

DISSERTATION ON

“ A PROSPECTIVE STUDY ON ROAD TRAFFIC ACCIDENTS AND THEIR PATTERN OF INJURY ADMITTED TO THANJAVUR MEDICAL COLLEGE AND HOSPITAL”

Dissertation submitted to

THE TAMILNADU DR. M.G.R. MEDICAL UNIVERSITY

*In partial fulfillment of the regulations
for the award of the degree of*

**M. S. IN GENERAL SURGERY
BRANCH – I**



**THANJAVUR MEDICAL COLLEGE,
THANJAVUR - 613 004**

**THE TAMILNADU DR. M.G.R. MEDICAL UNIVERSITY
CHENNAI - 600 032**

APRIL -2015

CERTIFICATE

This is to certify that this dissertation entitled “**A PROSPECTIVE STUDY ON ROAD TRAFFIC ACCIDENTS AND THEIR INJURY PATTERN ADMITTED TO THANJAVUR MEDICAL COLLEGE**” is the bonafide work of **Dr. VIJAYESWARAN.N.** in partial fulfillment of the requirements for M.S Branch -I(General Surgery) Examination of the Tamilnadu Dr. M.G.R. Medical University to be held in APRIL –2015 under my guidance and supervision during the academic year March- 2013 to May 2014.

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DECLARATION

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PROSPECTIVE STUDY ON ROAD TRAFFIC ACCIDENTS AND THEIR INJURY

PATTERN ADMITTED TO THANJAVUR MEDICAL COLLEGE” is a bonafide

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This dissertation is submitted to Tamilnadu Dr. M.G.R Medical University towards partial fulfillment of requirement for the award of **M.S. degree (Branch -I) in General Surgery.**

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Date: 24/9/2014.

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A PROSPECTIVE STUDY OF ROAD TRAFFIC ACCIDENTS.....

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MEDICAL COLLEGE

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INTRODUCTION

Road traffic accidents (RTA) have become a major public health issue of the world particularly in the developing nations. It is the price we pay for the rapid urbanization, modernization and economic development. RTA has become a leading cause of deaths, disabilities and hospitalizations which causes major socio-economic burden to the society across the world.

As per WHO data, "Deaths from road traffic accidents accounts for 20% of all casualties due to injury"¹. Globally, in one year there are around 1.2 million people had been killed in vehicular accidents. 80% of these deaths happened in developed and underdeveloped countries. Road Traffic Accidents accounts for 2.0% of total mortality and 11% of the total injury¹. India with the burden of both communicable and non-communicable diseases, and RTA a form of non-communicable disease has all set to take the third place in terms of death by the year 2020 as per WHO¹.

All these years since our independence India have invented and succeeded a lot in controlling and even eradicating many communicable diseases such as small pox, measles, polio and saved the lives of millions of children. Children who were saved earlier from dreadful communicable and infectious diseases are

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INTRODUCTION

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As per WHO data, "deaths from road traffic accidents accounts for 25% of all casualties due to injury"¹. Globally, in one year there are around 1.2 million people had been killed in vehicular accidents. 80% of these deaths happened in developed and underdeveloped countries. Road Traffic Accidents accounts for 2.1% of total mortality and 21% of the total injury². India with the burden of both communicable and non communicable diseases, and RTA a form of non- communicable disease has all set to take the third place in terms of death by the year 2020 as per WHO³

All these years since our independence India have invested and succeeded a lot in controlling and even eradicating many communicable diseases such as Small pox recently polio and saved the lives of millions of children Children

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ACKNOWLEDGEMENT

I gratefully acknowledge my sincere thanks to **Prof. Dr. K. Mahadevan .M.S.**, Dean, Thanjavur Medical College, Thanjavur, for allowing me to do this dissertation and utilize the institutional facilities.

I am extremely grateful to **Prof. Dr. V. Balakrishnan M.S.**, Head of the Department, Department of General surgery, Thanjavur Medical College, for his full-fledged support throughout my study and for his valuable suggestions and guidance during my study and my post graduation period.

I am greatly indebted to **Prof. Dr. R. Yeganathan M.S. D.A.**, my Professor and Unit Chief, who is my guide in this study, for his timely suggestions, constant encouragement and scholarly guidance in my study and in my post graduation period.

I profoundly thank my respected professors, **Prof. Dr.M. Elangovan, M .S., M.S., Prof. Dr. Karunaharan M.S,** and **Prof.Dr. G.Rajendran, M.S. F.I.C.S,** for their advice and valuable criticism which enabled me to do this work effectively.

My sincere thanks to assistant professors, **Dr. Jeevaraman, M.S,** and **Dr. Balasundaram MCh.,** for their motivation, encouragement and support.

A special mention of thanks to all the patients who participated in this study for their kind cooperation.

I would like to thank my colleagues and friends who have been a constant source of encouragement

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List of abbreviations :

AIS	Abbreviated Injury Scale
CT	Computerized Tomogram
DALY	Disability Adjusted Life Years
EMRI	Emergency Management And Research Institute
GCS	Glasgow Coma Scale
GDP	Gross National Product
HMV	Heavy Motor Vehicle
IPC	Indian Penal Code
JIPMER Education &	Jawaharlal Institute of Postgraduate Medical Research
LMV	Light Motor Vehicle
NCD	Non Communicable Diseases
NH	National Highways
NIMHANS Sciences	National Institute of Mental Health and Neuro
RTA	Road Traffic Accidents
SEAR	South East Asia Regions
SH	State Highways
TMCH	Thanjavur Medical college and hospital
USA	United States of America
UT	Union Territories
WHO	World Health Organization

“ A PROSPECTIVE STUDY ON ROAD TRAFFIC ACCIDENTS AND THEIR PATTERN OF INJURY ADMITTED TO THANJAVUR MEDICAL COLLEGE AND HOSPITAL”

AIMS AND OBJECTIVES:

1. To study the demographic profile of Road traffic accidents victims.
2. To study pattern of injury in victims of road traffic accidents.
3. To suggest the possible measures for prevention and control of road traffic accidents.

MATERIAL AND METHODS:

This study conducted at Thanjavur Medical College & Hospital (TMCH) at Thanjavur from March 2013 to May 2014 for a period of 15 months duration. The study group comprised of all the road traffic accident cases reporting to TMCH causality in the above period. All patients were screened for the inclusion criteria and all those who met these inclusion criteria, were enrolled in the study after obtaining their due informed consent to take part in the study. All these patient had AR/FIR entry entered. The researcher interviewed all the consented victims and relevant information pertaining to the accident were recorded. A pre-tested trauma proforma was used in collecting these information, either in the Emergency and Triage ward or in the surgical wards of TMCH.

RESULTS:

Rural trauma -- 78% Urban trauma 22%.

Male 699 85% and female 123 15% victims.

The highest number 240 31% of victims were between 20-29 years of age and average age is 36.5 years.

Accidents involving 2wheelers accounts 60.8% ,4wheelers 29%, pedestrians 13.4 ,3wheelers 5.2%,cycle 4.7%, bullock cart 1%.

Only 125 victims had a valid driving license.

Only 25 victims wore a helmet.

44.5% (n=365) were transported by 108 ambulance.

Around 192 victims 20% had been referred from primary, secondary care hospitals to TMCH.

About 196 victims 26% of victims have consumed alcohol <6hrs prior to accident.

INJURIES:

Simple injuries 48.5% and Grievous injuries 51.5%.

Lower limb fractures were most common 115 victims, followed by Upper limb 67 victims.

Fracture of Tibia and fibula 35 victims is the most common fracture followed by fracture Femur 33 20% had head injuries. Most common visceral to be injured is brain.

Interpretation and Conclusion:

From the above results, we can infer that most of the victims were males in their Productive age groups placing an economic burden on the family owing to medical care Costs and loss of productive days of work. Road users like drivers, passengers and pedestrians users are more vulnerable to Road traffic injury.

CONCLUSION:

Most of the victims are due to rural trauma with marked male preponderance, 75% are of age 20–49 years most productive for their family and the country.

High risk driving, not following speed limits common factors responsible for these RTAs. Stricter traffic law enforcement is a need in rural areas.

If RTAs are considered an Epidemic of modern times, then prevention is its vaccine.

To reduce RTA conducting public awareness program is the need of the hour.

KEYWORDS: Epidemiological factors, Demographic profile, Road Traffic accident, Road Traffic injuries.

INTRODUCTION

Road traffic accidents (RTA) have become a major public health issue of the world particularly in the developing nations. It is the price we pay for the rapid urbanization, modernization and economic development. RTA has become a leading cause of deaths, disabilities and hospitalizations which causes major socio-economic burden to the society across the world.

As per WHO data, “deaths from road traffic accidents accounts for 25% of all casualties due to injury”¹. Globally, in one year there are around 1.2 million people had been killed in vehicular accidents. 80% of these deaths happened in developed and underdeveloped countries. Road Traffic Accidents accounts for 2.1% of total mortality and 21% of the total injury². India with the burden of both communicable and non communicable diseases, and RTA a form of non- communicable disease has all set to take the third place in terms of death by the year 2020 as per WHO.³

All these years since our independence India have invested and succeeded a lot in controlling and even eradicating many communicable diseases such as small pox recently polio and saved the lives of millions of children. Children who were saved earlier from these dreadful communicable and infectious

diseases are now becoming prey to this man made epidemic called RTAs and many lives saved then are being lost on the roads now.

India lives in villages and the rapid increase in two wheelers were mainly due to the affordability rendered by the hire purchase schemes and second hand vehicle market , at the disposal of village youth .With regard to age structure of the Indian population which has a larger younger population in par with investing in education , child health ,India also needs to invest in mechanism to prevent the road traffic accidents. This is because India 's younger generation between age 20 – 29 years are taking the brunt of the attack particularly those belonging to the middle and low socioeconomic strata of the society.

According to the World Health Organization (2004), “Around 16,000 people die from various injuries every day worldwide, accounting for 12% of the global burden of disease, thereby making injuries the third most important cause of deaths overall”.⁴

TAMILNADU SCENARIO

Road traffic accidents in Tamil Nadu, are one of the highest when compared to rest of India. In the year 2013, the state had recorded 15,564 deaths of the 14,503 total accidents, the highest when compared to for any other states in India. The state had also notoriously topped the list of highest accidents in a state for the previous ten years from the year 2002 to the year 2012. It was estimated that around 8 accidents occur every hour, and a total of 15 % of all vehicular accidents in the country have occurred in Tamil nadu. Such is the magnitude of the problem of road traffic accidents in Tamil Nadu ⁴.

As per the State transport authority report published in 2013 two-wheelers were the most commonly involved vehicle accounting for 22,496 accidents.⁴ They also have accounted for 60–72% of casualty admission to major tertiary care hospitals.

Road Traffic Accident (RTA) is the number one cause (80 to 90%) for all injuries.³

REVIEW OF LITERATURE

Road Traffic Accidents represent a great epidemic of the non communicable diseases in current 21st century. They are no longer considered by the diagnosis here. They are the price we have to pay for our economical and technological advancement. Accidents too have their own natural history, follow similar epidemiological pattern as other diseases, i.e. the agent, the host and the environmental factors interacting each other to produce injury or disability.

