children are underweight and three out of every ten children were stunted. Several factors like age, father's and mother's characteristics, family's characteristics, immunization status, morbidities and feeding practices were observed significant factors of malnutrition, notably sex of children have not seem to be determinant factors for malnutrition in all the communities. Lois and Kabui children were relatively more vulnerable to malnutrition than Meitei. Key words: Malnutrition. Cultural Beliefs.Practices.Anthropometric Indicators.Comparative.Meitei. Lois. Kabui.Manipur.

Contents

1. Introduction 2. Methodology 3. Trends and patterns of health structure and health infrastructure in Manipur 4. Perspectives of malnutrition: The cultural 5. Management and prevention of malnutrition among children 6. Nutritional status: Anthropometric assessment 7. Conclusion and recommendation. Reference. Appendices.

07. MAHIMA GULABANI

Genetic Association Study of GWAS-Identified Genes Related to Age at Menarche and Age at Natural Menopause among the Rural and Urban Jat females of Haryana, India.

Supervisor: Prof. M. P. Sachdeva

Th 23239

Abstract (Not Verified)

A women's life is predominantly marked by two major hallmark epidemiological events; Age at Menarche (AAM) i.e. beginning of menstruation &Age at Natural Menopause (ANM) i.e. the permanent cessation of menstruation (at least twelve consecutive months of amenorrhea), not because of surgery or other causes (W.H.O, 1996). These have been found to be highly varying within &between populations, influenced by intrinsic &extrinsic regulating factors &strongly correlated with complex disorders viz. cancers, CVDs, osteoporosis, psychopathies etc. This study attempts to evaluate the association of two GWAS-identified candidate genes: rs7759938 (nearest gene LIN28B; for AAM) and rs16991615 (MCM8; for ANM) among a total of 830 (533 rural & 297 urban) unrelated Jat females of rural &urban Harvana, supplemented by the effects of biological, socio-demographic. lifestyle &reproductive-health variables. The study identified mean (median) age at menarche of 14.46 ± 1.26years (15.00years) (rural) and 13.88 ± 1.11years (14.00years) (urban) and age at natural menopause of 44.33 ± 4.61 years (44.00 years) (rural) and 44.38 ± 3.93 years (45.00 years) (urban), showing a decreasing and increasing trend of menarche and menopausal timings respectively in both the areas, supported by significant associations with BMI, WHR and WHtR. It also revealed blood pressure and fasting blood sugar levels as suggestive risk-factors in urban areas for menarche and menopausal timings respectively. Genetically, the high frequency of menarche risk allele in the population with continuous lifestyle changes raises concerns because of possible associations with severe health outcomes (CVDs, cancers, diabetes, osteoporosis etc). The absence of menopause mutant homozygote could be suggestive of selective disadvantageous nature. Conclusively, being the first study w.r.t. GWAS-identified genes, it can serve as the baseline for future CGASs, GWLA, GWASs or epigenome-wide association studies, providing a powerful background for developing community-specific studies emphasizing on gene-environment interactions &in estimating correlations between the risk-factors of associated complex disorders.

Contents

1. Introduction 2. Review of literature 3. Methods and materials 4.Results and discussion 5.Summary and conclusions.References.Annexure.

08. MARY PANMEI

Customary Law and Gender Relations among the Rongmei Tribe of Manipur.

Supervisor: Prof. Subhadra Channa

Th 23240

Contents

1. Introduction 2. Fieldwork and experiences 3. Area and people 4. Customary laws of the Rongmei 5. Village administration and the functioning of the laws 6. Interface of Rongmei law with the state law 7. Customary law and gender 8 Conclusion. List of plates.References and bibliography.Appendices.

09. NAIK (Kumud Chandra)

Barriers to Tribal Education: A Study among PengoKondh Tribe of Odisha.

Supervisor: Prof. P. C. Joshi Th 23237

Abstract (Not Verified)

According to the 2011 census, Odisha is the third largest tribal dominated state in India. Undivided Koraput is a very backward district in Odisha. There are 22 tribal groups, including 7 particularly vulnerable tribal groups (PVTg) out of 62 tribes of Odisha. After 1992, the undivided Koraput district was bifurcated into four separate districts namely; Koraput, Nabarangapur, Malkangiri and Rayagada. In Rayagada district 56 percentage of the population are tribal population (Census, 2011). Population wise Kondhtribe is the dominant tribe in Odisha. They constitute 20 percent of the total Scheduled Tribe population of the state. Pengopeople are socially, educationally and economically underdeveloped due to lack of awareness and proper education. Until now, they believe in superstition and do not understand the value of education. After 68 years of India's independence, they are still unaware about all the government schemes, particularly implemented for them (GOI, 2014). There is a negative impact of development due to lack of education among these tribal people. In addition, the incentives provided by the government do not reach the intended people. Therefore, there is a need to have an adequate provision for development of these particular groups by looking at all spheres of their lives. The Government of India and the state governments are taking steps to fulfill this right. There is need to invest in creating support mechanisms that supplement the integration of tribal children into the formal education system. This attitude and difficulties should be removed by adopting easier and simple teaching methods. Consequently, the number of teachers and official staffs should be increased in the tribal schools. The attitude of tribal students toward education should be improved through proper counseling and guidance. More number of tribal teachers should be appointed who know the language of tribal people.

