

Forensic Medical Aspect in Siddha Medical System-Comparative Study

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Abstract

Siddha medical system is creating to re-erect of whole world by their facts on human being of health status of living now. In this aspect forensic medical facets also defined in ancient era perfectly by the sages with their collection of findings. Development of medicine can be considered as old as mankind. To the earliest man, medicine was known in the form of magic, witchcraft and worship of various objects of nature. To protect themselves from their charlatan effect, the ancient men framed a set of regulations, which was the origin of medical jurisprudence. In this research objectives were defined as; to enumerate forensic science view in siddha medical system, to list out siddha forensic valedictions, to reveal the ancient Tamil literature on forensic science to modern world. Referred Main Tamil manuscript on "nanthesar ahalamarana nool", this book mentioned post-mortem appearance of victims and general antidote for poisonous intake. According to result; 15 types of Habits which were list as; Food habits (03), Children victims (04), Sexual offences (08). 41 types of Plant poisons, 20 types of Metals and minerals, 07 types of Homicidal and 05 types of Suicidal were list with Tamil stanza and well clear definition and findings separately. This research finally concluded as ancient Tamil siddhar Nanthesar define and deal with the perfect forensic science without any modern technology and testing of poison or crime. Therefore, future researchers have click to find the ancient techniques in crime scene to legally stable by good evidence bases forensic science.

Keywords: Forensic Medicine; Siddha Medical System; Un-natural Death

Introduction

Siddha medical system is creating to re-erect of whole world by their facts on human being of health status of living now. In this aspect forensic medical facets also defined in ancient era perfectly by the sages with their collection of findings.

Development of medicine can be considered as old as mankind. To the earliest man, medicine was known in the form of magic, witchcraft and worship of various objects of nature. To protect themselves from their charlatan effect, the ancient men framed a set of regulations, which was the origin of medical jurisprudence. Manu (3102 BC) was the first traditional king and lawgiver in India. His famous treatise, *Manusmriti*, laid down the various laws prevailing in those days [1]. It prescribed specific rules for marriages. Punishment for various offences was mentioned in it, viz., for adultery, seduction and carnal knowledge with force, incest, unnatural sexual offences, etc [3,5-7,9,10].

Mental incapacity due to intoxication, illness and age were also recognized. The first treatise on Indian Medicine was the *Agnivesa Charaka Samhita*, supposed to have been composed about the seventh century BC. It lays down an elaborate code regarding the training, duties, privileges and social status of physicians. It can be considered as the origin of medical ethics. It also gives a detailed description of various poisons, symptoms, signs and treatments of poisoning [11-22].

However, in most parts of the world, the description Forensic Medicine and Medical Jurisprudence are not synonymous terms [3,5-7,9-14]. Though they are related to each other, however, carry different meaning. *Forensic Medicine deals with application of medical knowledge in the administration of law and justice.* [3,5-7,9-16,23,25-27]. In fact the word 'Forensic' is derived from the Latin word *forensis*-meaning forum that was the meeting place where civic and legal matters were discussed by people with public responsibility. Application of medical knowledge in injuries, alleged murder, alleged sexual offenses, cases, pregnancy and delivery etc. It covers responsibilities of doctors towards the State, patients and towards each other. With the enormous advances in knowledge and technology during the past decades, the fields like Forensic Odontology, Forensic Osteology, Forensic Biology, Forensic Ballistics, Forensic Psychiatry and Forensic Serology, etc. have come to be recognized as specializations in themselves.

Forensic Pathology essentially deals with interpretation of autopsy findings in a medicolegal investigation of death [2,4,8-10,16-18,26]. It still rests largely on the principles of morbid anatomy [24-27].

Forensic medicine plays a remarkable role in guarding safety of each individual and also in ensuring that any accused is not unjustly condemned. Histochemical and biochemical studies of the injured tissue would establish the postmortem origin of the injuries and the examination of the coronary vasculature will reveal the presence of disease; thereby clearing the issues and helping in the disbursement of justice when the concerned doctor is called upon to depose in a court of law. It is obvious that if the medical aspects of such cases are not interpreted in a proper forensic perspective, pans of justice may remain ill-balanced [16-27]. Thus this branch of medicine deals with medical aspects of law. The term *Medical Jurisprudence* (*juris=law, prudential=knowledge*) deals with legal aspect of medical practice [19,21-27]. This branch deals with legal responsibilities of doctor while practicing medicine. these having knowledge of the Medical Termination of Pregnancy Act, medical negligence, consent, medical ethics, professional misconduct, doctor-patient relationship, rights of doctor, etc. In other words this branch deals with legal aspects while practicing medicine [11-13,16-24].