The various definitions of accident are:

- 1) "An unexpected, unplanned occurrence which may involve injury".⁵
- 2) "Unpremeditated event resulting in recognizable damage".⁵
- 3) "Occurrence in a sequence of events which usually produces unintended injury, death or property damage".⁵
- 4) "An unforeseen occurrence, especially one of an injurious character".⁶

For the purpose of the study, "A road traffic accident was defined as accident which took place on the road between two or more objects, one of which must be a moving vehicle".⁷

WORLD SCENARIO OF ACCIDENTS

Accidents are not only the prerogative of developed nations. In developing countries accidents are shown to be as high as in developed countries. It is increasing rapidly as a cause of death in absolute numbers and in terms of proportion.⁸ Accidents represents a global public health problem currently.⁹

The accidents and injuries range from cuts, wounds, fractures to coma and deaths or lifelong disability. Accident involves injuries, groups of persons and many a times whole family like in accidents involving buses, trains and planes.¹⁰

Accidents cause more morbidities than mortalities. There are 19 admissions for every death from accidents in the hospital admissions of USA. The statistics reveal that for every one death in accident there are nearly 233 injured who need treatment.¹¹

WHO data from 58 countries reported 64 lack deaths from accidental poisoning, and violence account for 3-10% of all deaths.¹⁰

According to WHO in 2008, total unintentional deaths were 6.4%. Among them 2.1% were due to road traffic accidents, 6 per 1000 were from falls, acute poisoning resulting in over 3 lack deaths each year.

Over 3,00,000 deaths are caused by fire burns and 4,00,000 deaths each year from drowning.¹²

The number of deaths due to injuries among both sexes are significant when compared to communicable and non communicable diseases.

All types of accidents like road traffic accidents, war, violence, and self inflicted injuries etc., are huge and mostly neglected health issue in all parts of the world accounting five million persons died in the year 2000. It accounts for (15.9%) of global burden of disease worldwide.⁹ The real numbers may be only more due to under reporting.

In India, non communicable diseases such as malignancies, coronary artery disease, cerebro-vascular disease, road traffic accidents, chronic obstructive lung disease, diabetes and other metabolic diseases have become the dominant cause of health problems (accounts for eight out of 10 adult deaths in urban areas and six out of 10 deaths in rural areas).¹³

INDIAN SCENARIO OF ACCIDENTS

Recent publication suggest that accidents are definitely on an increase in India. Increasing mechanization in agricultural sector and in industries, induction of unskilled and semi-skilled workers in different jobs and abrupt increase in motor traffic have caused an increase in death and disability due to accidents. Lack of awareness, overcrowding, and poor law enforcement of existing safety norms result in an increasing number of accidents.⁸

Deaths, disabilities and hospitalizations due to injuries continue to have impact on the socio economic loss to individuals, families and society. Injuries are not given priority by policy makers as only few plans are drawn for injury prevention according to studies and paper.

GLOBAL SCENARIO OF ACCIDENTS

According to the worldwide statistics, every year 3lakh people would die due to road traffic accidents and around 8 million people would be injured. An annual growth rate of fatal injuries is 5%.¹⁴

In many countries, road traffic accidents rank first among all fatal accidents. During 2002 there were almost 1.19 million deaths from road accidents in the world. In addition, for every death there are as many as 50-100 minor injuries and 10-20 serious injuries requiring long periods of expensive care, nursing and treatment.³

World Health Organization strategy reports (2001) states that presently vehicular accidents are one of the leading cause of death and disability, the tenth leading cause of overall deaths and ninth leading cause to the burden of disease in the world based on DALY. The numbers of deaths from road accidents have been estimated to reach 8.5 million in the year 2020.¹⁵

Projected estimations reveals that fatalities due to Road traffic accidents will increase by 66% over the next 20 years and would be the 3rd leading cause of death by the year 2020 moving from the current 9th place.²

**Table 1: Showing the burden diseases in the world during 1998 and in 2020
(projected)**

Disease or accidents-1998	Disease or accidents-2020
1. Lower respiratory tract infections	1. Coronary artery disease
2. HIV/AIDS	2. Unipolar Major depression.
3.Perinatal Conditions	3. Road Traffic accidents
4. Diarrheal disease	4.Cerebro-vascular disease
5.Unipolar Major depression	5.Chronic obstructive lung disease
6. Coronary artery disease	6. Lower respiratory tract infections
7. Cerebro-vascular disease	7. Tuberculosis
8. Malaria	8. Act of War
9. Road Traffic accidents	9. Diarrheal disease
10. Chronic obstructive lung disease	10. HIV/AIDS

Source: Evidence, Information and Policy Report -WHO year 2000

Table 2: International Comparison of Road Traffic Injury Accidents and Deaths

Sl.No	Name of the country	Road accident deaths / lakh
1	South Africa	27.9
2	Malaysia	24.5
3	Russian Federation	18.4
4	Kuwait	14.5
5	Republic of Korea	12
6	Jordan	11.3
7	USA	11
8	India	10.8

The number of road accident deaths per lakh of population (2009)⁷

SOUTH-EAST ASIA REGION:

In the South-East Asia Region road traffic accident is the leading causes of injury-related mortalities.³

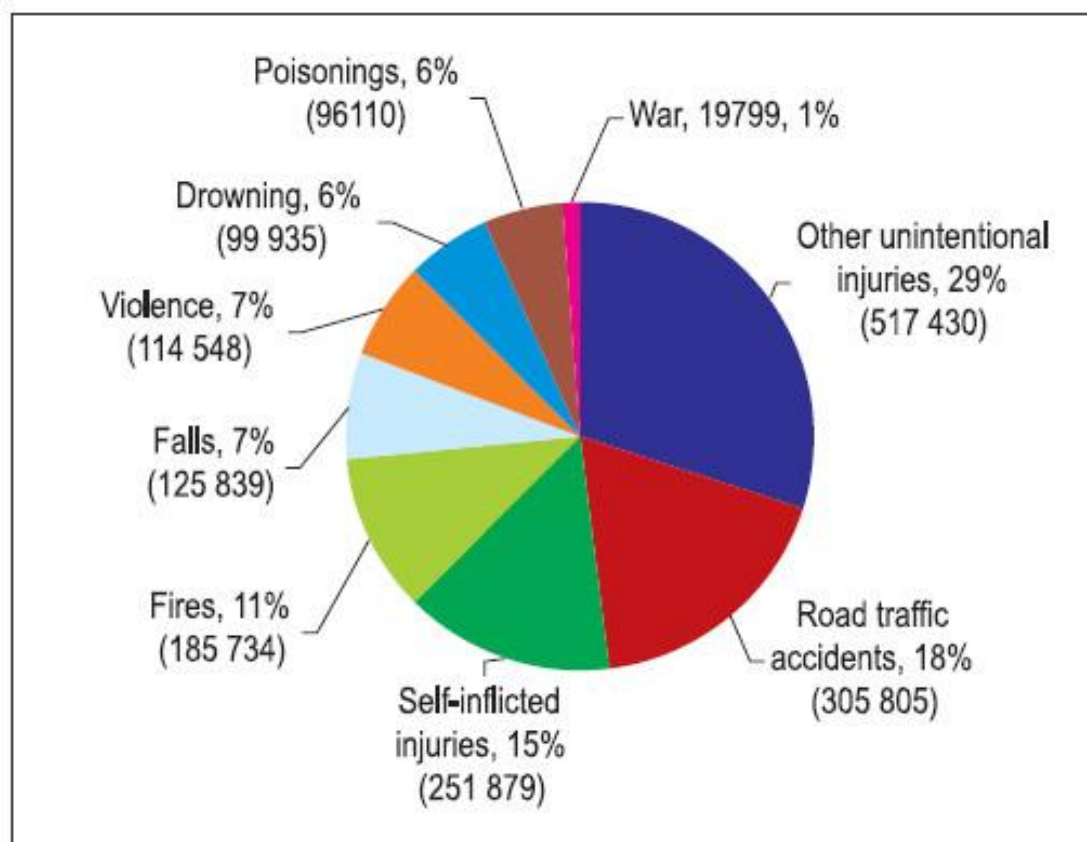


Fig 1: Injury-related deaths in the SEAR-2004

Source: WHO, Global Burden of Disease Study -2004 update

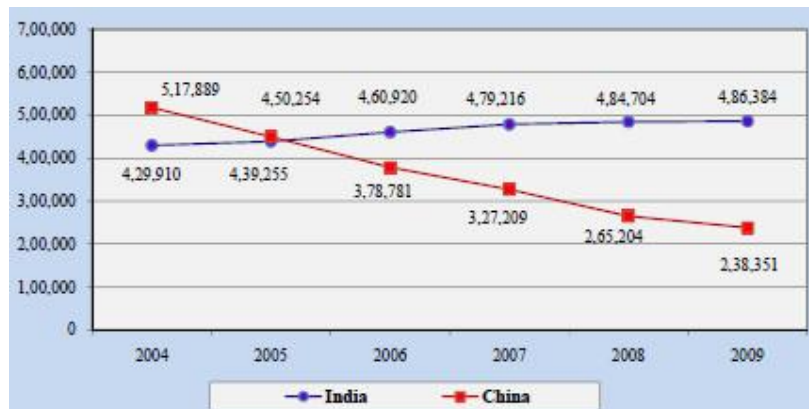


Fig 2: A comparison of trends in Road Accidents Scenario: India and China (2004 to 2009)

X axis = years y axis= number of accidents

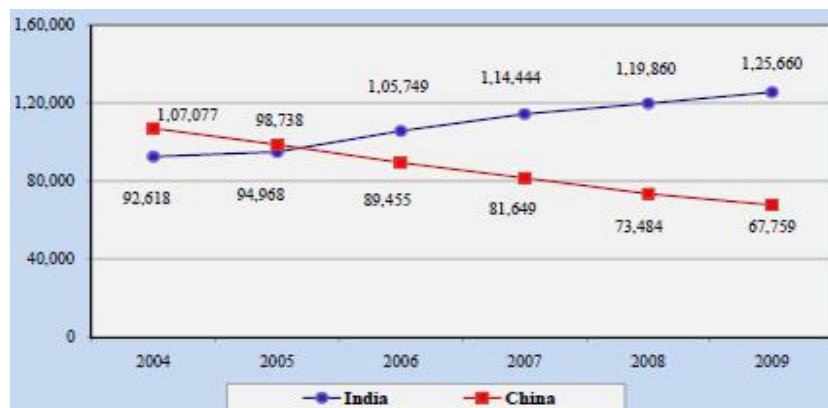


Fig 3: A comparison of total Number of deaths due to Road traffic accidents both India and China - 2004 to 2009

X axis = years y axis= number of deaths

In China deaths due to road accidents are decreasing whereas in India both road traffic accidents and deaths are steadily increasing.¹⁶

INDIA:

India has one of the highest number of road traffic accidents in the whole world. There have been a steady increase in death due to road traffic accidents in India and their proportions in total deaths due to other accidents have also increased . In India, nearly 80,000 people killed and 3,40,000 were injured yearly in around 3,00,000 accidents on road network of 22,00,000 km.¹⁷

In India every year RTA accounts for over 1,00,000 deaths, 2 million hospitalizations, 7.8 million minor injuries and an estimated loss of 55,000 crores rupees or nearly 3% of the GDP lost every year. If the current rate is continued unchecked , it is projected that deaths due to RTAs will be 1, 50,000 and 2.8 million victims will be hospitalized by 2020. Around 1, 85,000 deaths and 3.6million victims will be hospitalized by 2020.The social and psychological suffering of the injured persons is enormous. It is sad to note that lives saved as a result of advancements in communicable and non communicable diseases is now being wasted on the roads. ²