Contents

1. Introduction 2. Methodology 3.The area and people 4.Socio economy and demographic structure 5.Issues in school education 6.Government policies and programmes 7.Role of the Parents.Teachers and education officers on schooling system 8.Summary and conclusion.References.Appendix.Interview schedule.

10. NGAO THOHRII

Traditional Knowledge as Situated Practice: Understanding Subsistence Pattern AmongstPoumai Naga Tribe of Manipur, India.

Supervisor: Dr. IndraniChattopadhyaya

Th 23234

Contents

1. Ethnography profile: People and area 2. Research methods 3.Poumai Naga Tribe through their traditional knowledge practices 4. Poumai modes of subsistence

5. Foodways and its social implications 6. The fear factor that sustains 7. Conclusion. Glossary. Maps and Plates. Bibliography.

11. SINGH (Joginder)

Study on Handwriting of Twins and Siblings and the Impact of Regional Language Writing Habits on English Handwriting.

Supervisor: Prof. M. P. Sachdeva

Th 23236

Contents

1. Introduction 2. Review of literature 3. Aims and objectives 4. Area of study 5. Methodology 6. Results and discussion 7. Summary and conclusions. References. Additional bibliography. Appendices.

12. SINGH (Supriya)

Politics of Water: Strategizing Access and Managing Resources in NCR Delhi. Supervisor: Prof. S. M. Patnaik

Th 23242

Abstract (Not Verified)

That water resources in India are overexploited has been an undisputed fact for long. The rootcause of the problem is not only public apathy to the issue but also the way water is managedand governed. Using the case of Delhi, the research discusses how different mainstreamdebates, concepts and actors have managed to polarise and in some ways limit thedeliberations around water and failed to recognize the complexity and multidimensional aspects of the precious resource. The thesis examines the reason(s) for the water crisis in the Masoodpur and Vasant Kunj area. It contextualizes the importance of Aravalis in Delhi and NCR by studying the political economyof its most important ecosystem service, water. An inherent part of the study is also to critically examine the role of rights and duties in obtaining access to water. The aim is to inform the policy debate on how best to manage water resources so as to achieve the twin goals of watersecurity and environmental sustainability. Further, using the lens of Political ecology to analyse the issue of groundwater the research covers motivations for water and land policy formulation, and implications of these policies onthe ground as well as interactions between environmental governance (structures and process)and the general population. The research methodology centers on the ethnographic approach along with using secondaryand data analysis; archival research; household surveys; and structured and semi-structuredinterviews with stakeholders. The research argues for a more robust, inclusive and flexible framework of policy that takesinto consideration the socio-political aspects of groundwater, keeping the social imagination ofwater alive in conjunction with environmental and physical aspects of the resource. What thismeans is to treat water as a local resource and apart from the supply side also look critically atregulating consumption.

Contents

1. Introduction 2. Methodology 3. Ethnographic space 4. Nature and culture intersections: Citizens and the State 5. Water governance: Situating groundwater 149-184 6. Social life of water 7.Summary and conclusions. References. Appendices.

13. SWETA

Riverfronts (Ghats) of Banaras: An Antropological Study.

Supervisor: Prof. Vinay Kumar Srivastava

Th 23235

Abstract (Not Verified)

The thesis is the study of spatio-temporal dimensions of ghats. It looks at how landscapes create and sustain the cosmogony in the most magnificent way. The ghats have a mythological history, temporality, and ecological-religious background. A cosmogony order is formed along the riverfront. The order is in the routine and the rhythm people follow. The arrangement of names and their usage in everyday life on the ghats bear the spirit of the place. The interaction of the people with the ghat-river complex is shaped around the everyday practices. From the fieldwork conducted, I conclude that the riverfronts act as an all-purpose glue collapsing individual agency to social determination and personal experience to collective consciousness. The bearers of historicity, patronization, narratives and identity struggles are all studied through ghat-names. The temporality of the ghats and its uniqueness to transcend in and out of time is presented in the thesis. The thesis analyses the materialization of sacred texts and hymns into practices which affect the river's ecology. The thesis is an outcome of an ethnographic approach, which combines numerous methods like participant observation, focus group discussion, interviews, visual aids and the like.

Contents

1. Introduction 2. Research methodology 3. Ghat – names and their dynamic aspects 4.Time and the ghats 5. The Ganga: The Goddess and the river 6. Conclusion.Bibliography.Annexures.

14. VALENTINA PAKYNTEIN

Matrilineality and Power Dynamics within the Pnar Householders.

Supervisor: Prof. Subhadra Channa

Th 23233

Contents

1. Introduction to the present study: Matrilineality and power dynamics within the pnar households 2. The pnars of jaintia hills Meghalaya: Culture contact and change 3. Nangbah: The studied village 4. Power dynamics in the household: Authority and control over the symbolic capital 5. Power dynamics in the household: Authority and control overSocio-Economic sphere 6. Matrilineality and power dynamics within the pnar households: Concluding remarks. References.