However, ancient siddhars' also defined each and every condition in legal manner very perfectly without analytical way as histochemical and biochemical. World don't know these type of manuscripts in Tamil language written by siddhars' therefore as a siddha medical expert, like to share these things to explore the world now.

In this research objectives were defined as; to enumerate forensic science view in siddha medical system, to list out siddha forensic valedictions, to reveal the ancient Tamil literature on forensic science to modern world.

Materials and Methods

Research Type: Comparative Literature Reviews

Research Period: 03 months

Research Data: Text References of selected literatures

Data collected from authenticate siddha text book which published by well-known publisher and eminent publishing field in siddha medical field.

Data sources: As selected Literatures: Siddha aspect

Research Design

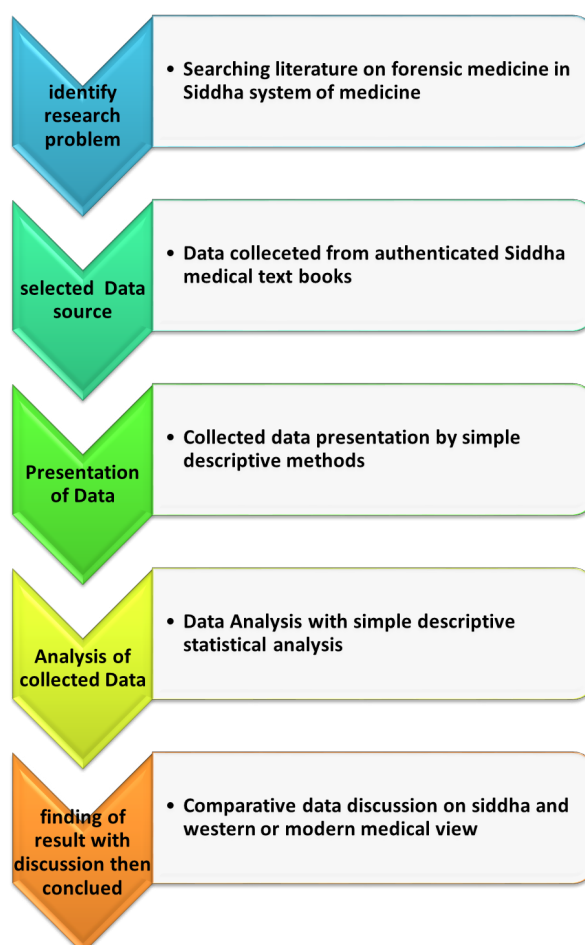


Figure 1: Research design

Literature Review

Forensic Medicine Consists of these Topics in Modern Aspect Text Books: Legal Procedures, Medical Jurisprudence, Identification, Forensic Osteology, DNA Profiling, Medicolegal Autopsy, Death and Changes after Death, Injury: General Considerations and Biophysics, Mechanical Injury, Firearm Injuries and Bomb Blast Injuries, Regional Injuries, Road Traffic Accidents, Injury: Medicolegal Considerations, Thermal Injuries, Violent Asphyxia: Anoxia, Types and Causes of Asphyxia, Pathophysiology of Asphyxia, Stages of Asphyxia, Signs of Asphyxia, Hanging, Strangulation, Ligature Strangulation, Throttling (Manual Strangulation), Hyoid Bone Fracture, Suffocation, Smothering, Gagging Choking, Traumatic Asphyxia, Drowning. Virginity, sexual offenses and Perversions, Impotence, Sterility and Sterilization, Pregnancy and Delivery, Abortion and Medical Termination of Pregnancy, Infant Deaths and Female Feticide, Legitimacy, Paternity and Medicolegal Aspects of Marriage Annulment, Assisted Reproduction, Starvation, Euthanasia, Human Rights, Torture and Medical Ethics, Medicolegal Aspects of AIDS, Anesthetic and Operative Deaths, Medicolegal Aspects of Embalming, Forensic Psychiatry, Trace Evidences, Forensic Science Laboratory [3-21].