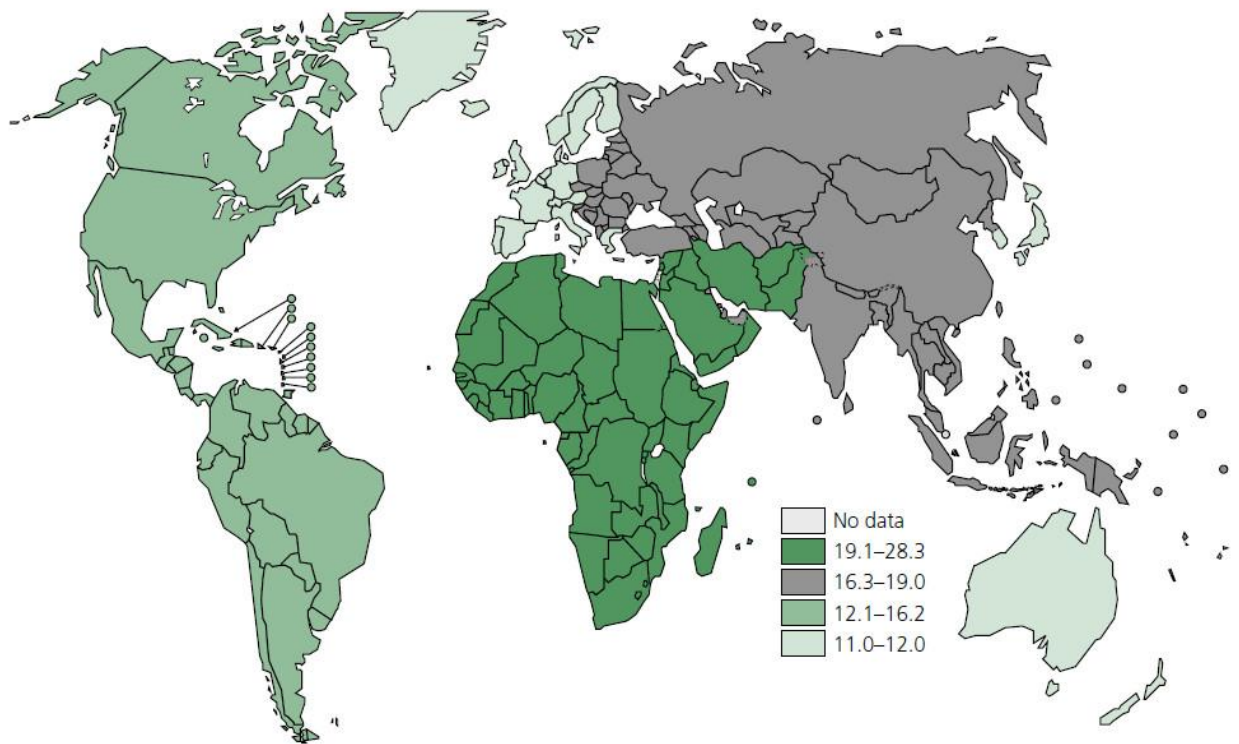


Fig 4: Road traffic accident mortality rates (per 1,00, 000 populations) in WHO regions

NATIONAL STUDIES

In India, 11 million deaths have occurred due to road traffic accidents in 2006, which is nearly 10 percent of the total road traffic deaths in the whole world.⁸

In National studies useful statistics is given by relating number of deaths, number of injured and number of vehicles. This total includes deaths, injuries and total motor vehicles from 7 union territories (n=2139). Among 29 states of India, RTA mortality rate per one lakh population varied widely from as low as 1 in Haryana to as high as 18 in Goa, with national average of 8/1, 00,000.⁷

The states of Andhra Pradesh, Maharashtra ,Karnataka , Himachal Pradesh, Kerala, Tamil Nadu and Rajasthan had higher than national average of 8/1, 00,000 population. These were among the progressive states leading on different indicators of growth and development in health sector , education and economy .⁷

Multi-factorial causation of Road Traffic Accident:

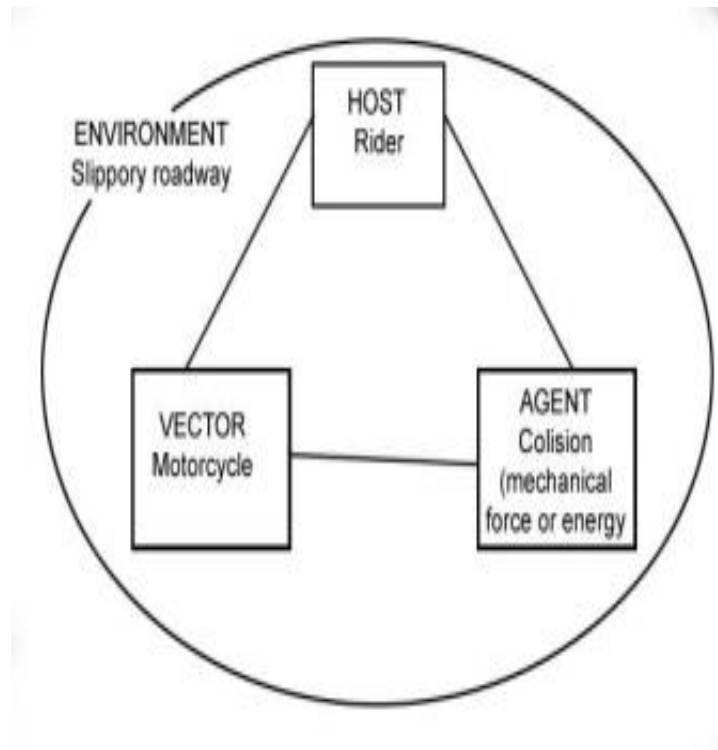


Fig 5: Epidemiological model of an injury caused by a motorcycle collision

Source: WHO Injury Surveillance Guidelines

Accidents are complex phenomena of multiple causation, the etiological factors may be classified into two broad categories

- 1) Human factors
- 2) Environmental factors.

Up to 90% of the causative factors for accidents are attributed to human failure. The psychological circumstances in which accidents occur are still poorly understood.¹⁸

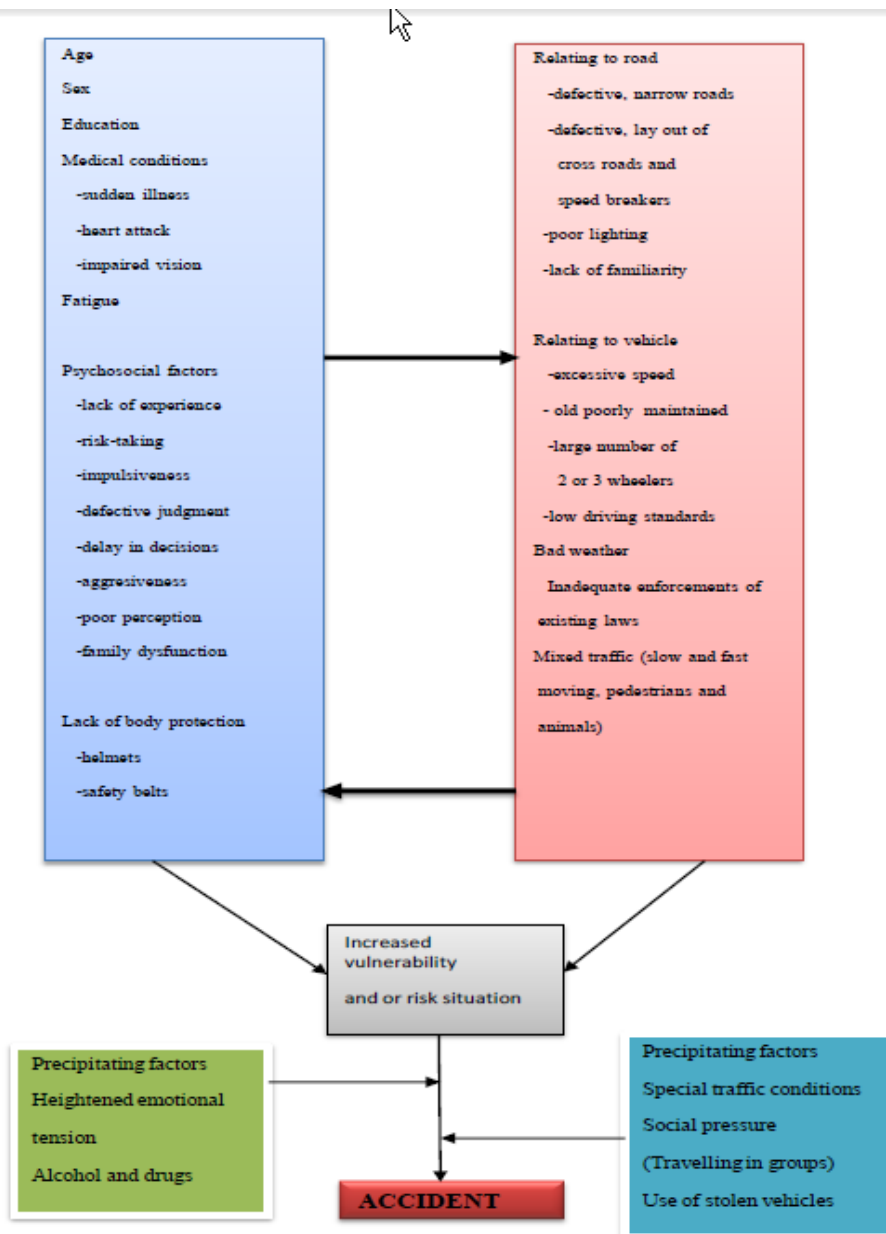


Fig 6: Multi-factorial causation of Road Traffic Accident

1. Age :

Young drivers and riders are in more risk of crash accidents. This is because young were often tend to be overconfident, less experienced, drive in high speed together with use of alcohol makes the worse combination of risks. Unnecessary travel and joy ride and choice of less safe travel modes are a habit with adolescents.¹⁹

The study conducted at Pondicherry²⁰ reveals that there was less accidents below the age range of 20 and above 49 years. Lower rate of accidents in those aged above 60 years may perhaps be due to less mobility of old people.

A study from Tanzania concludes that the vehicular accidents related injuries were common among adult population²¹.

Agarwal et al²² in a study showed that the fifty nine percent of RTA cases were in the age group 20 to 40 years with the mean age was 36.5 years with a range from 3 years to 60 years.

A study from Bhopal in a tertiary hospital by Khare et al,²³ shows that the highest number of accidents victims 634 (50%) were of age 16 – 30 years, followed by age group of 31 – 45 years. Age wise mortality among RTA cases was higher in 16-30 years (30%) age group followed by 31-45 years (27.5%).

2. Sex:

A study from Delhi²⁴ found that the males are more exposed to road traffic accidents than females and in another study the male and female ratio was very high (9:1).

The study conducted by Sathiyasekaran et al,²⁵ and Vergees et al,²⁶ found that 80% of the RTA victims were males.

According to a study by Jha et al,²⁰ 83% of the accident victims were males. Ganveer G B et al²⁷ in a study had shown that the M:F ratio of 6:1 , can be due to the fact that proportion of males when compared to females is more and in our society as males are the bread winner for the family and thus usually involved in outdoor activities exposing themselves more to accidents.

A study by Agarwal et al,²² showed that eighty four percent of RTA victims were males. Khare N et al,²³ at a tertiary care hospital, had shown that out of 1268 RTA cases 1047 (82.5%) of the victims were males & rest 221 (17.5%) were females.

3. Religion:

A study by Agarwal et al,²² had observed that sixty seven percent of RTA victims were belonged to Hindu religion possibility due to majority.

4. Education:

It was observed that several people with low education had been involved in road traffic accidents and a similar result were also inferred by others.^{29,30}

Lack of knowledge on road traffic rules due to illiteracy or low level of education may have been a factor to the causation of these RTAs.³⁰

In a study, Agarwal et al²² showed that sixty five percent were educated up to secondary level.

5. Occupation:

Jolly M F et al,²⁹ had shown that more number of accidents were seen among lower socioeconomic class. In another study from Delhi²⁸, school and college students were commonly involved in accidents followed by laborers.

The available literature by WHO²⁰ had shown that, the laborers were the highest group (27.5%) involved in RTA followed by students (24.2%). A study by Agarwal et.al,²² had shown that out of total injured persons 18% were students and equal numbers were unskilled workers.

6. Socio economic status:

In a study in India by Agarwal et al,²² forty nine percent of the victims of accidents had Rs 1001 to Rs 2000 per capita income per month.

7. Marital status:

A study by Agarwal et al,²² had shown that fifty four percent victims of accident were married.

8. Location: Rural and urban :

Study by Agarwal et al,²² had shown that fifty four percent of RTA victims belonged to rural habitants.

In 2011, rural areas had more death (63.5 %) than urban areas (36.5 %). The number of persons injured was also more in rural areas (59.3 %) as compared to urban area (40.7 %).¹⁶

9. Speed of the vehicle:

Clark et al,³¹ in a study had found that high speed is a predisposing factor in 64% of the accidents. The literature available had shown that non adherence to speed limits and non usage of indicator lights were the two main reasons in more than half of RTAs.

WHO has described how “Speeding increases the risk of an accident and its injury outcome. The risk of death or disability with a speed zone of 60km/h increases rapidly even with relatively small increase in speed in urban traffic. The fatal crash risk at 65km/h is *2 times the risk at 60km/h. At 70km/h, the fatal crash risk is > 4 times the risk at 60km/h and at 80 km/h the risk is *32 times. A major problem in speed-related accidents was that most motorists misjudge the distance needed to stop the vehicle. A car travelling at 60km/h needs 38 meters to halt, while a car travelling at 80km/h takes an extra 20 meters.

10. Month:

Mehta S P et al ²⁸ and Ghosh P K et al²⁴ in their studies had shown that the highest number of accident victims were in the month of January compared to other calendar months.

11. Day of accident:

In a study from New Delhi, ³³ the highest numbers of RTAs have occurred on Mondays and Wednesdays. In another study conducted by Bharadwaj et al, ³² about 54% of accidents were reported on weekdays and remaining on weekends.

These findings were also reported by Agarwal et al²² in their study. Mehta et al²⁸ and Stallones et al³⁴ had shown that, the highest number of accidents was on Sundays and lowest was on Mondays.

12. Time of accident:

A study conducted by Ranganathan et al, ³⁵ had shown that greater than 60.2% of vehicular accidents took place in the day time (6AM - 6PM).

A study by Ganveer G B et al, ²⁷ observed that about 53.19% of the accidents took place in the daytime. This is mainly because of the increased activities on road during daytime such as commercial activities, activities like attending the schools, colleges and offices. In contrast to the findings of this study, Bharadwaj et al, ³² had shown that most (40.1%) of the Road traffic accidents occurred in the evening hours from 6pm to 12 midnight.

13. Type of road :

Bharadwaj et.al, ³² had shown that most of the accidents had taken place on main roads (74%), in near junctions (14.5%) and cross roads (12.1%). Most (84.4%) of the victims informed that RTAs took place on tarred road, 12.1 % of the cases reported that the road was bumpy , 3.9% of them said that the road was wet .

14. Visibility:

Poor visibility due to foggy conditions or smoke of vehicles or dust storms decreases the visibility. At night, driving needs extra precautions as vision is seriously affected by head lights. Pedestrians, cyclists and mixed traffics like bullock carts or camel carts, tractors often get hit by motor vehicles as they do not observe the rules and often these have no lights/indicators. ²⁷

15. Type of vehicle :

Bharadwaj et al³² had observed that, most of the victims 41.5% were 2 wheeler occupants. Occupants of HMTV accounted for 9.9% of the victims, 5.8% of victims were cyclists.

Pramod et al³⁶ had shown that most of the victims were 2 wheeler users (46.9%) and 25% are pedestrians, followed by cycle users (14.3%).

Agarwal et al,²² at JIPMER had shown that the maximum number of RTA victims were using two wheeler (68%), followed by 17% were using four wheeler, 10% were using three wheeler and bicycle user only 5%.

The study conducted at Bhopal, Madhya Pradesh²³ shows that motorized two-wheeler occupants were highest in number i.e. 929 (73%) followed by occupants of four wheelers 137 (11%), other hit by heavy vehicle 76 (6%) followed by bullock cart, pedestrians, & bicycle 126 (10%) and also shows that

deaths among users of 2 wheeler 26(65%) was higher than users of 4 wheeler 14 (35%).

As per road safety report NIMHANS,³⁷ the Asia/Pacific region has only 16.2% of worlds motor vehicles, 54.2% of world population but contributes for 44.9% of total road traffic accidents deaths.

16. Safety measures :

Awareness of use of safety belts is on the rise but still many drivers and occupants of vehicles do not use them. A seat belt will reduce the impact of collision. Similarly, drivers of motorized two- wheelers do not use crash helmets have increased risk of fatal head injuries¹⁰.

In a study by Jha et.al,²⁰ had shown that, among road traffic victims 29% of two wheeler passengers was wearing helmet when they were injured and 71.01% did not wear helmet. He also showed that only 13.42% of 4 wheeler drivers used seat belt and rest had not used it.

17. Cause of accident :

The major factors contributing to the likelihood of a crash include speed, vehicular instability, break failure, inadequate road design and alcohol intoxication.

A study by Bharadwaj et al,³² had shown that most of the pedestrian were injured while crossing the road (70.6%) and 18% of them were injured while riding or walking on roadside (footpath). Not using indicator lights and not following speed limits were most common causes responsible for these RTAs.

18. First aid:

In a study by Mishra et al,³⁸ had shown that the first-aid coverage in the present study was 213 (59.16%); however, the coverage for fatally injured was at a low at 45.45% (30 victims) in comparison to non-fatally injured at 62.24% (183 cases).

19. Mode of transportation used for reaching medical center :

A study by Bharadwaj et al,³² had shown that the cases were brought to the hospital by auto rickshaws (31.5%) and by private vehicle (25.3%) the police used their vehicle to transport 17.77% of victims to the hospital and 8.32% victims were transported using a taxi, 4.93% by bus. Ambulances brought the victims to the hospital (12.12%).

20. Time gap between injury and reaching hospital :

A study by Sharma et al, ³⁹ had shown that 62 (14.9%) RTA victims reached hospital in less than half an hour and 140 (33.2%) reached in a hour. Studies by Sharma et al (2011)³⁹ and Patil et al (2008) ⁴⁰ had shown that fatality rates were 0.8% and 1.65% respectively.

In a study conducted by Khare et al²³ in a tertiary care hospital shown that, out of total 1268 RTAs 774 (61%) victims reach the hospital less than 30 minutes followed by 370(29%) cases reach the hospital within 30 – 60 minutes & 124 (10%) cases were reach the hospital more than 60 minutes and also it was observed that time factor (to reach hospital) is very crucial for increase the chance of survival among RTA victims, death rate significantly low 2 (5%) among those who reached within 30 minutes in comparison to those who reached above 60 and more minutes 25(62.5%).

21. Alcohol:

Drinking alcohol and driving should never be mixed. Increased use of alcohol and other drugs in drivers expose them to the risk of accidents as the judgment gets impaired and control over vehicles is lost due to the effect of alcohol and other drugs.

National maximum legal blood alcohol concentration is 30 mg/100ml.¹⁰

A study by Sood S et al,⁴¹ and Ghosh et al,⁴³ have shown that the 4.6% and 8% alcohol level was found among RTA victims reported from the Delhi study.

The study by Bharadwaj et al,³² had shown that among the victims 18% gave a history of having consumed alcohol within six hours before the RTA whereas 82 % have not consumed.

In the WHO supported study in Nepal, a much higher % (16.8%) drivers were found to have consumed alcohol 2 to 3 hours before the accident. 11.2% of RTAs and 29.1% of night time crashes linked to alcohol, 17% were under alcohol influence. While Agarwal et al,²² showed that about 26% of subjects gave a history of alcohol consumption. He also showed that consumption of two or three pegs per day were involved in accidents. Twenty six percent used take alcohol occasionally. A total 15 out of 26 (57.7%) had accident under the influence of liquor.

22. Nature and Severity of the injury :

1) Simple injury:

One which is neither extensive nor serious and which would heal rapidly without leaving any permanent deformity or disfigurement.

2) Grievous injury: (Indian Penal Code Section 320)

- 1) Emasculation
- 2) Permanent privation of either eye or ear or any member part, organ or limb or a joint.
- 3) Permanent disfiguration of head or face
- 4) Fracture or dislocation of a bone or a tooth,
- 5) Destruction or permanent impairing of powers of any member or joint.
- 6) Any hurt which endangers life, or which causes the victim to be in severe body pain or unable to follow his daily routine for a period of twenty days.

If death occurs at once or within a week after the accident, it is called fatal accident; if death occurs after a week but within a month, it is called death due to accident or killed in accident and if death occurs after one year it is called sequale of accident.

For every fatal accident, there are about 10 to 15 serious injuries and about 50 minor injuries.⁴⁴

The study conducted by Ghimire et al, showed that the incidence of minor injuries was greatest (4.7%) among 40 to 49 years age group, followed by 4.6% among 0 to 9 years and major injuries was highest (1.7%) among 50 to 59 years.⁴⁵

23. Injury patterns :

The Global burden of disease study reveals that nearly 25.1% sustain head injuries, 10% had open wounds and 25% have long bones fracture .⁴⁶

Most of Indian studies have recognized greater occurrence of injuries to brain, face and the long bones. Guru Raj et al^{42, 47} noted that polytrauma in nearly 25% of patients, head injuries in 50-60% of patients, facial injuries in nearly 40-50% of patients. Long bone especially lower limb injuries have been noticed in 14-40% patients, fractures in 18-22% of patients. Injury to chest and abdomen had been comparatively less.⁴⁸

Observations from pooled data of RTA study among 3,078 patients from 23 hospitals in Bengaluru (Guru Raj et al, 2000)⁴⁹ has shown that head and face, upper and lower limbs are the most commonly injured areas (varies as per road

user category). Motorcyclists sustained more injuries to face and lower extremities, while pedestrians had sustained more injuries to lower limbs.

Very little studies have studied injury severity distribution. Minor injuries with AIS score <3 constituted 35%, 66% in studies from Delhi and Chennai, respectively. Severe injuries with AIS 4, 5 and 6 accounted for 65%, 10% respectively. Jha et al ²² utilized trauma scale and observed that 48.2% victims were in the score range of 8-18 with 1% being >18 (very severe). Two of the studies on brain injuries at NIMHANS^{42,47} revealed that nearly 60% were mild, 15- 20% were moderate and 15-20% were serious based on Glasgow Coma Scale. Similarly, Bharathi et al ⁵⁰ showed that 42% were mild, 25% moderate and 33% severe in nature among head injuries. ⁴⁸

24. Type of road users:

A study conducted by Mehta et al, ²⁸ showed that 2 wheelers, were commonly involved in road traffic accidents. Higher speed achieved over a short distance , less stability may possibly be the cause.

This study also found that 15.5% drivers of various vehicles were without a valid driving license, which is much greater when compared to 7.5% found in Delhi. Pedestrians constituted 22.1% followed by cyclists 15.32%, two wheeler drivers 10.8 %.

A study conducted by Sharma et al, ⁵¹ had shown that, Out of total 236 drivers/riders, majority of them were 2 wheeler riders (75.0%).

25. Driving License:

Driving License denotes the license issued by a competent government authority authorizing the person specified therein to drive, otherwise than a learner, a motor vehicle or a motor vehicle of any specified class or description.⁵²

The study by Trivedi A and Rawal D⁵³ found that 15.7% of the study samples were driving without a driving license. The reason for not carrying license is probably that people feel it is not necessary to carry the license for short distance and some victims forgot it at home.

26. Mobile Phone:

Driving with hand held telephones has become a fashion, it is risky and misuse of telephones. It affects the reaction time and maintenance of lane, hence more risk of RTA. In many countries use of hand held mobile phones have been banned. ⁵⁴ A study by Hassen A ⁵⁵ observed that 42.3% had a habit of using mobile phone while driving vehicle.

27. Psychosocial factors

Psychological factors are defined “as those influencing the accident or attendant risks associated with the accident, stemming from the psychology of the individual and the structure and function of social groups”.