In Siddha Aspect: Referred on “*nantheesar ahalamarana nool*”, Publisher: R. C. Mohan, publisher: Thaamarai noolagam, Chennai, 3rd Edition- July, 2013.

This book mentions post-mortem appearance of victims and general antidote for poisonous intake.

Results

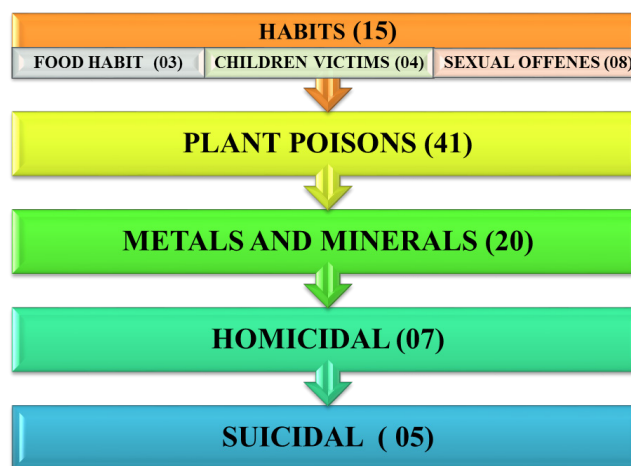


Figure 2: Summary of Siddha manuscript's Result <Source from: Mohan, R. C., “*nantheesar ahalamarana nool*”, Thaamarai noolagam, Chennai, 3rd Edition- July, 2013.> [15]

Habits (15)

1. Food habits
 - a. Over eating
 - b. Rice and Salt excessive
 - c. Rice and Sesame oil excess [15]
2. Children victims
 - a. Eating leeches (*adtai*)
 - b. Eating skink by toddler
 - c. Eating skink by infant
 - d. Eating Kaduvaainaaku [15]
3. Sexual offences:
 - a. Sexual intercourse without women concern
 - b. Rape
 - c. Sexual intercourse with sexual urge ladies
 - d. Older sexual urged lady died after sexual intercourse by young gent
 - e. Sexual intercourse with small girl
 - f. Gang rape
 - g. Revenge sexual intercourse
 - h. Death of pregnant [15]

Plant Posions (41)

1. Opium, *nerium* mixed with sesame oil
2. Opium, sesame oil mixed with curd
3. Nerium root mixed with sesame oil
4. Opium, sesame oil, curd mixed with fruit
5. Drinking cacti latex
6. Intake of latex of *Calotropis gigantea*
7. Intake of latex of *Exocallia agallocha*
8. Henna mixed with sesame oil
9. *Pavatta indica* mixed with Sesame oil
10. Seeds of *Strchynos nux vomica* mixed with sesame oil
11. Eating of *Abrus precatoris* seeds
12. Seeds of abrus mixed with sesame oil
13. Intake latex of vine cactus
14. External spreading of latex of cacti on skin
15. Eating tobacco
16. Sesame oil with juice of betel
17. Excess cannabis
18. Excess opium
19. Opium with juice of Datura
20. Eating of root of *nerium*
21. Drinking root of *nerium* with sesame oil
22. Opium with fruit of Datura
23. Eating of Semacarpus anacardium
24. Eating seeds of *Strychnos nux vomica*
25. Eating of *Croton tiglium*
26. Abrus seeds with lime
27. Eating *pei perkkku*
28. Excess eating of sesame seeds
29. Intake of latex of *Jatropha curcas*
30. Intake of alcohol
31. Intake tuber of *Aconitum ferox*
32. Intake of *irruvi*
33. Eating *irruvi* with aconite
34. Eating *neri visham*
35. Intake of *raththapolam*
36. Eating of *thora ravai*
37. Intake root of *sivathai – turphathum*
38. Intake tuber of *Gloriosa superba*
39. Intake of seeds of *jatrophha*
40. Intake of tamarind with lime
41. Intake of excess *payasam* (sweet) [15]