28. Medical conditions:

The study conducted by Julian A. Waller, MD, MPH, Berkeley ⁷⁰ showed that the relationship between chronic medical conditions and road traffic accidents is a subject of considerable controversy. An increased RTA risk appears to be related with many chronic medical condition including alcohol abuse, cardiovascular disease, seizure disorder, diabetes mellitus and mental illness. In about half of the accidents caused by heart attacks, the individual has no previous knowledge of his illness hence cannot be prevented. Impaired vision, poor visibility due to foggy conditions or smoke of vehicles or dust storms decreases the visibility. At night, driving needs extra precautions as vision is seriously affected by high beam in head lights. Pedestrians, cyclists and mixed traffics like bullock carts or camel carts, tractors often get hit by motor vehicles as they do not observe the rules and often these have no lights.

OBJECTIVES OF THIS STUDY

1. To study the demographic profile of Road traffic accidents victims.
2. To study pattern of injury in victims of road traffic accidents.
3. To suggest the possible measures for prevention and control of road traffic accidents.

MATERIAL AND METHODS

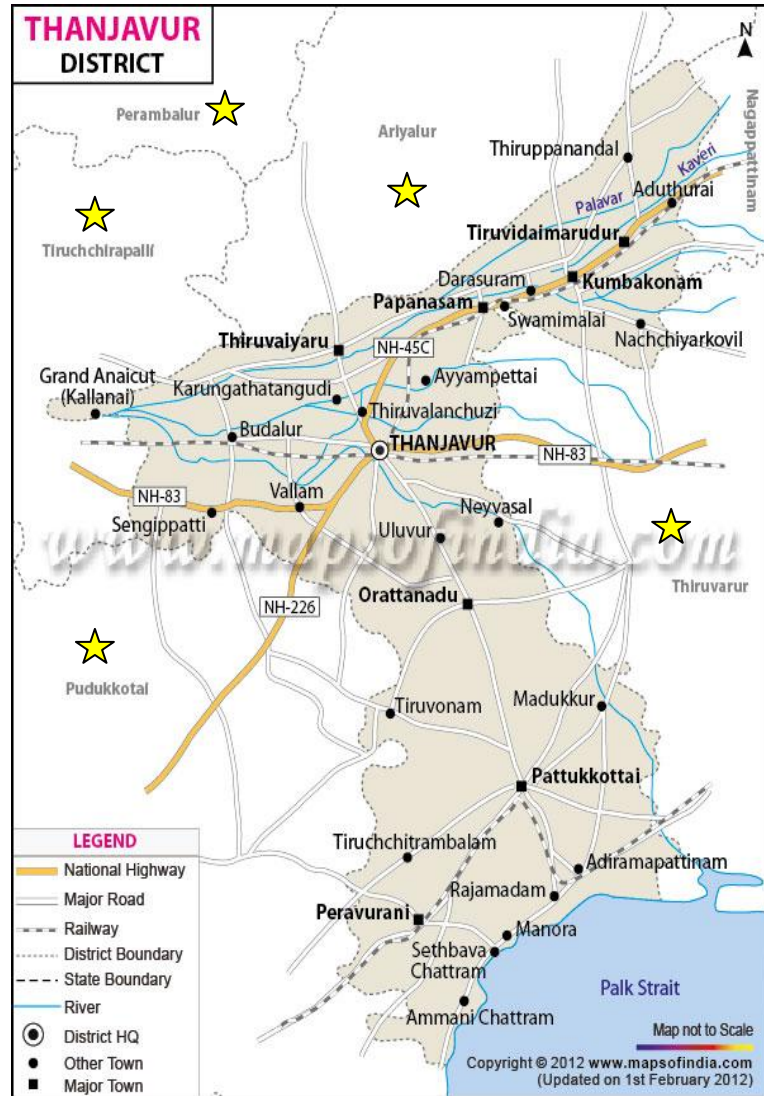
This study conducted at Thanjavur Medical College and Hospital (TMCH) at Thanjavur from March 2013 to May 2014. The study group comprised of all road traffic accident cases reporting to Thanjavur Medical College and Hospital causality in the above period. All patients were screened for the inclusion criteria and all those who met these inclusion criteria, were enrolled in the study after obtaining their due informed consent to take part in the study. All these patient had AR/FIR entry entered. The researcher interviewed all the consented victims and relevant information pertaining to the accident were recorded . A pre-tested trauma proforma was used in collecting these information, either in the Emergency and Triage ward or in the surgical wards of Thanjavur medical college and hospital.

When the condition of the patient not fit for an interview, the relatives or patients attenders/friends were interviewed by the researcher. The injuries of all the patients are categorized and entered by the researcher. The type of treatment given , surgical procedure performed and their outcomes were also recorded for all the cases.

The medico legal records and patients case-records were also verified for collecting any other valuable information.

The data collected included name , age ,sex, in patient number ,date and time of admission and injury details , education , income ,mode , cause and place of injury , mode of transport , safety gadgets usage like helmet and seat belt , driving license , whether obtained first aid or other treatment before admission/ referral to our hospital ,history of alcohol intake ,time and amount, co morbidity, vitals like pulse ,blood pressure ,nature of injury sustained ,type of treatment obtained including surgical intervention and their injury severity score were all recorded for each and every case and compiled using an excel spread sheet. The categorical variables were presented in the form of frequencies and percentages.

In case of death , their postmortem findings were also recorded. All records pertaining to the study were kept confidential.



- Fig 7: THANJAVUR DISTRICT MAP

★ - INPUT OF REFERRAL CASES FROM THESE NEIGHBOURING DISTRICTS

Inclusion Criteria :

1.All Patients presenting to Thanjavur Medical College and Hospital as a case of Road traffic accident.

Exclusion Criteria :

1. Patients admitted in Thanjavur Medical College and Hospital other than Road traffic accident like assault, accidental fall .
2. Not given consent for the study.
3. Brought dead.
4. Unknown patients i.e. no relative or a friend by the side.
5. Victims who were immediately referred to higher centre

Ethical considerations:

The study was conducted after the necessary approval from the surgery department and Institutional Ethical Committee clearance from Thanjavur Medical College and Hospital. An informed consent was obtained from the conscious adult patients themselves or their relatives in their known familiar language.

RESULTS OF THE STUDY

Road traffic injury is an important public health problem. They result not only in death but disability among the survivors which can be a burden to the society. Since vehicular accidents is on the rise, the country faces this problem of non-communicable disease, the road accidents . Since the road traffic accident is an important cause for morbidity and mortality, this study was taken up to analyze various epidemiological factors determining the accidents, and their common pattern of injury and outcome. Out of total 425 accidents 1000 Road traffic accident cases were interviewed in the emergency departments of our college by the investigator and during the study period.

RTA STUDY SUMMARY

In this prospective study conducted at our college out of total 1000 Road traffic accident cases 822 (82%) met the inclusion criteria and were included in the study . Of the total 178 cases excluded there were 132 absconders (13%) and 48 deaths (4.8%). Most of the death were due to fatal head injury.

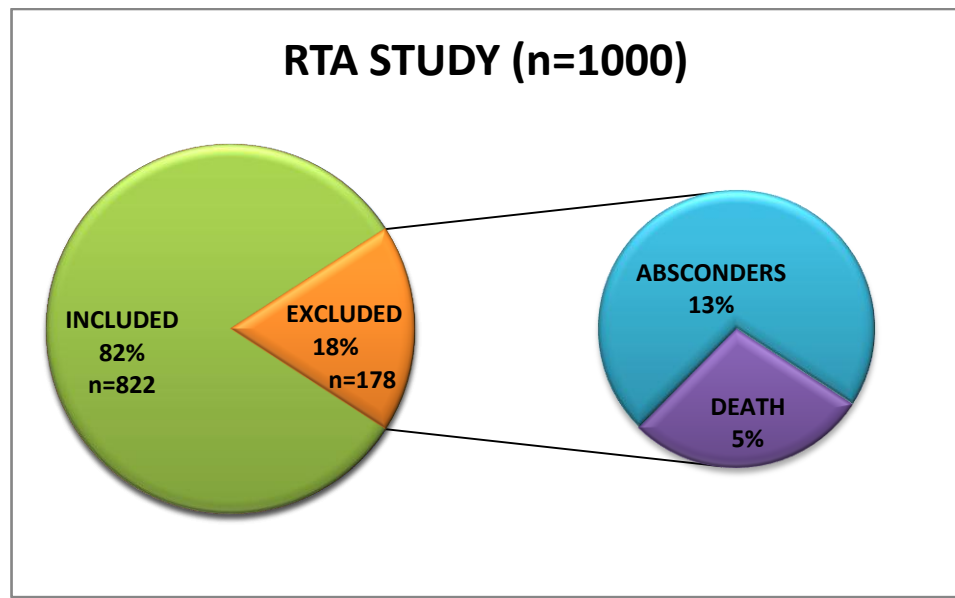


Fig 8: RTA study summary:

DISTRIBUTION OF INFORMANTS OF RTA

Majority of the instances, in 430 cases the friends and relatives gave the required information about Road traffic accident i.e., 52 %, followed by 316 victims themselves (38.5%). In very less instances others were the informants (10%). Most of the instances in our study relatives were accompanying the road traffic accident victims and gave information about accident to the researcher.

Table.3: Distribution of informants of RTA

Informant	Frequency	Percentage
Self	316	38.5
Relatives and Friends	430	52
Passer by	56	7
108	20	2.5
Total	822	100

AREA WISE DISTRIBUTION OF RTA

By directly enquiring about the place of occurrence of the Road traffic accident, 78 % of victims (n=640) were of trauma in the rural region and 22 % were of trauma in region urban (n=180)

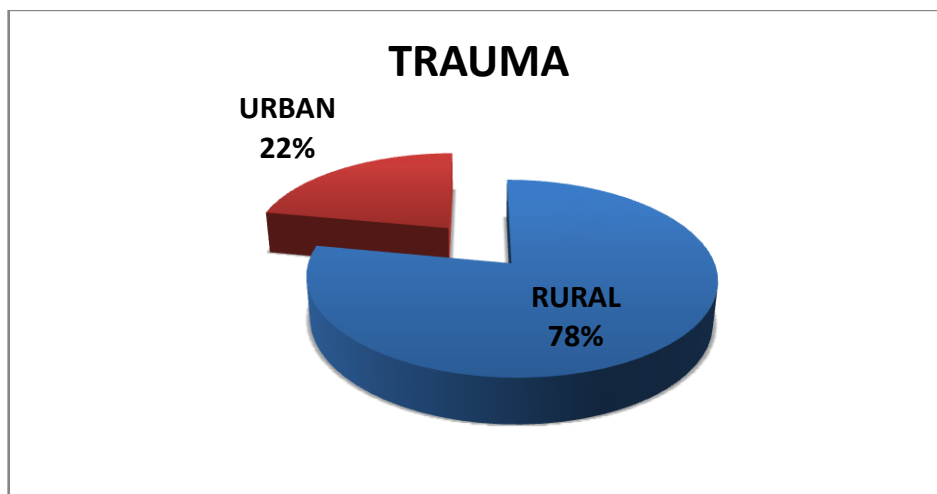


Fig 9: Area wise distribution of RTA

DAY WISE ADMISSION AND ALCOHOL INTAKE

The intake of alcohol is noted by direct questioning of the patient after the admission and only in conscious patients. We have no idea of those patients who were excluded from the study. Highest amount of admission was noted on the day of Friday accounting to one fifth of cases (n=158).

Table 4:Day wise admission and alcohol intake

DAY	NO.OF CASES ADMITTED	%	ALCOHOL INTAKE	%
MONDAY	134	16.3	42	19
TUESDAY	76	9.2	22	10
WEDNESDAY	74	9	14	6.3
THURSDAY	110	13.3	30	13.6
FRIDAY	158	21.6	32	14.5
SATURDAY	134	16.3	16	16.5
SUNDAY	136	16.5	44	20
TOTAL	822	100	220	100

About 16.5% and 16.3% of the injuries took place on Sunday and Saturday respectively, followed by Monday (16.3%), Tuesday (6.6%), Wednesday (9.2%), Thursday (13.3%). In present study 33% RTA took place on weekends.

Highest number of victims admitted with history of alcohol intake was noted on the weekend Sunday 20% followed by Monday 19% and Saturday 16.5%. Lowest number of admission 9% as well as lowest intake of alcohol was noted on the day of Wednesday 6.3 %.

COLLISION

In present study about 33.5% RTA's had self fall followed by sideways collision 31%, collisions from behind in 17.2%, head on collisions were 15%, and the type of collision was unknown in 3.2% of the cases. Unknown type of collision includes those who do not know the mechanism of RTA.

Table 5: Distribution of RTA based on type of collision

Type of collision	Frequency	%
Self fall	276	33.5
Sideways	255	31
From behind	142	17.2
Head on	122	15
Unknown	26	3.2
Total	822	100

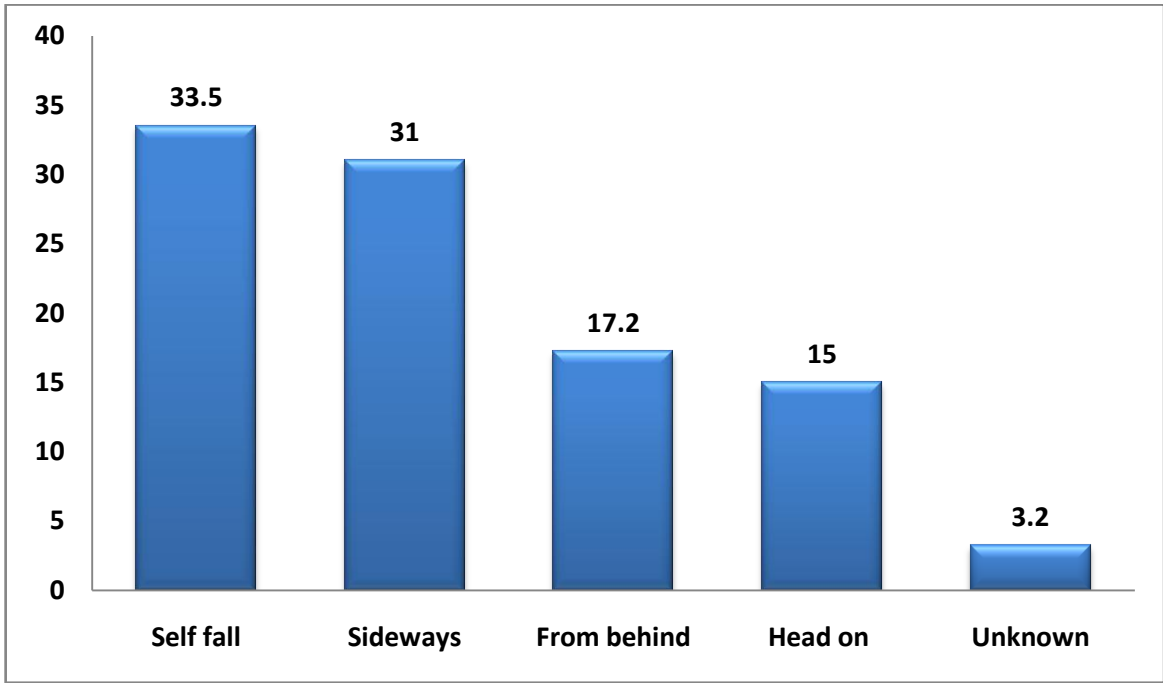


Fig10:Distribution of RTA based on type of collision

MODE OF INJURY

In our study, commonest mode of injury 60.8% were noted in the two wheelers followed by four wheelers 29%, pedestrians 13.4%, three wheelers 5.2%, bicycles, 4.7% and bullock carts 0.8%. Majority of the road traffic accidents have happened in the commuters of two wheeler, four wheeler and pedestrians.

Table 6:Mode of injury

MODE OF INJURY	2WHEELERS	3WHEELERS	4WHEELERS	CYCLE	TOTAL
FALL	195	10	4	1	210
PILLION RIDER FALL	52	0	14	0	66
PEDESTRIANS	74	1	35	0	110
2 WHEELERS	196	0	0	0	196
3WHEELERS	24	0	6	0	30
4 WHEELERS	128	0	20	0	148
CYCLE	20	2	8	0	30
BULLOCK CART	1	0	5	1	7
OTHERS	18	0	0	7	25
TOTAL	499(60.8%)	13(5.2%)	92(29%)	9(4.7%)	822

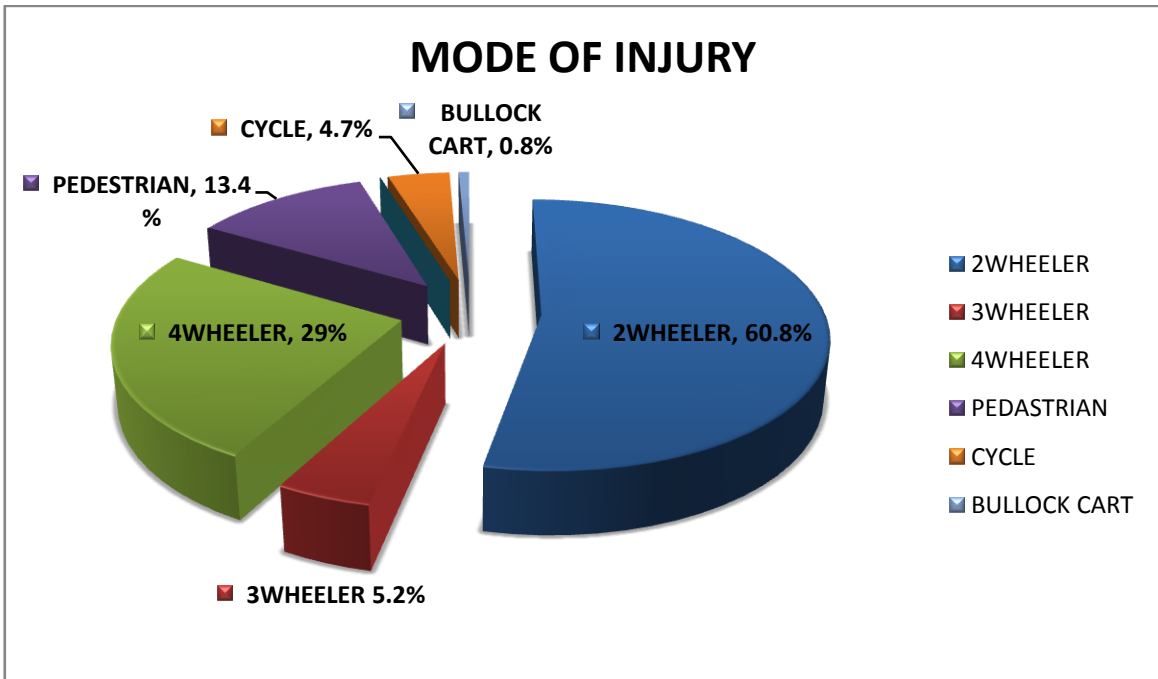


Fig11: Mode of injury

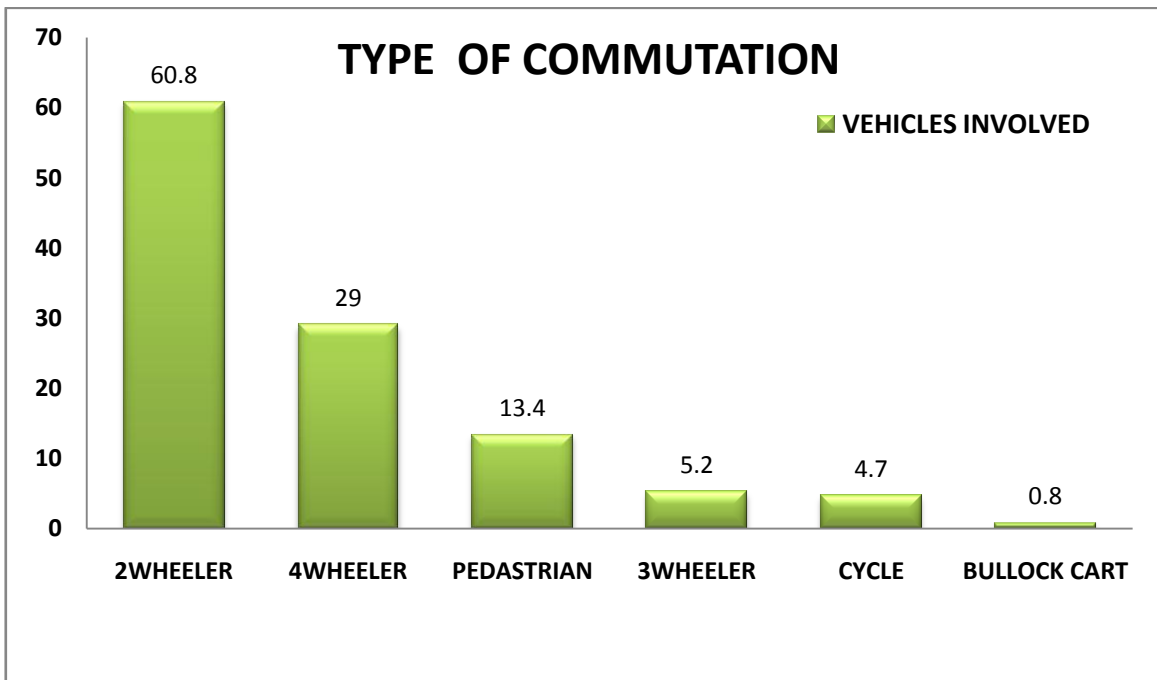


Fig12: Type of commutation

AGE AND SEX DISTRIBUTION

Majority of the victims were in the age group of 20-29 years (31%) and elderly (>60yrs of age) were 7.3%. The mean age is 34.8 years and range is 1 to 79 years.