Metals and Minerals (20)

1. Excessive intake of lime
2. Intake powder of white bottle
3. Intake powder of black bottle
4. Intake of glass parts
5. Intake of camphor
6. Intake of sulphur and copper sulphate

7. Intake of zinc and copper sulphate
8. Intake of *mirutharasingi*
9. Intake of white arsenic
10. Intake of *gowri pachchanam*
11. Intake of white arsenic & *gowri*
12. Intake of white arsenic & *gowri* with sugar
13. Intake of arsenic
14. Intake of super chloride of mercury (*savveeram*)
15. Intake of *savveeram* with mercury
16. Intake of sub chloride of mercury (*rasa katpuuram*)
17. Intake of diamond
18. Intake of *moongil pasaanam*
19. Intake of *dravagam*
20. Intake of lime with *tamarind* [15]

Homicidal (07)

1. Choking and through into water (*kazhuththai nasukkik konru neeriliddaal kuriyariya*)
2. Choking (*kazhuthu nasukki konraal*)
3. Signs of Asphyxia (*moochai piduthum, adaiyai karaththum konraal kuriyarithal*)
4. Signs of Scrotum inserted into the cervix (*karukuzhikkul vithaiyt pukunthaal kuri*)
5. Signs of hanging after kill by hit (*adithukkonru katti thukkinaal athan kuri*)
6. Signs of drowning after kill by hit (*adithukkonru thanneeril iddal*)
7. Detection of Death causing by Thread applying into Cervix (*alkulil thiri vaithu athanaal maranamadhanthaal ariyum vitham*) [15]

Suicidal (05)

1. Hanging (*thookittu seththa pinathaik kandu kurikunam ariya*)
2. Drowning (*thanneril vezhunthu seththavar enrariya kunankal*)
3. Abortion (*karppamazhithal*)
4. Burns (*theepattaal*)
5. Abortion (*thallai marunthu thenru athil seththup pirakkum pillaiyai kandaraiya*) [15]

In modern aspect of topics in Forensic Medicine and toxicology

Section I: Forensic Medicine

1. Introduction
2. Legal Procedure
3. Medical Law and Ethics
4. Identification
5. Medicolegal Autopsy
6. Death and its Cause
7. Postmortem Changes
8. Mechanical Injuries
9. Regional Injuries
10. Medicolegal Aspects of Wounds
11. Thermal Deaths
12. Starvation
13. Mechanical Asphyxia
14. Anaesthetic and Operative Deaths
15. Impotence and Sterility
16. Virginity, Pregnancy and Delivery
17. Abortion

18. Sexual Offences
19. Infant Deaths
20. Blood Stains
21. Artefacts
22. Forensic Science Laboratory
23. Forensic Psychiatry

Section II: Toxicology

24. General Considerations
25. Agricultural Poisons
26. Corrosive Poisons
27. Metallic Poisons
28. Inorganic Irritant Poisons
29. Organic Irritant Poisons
30. CNS Depressants
31. Psychotropic Drugs
32. Deliriant Poisons
33. Drug Dependence and Abuse
34. Spinal Poisons
35. Cardiac Poisons
36. Asphyxiants
37. Miscellaneous Poisons
38. Food Poisoning [19-27]

These were included in modern forensic medicine and toxicology science curriculum now. But these satisfied with ancient Tamil manuscript without modern technical analysis in the curriculum [3,6,7,19,23,25,27].

Discussion and Conclusion

According to result; 15 types of Habits which were list as; Food habits (03), Children victims (04), Sexual offences (08). 41 types of Plant poisons, 20 types of Metals and minerals, 07 types of Homicidal and 05 types of Suicidal were list with Tamil stanza and well clear definition and findings separately. In the western medical system defined 38 major topics as curriculum. Most of these topics covered in ancient Tamil manuscript especially in homicide and suicide without analytical toxicology and legal acts and procedures. This research revealed and explores the world of these undocumented facts in forensic science yet.

This research finally concluded as ancient Tamil siddhar Nanthesar define and deal with the perfect forensic science without any modern technology and testing of poison or crime. Therefore, future researchers have click to find the ancient techniques in crime scene to legally stable by good evidence bases forensic science.

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