Table 7: Age and Sex Distribution

AGE(YEARS)	MALE	FEMALE	TOTAL	%
0-11	22	14	36	4.40%
12 -- 19	52	10	61	8%
20-29	240	15	255	31%
30-39	148	25	173	21%
40-49	121	34	155	19%
50-59	67	10	77	9%
60-69	41	12	53	6%
>70	8	3	11	1.30%
TOTAL	699(85%)	123(15%)	822	100%

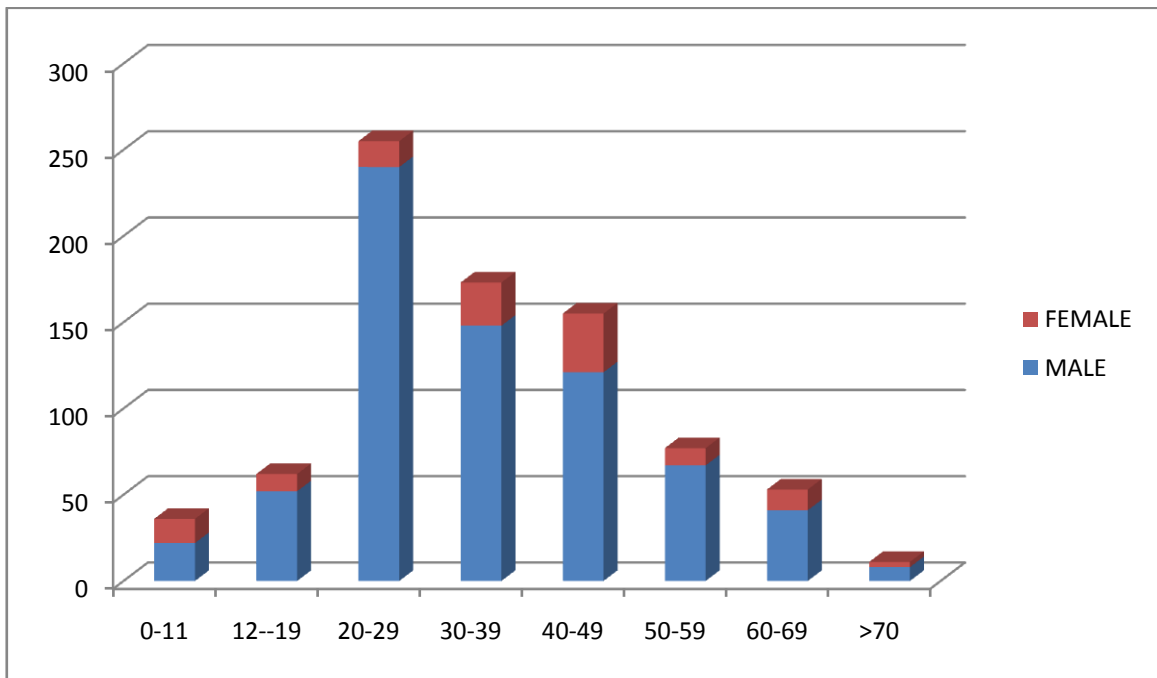


Fig 13: Age and Sex Distribution

Out of 822 cases admitted 85% were males and 15% were females. The victims of second and third decade of life accounted for 52% of cases admitted. Victims of extremes of age accounted for only 5.7 % of admission. Most of the females admitted were either pillion riders of two wheelers or an occupant in a three or four wheeler .

EDUCATIONAL QUALIFICATION

Table 8: Education

EDUCATION	PERCENTAGE
ILLITERATE	2 %
UPTO 8 TH STD	41%
UPTO 12 TH STD	33%
DEGREE	12%
NOT KNOWN	2%

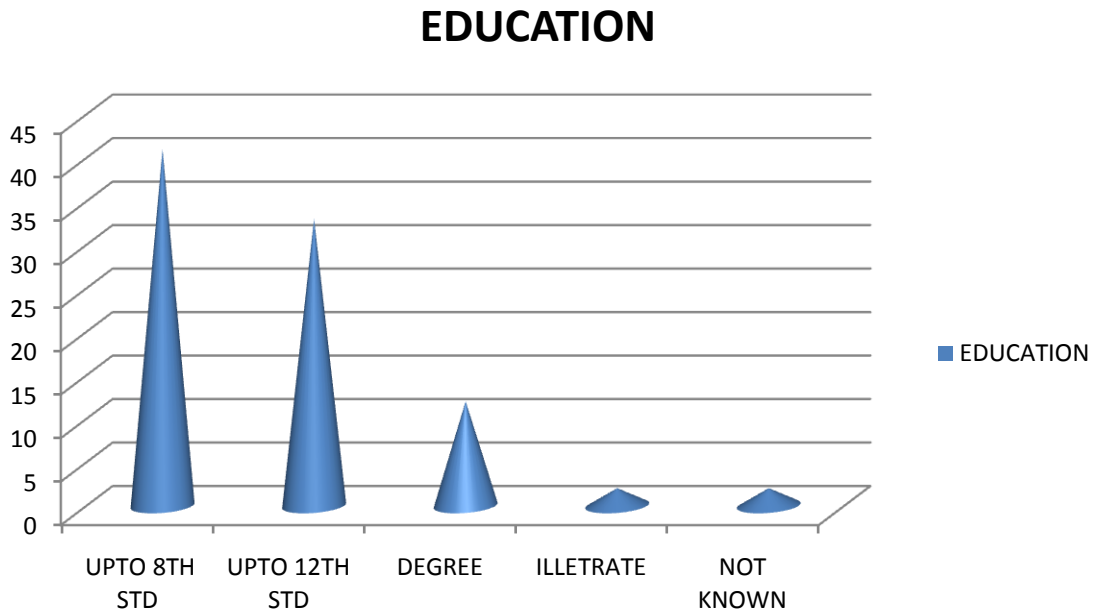


Fig 14:Education

In the present study, maximum no. of accident victims were from low education status group. Maximum no. of victims (41%) were of the education status of High school, followed by secondary school (37%), college and above (8%) and 2% were illiterate.

The main occupation of the inhabitants of Thanjavur and surrounding regions is agriculture . More than 70% of the workforce is involved in agriculture; 14% being cultivators and rest are agricultural labourers. Most of the victims belong to lower , upper lower and lower middle class as per Kuppusamy socioeconomic scale.

MODE OF TRANSPORT

About 365 (44.5%) of the cases were brought through EMRI 108 ambulance to our hospital and by other vehicles in 55.5% of the cases. Of the 192 referred cases most of them around 118 victims were transported by EMRI 108.

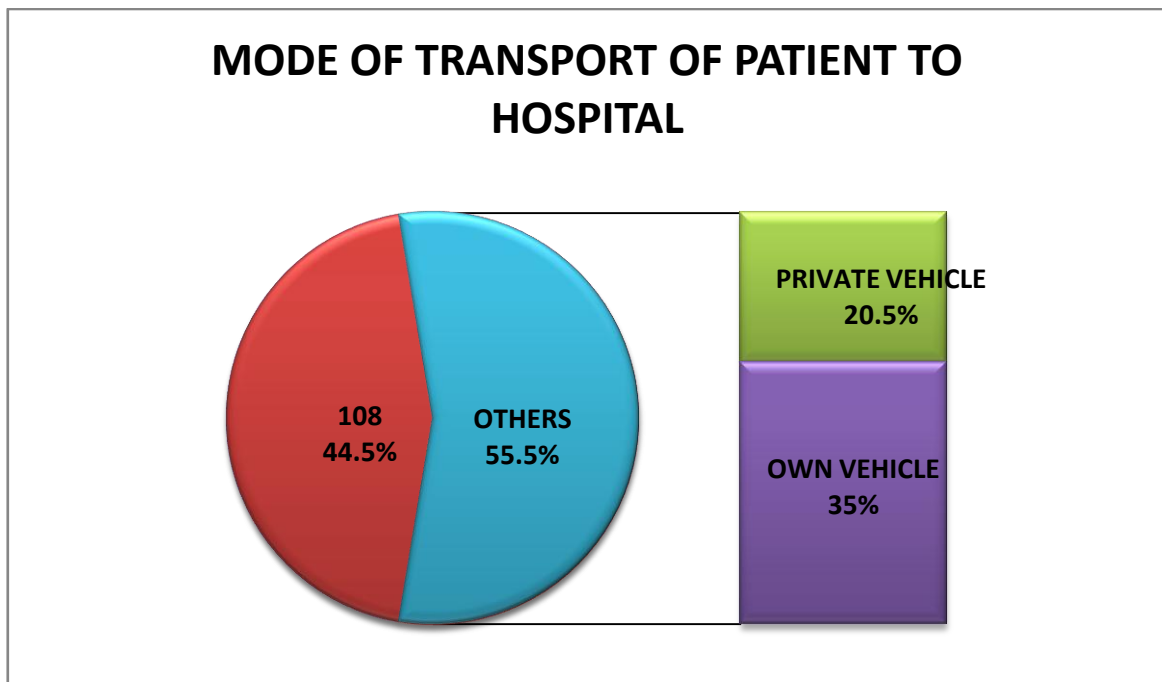


Fig 15: Mode of Reaching hospital / shifting to hospital

DRIVING LICENCE

In this study it was observed that out of eligible 452 drivers only 22% n=99 had a Valid license. Majority of drivers who could be interviewed n=353 had no valid driving license . A good number of those who had no valid license were driving two wheelers. Pillion riders, bicyclist , pedestrians , and bullock cart drivers who do not need a license to drive accounts to 213 cases. Large number of non license holders were in rural areas signifies that there were no efficient traffic law enforcement in these places.

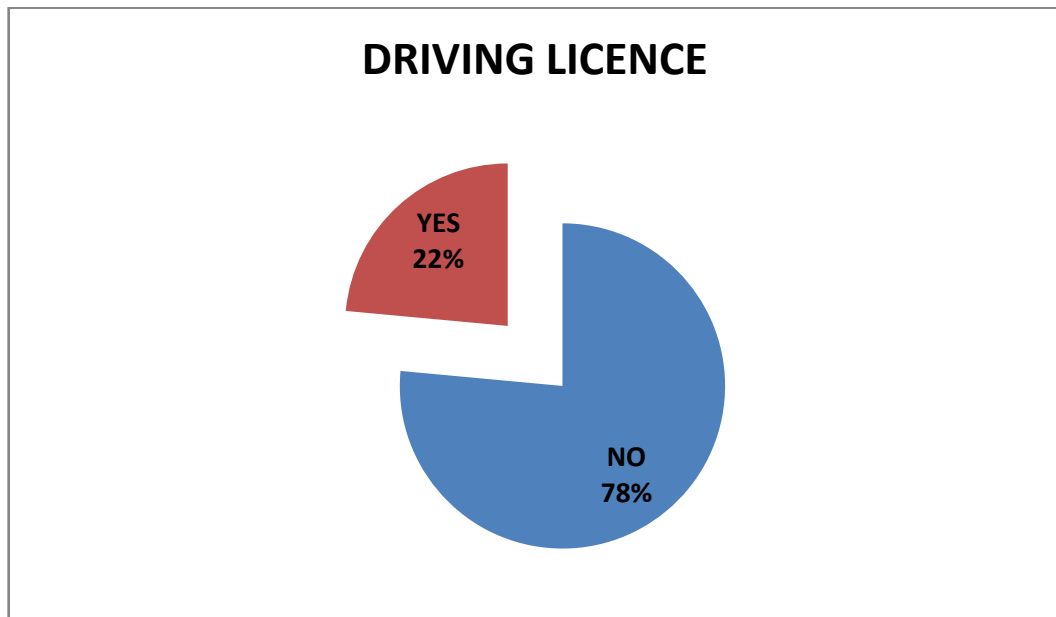


Fig 16: Driving license

PROTECTIVE EQUIPMENTS / SAFETY WARES LIKE HELMETS / SEAT BELTS

Of 320 two wheeler victims only 25 victims wore a helmet at the time of accident. About 51.9% drivers don't have knowledge about safety measures and 48.1% of drivers had knowledge about the safety measures and also observed that 91.2% drivers did not practice safety measure before Road traffic accident. None of the pillion riders of two wheeler as well as four wheeler drivers/occupants used the protective equipments like helmets or seat belts.

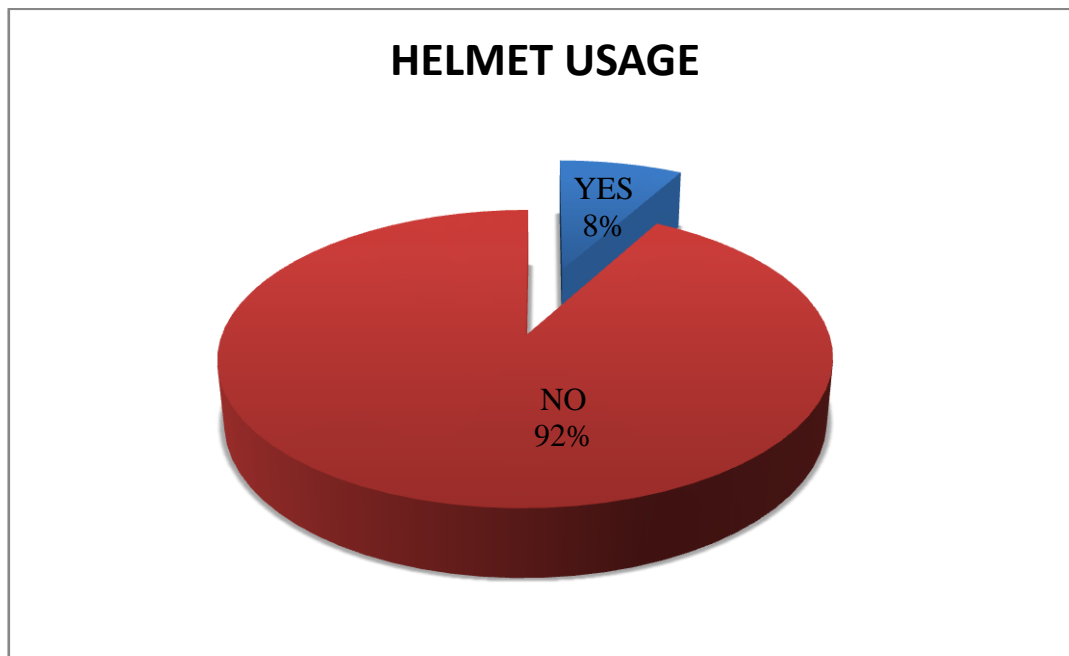


Fig 17 : Helmet usage

ALCOHOL INTAKE

The study conducted shows that about 24 % n= 196 victims had H/o alcohol consumption within approximately 6hrs before the accident. This information collected from patient history. We have no idea of those patients who were excluded from the study. Highest number of victims admitted with history of alcohol was noted on weekends and on Monday.

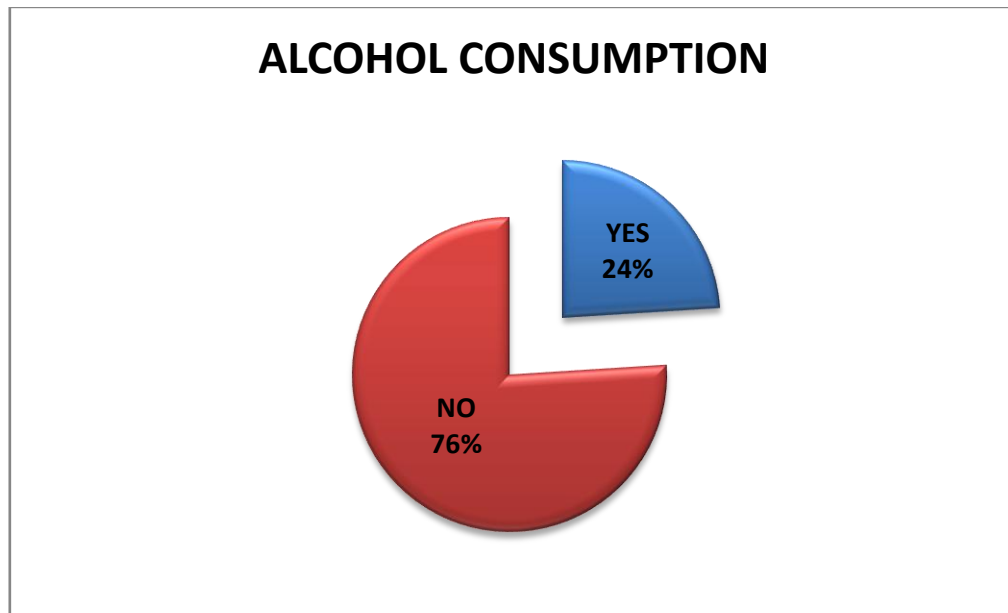


Fig 18 : Alcohol consumption

CASE REFERRAL

Thanjavur Medical College and hospital being a tertiary care centre cases from primary and secondary level care hospital from Thanjavur and its neighbouring district are being referred here for further management . One of the common reason for referral is for Neurosurgical management. It was the reason for higher number of grievous nature of injury and mortality.

In the study about 23% (n=192) had got a first aid or treated in a hospital immediately after the accident. Of the 192 referred cases most of them around 118 were transported by EMRI 108. Road traffic accident victims most commonly had taken first aid in a nearby Govt. Hospital (G.H).

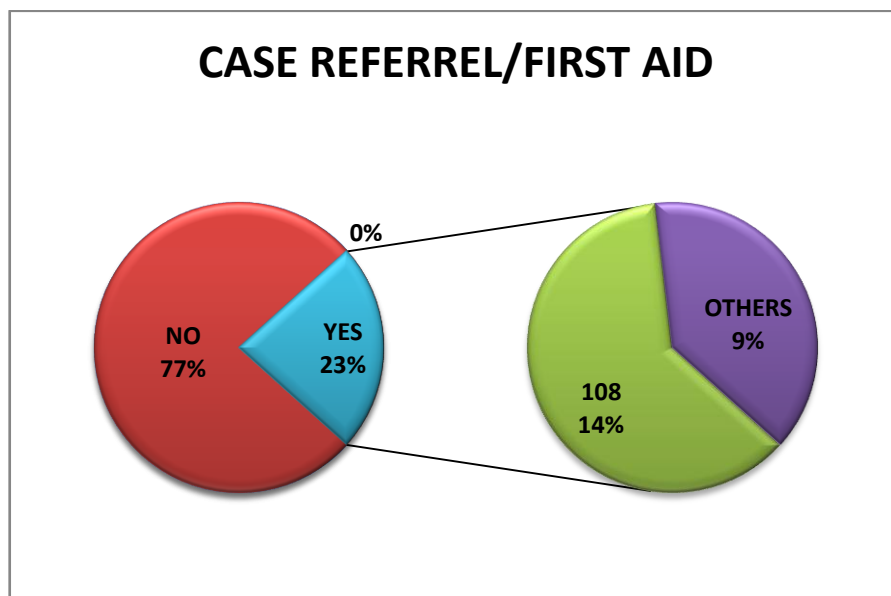


Fig 19: Case referral / first aid

NATURE OF INJURY

In our present study majority of the victims had suffered grievous injury 51.5% (n=424) and 48.5% (n=398) of them had simple injuries. Grievous injury ranged from fracture tooth to fatal head injury.

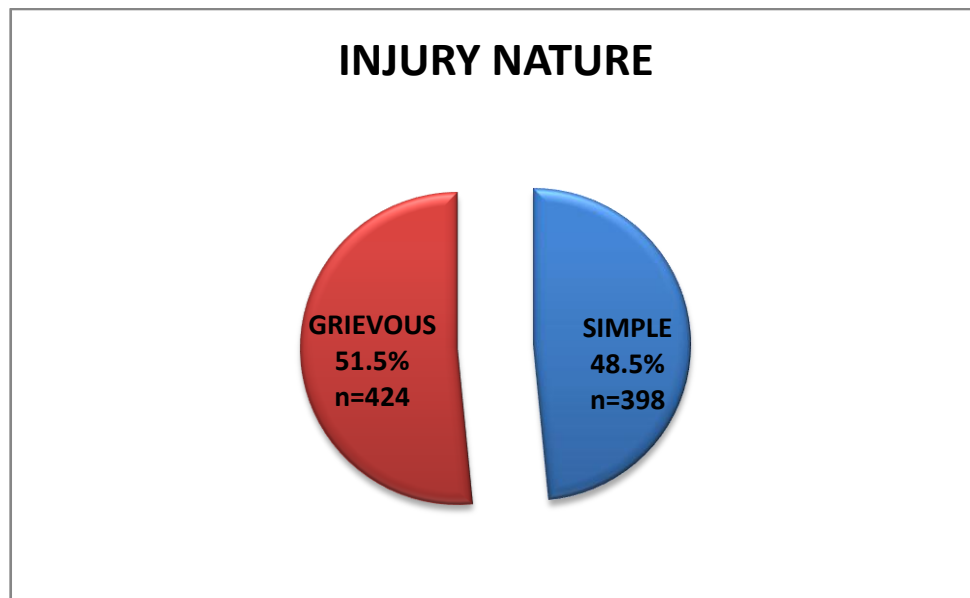


Fig 20: Nature of injury

ADMISSION PATTERN AND TREATMENT

Most of Road traffic accident victims n= 608 were managed in the surgical wards in our hospital, 24.6% victims had an overnight stay and discharged thereafter , 14.7% patients were managed in the surgical intensive care unit (SICU); and of those, 80 cases (62.1%) needed mechanical ventilator support. Most of the (91.2%) patients had simple surgical intervention. Primary wound suturing and wound de'bridement were the most commonly performed procedure. Out of 1000 patients only 2 patients were referred to other higher centre (for vascular repair).

PATTERN OF INJURY

Soft tissue injury to skin and subcutaneous tissue were present in majority of cases which included abrasions, lacerations of various sizes. Face and extremity were commonly involved. Chest injury and abdominal injury were less common .

Table 9: Pattern of injury

INJURIES	TOTAL	PROCEDURE	EMERGENCY PROCEDURE
SOFT TISSUE INJURIES	398	WOUND MANAGEMENT	398
FRACTURES	285	ORTHOPEDECS	80
HEAD INJURIES	126	NEUROSURGERY	38
CHEST INJURIES	30	ICD	20
ABDOMINAL INJURIES	12	GENERAL SURGERY	4
TOOTH LOSS	10	TOTAL	586

Four laparotomies were done for blunt injury abdomen findings were perforation in 2nd part of duodenum , liver laceration ,splenic contusion and perforation in transverse colon respectively rest were managed conservatively. Orthopedic and neurosurgery procedure were commonly performed emergency surgeries. Most of the head injuries were managed conservatively.

INJURY PATTERN IN ALCOHOL INTAKE VICTIMS

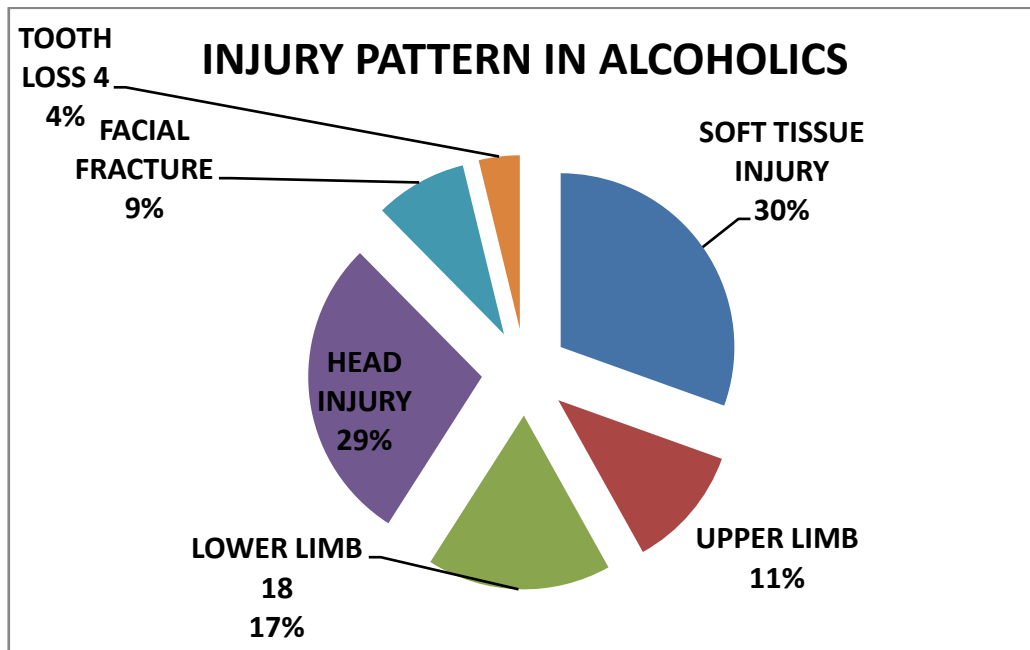


Fig 21: Injury pattern in alcoholics

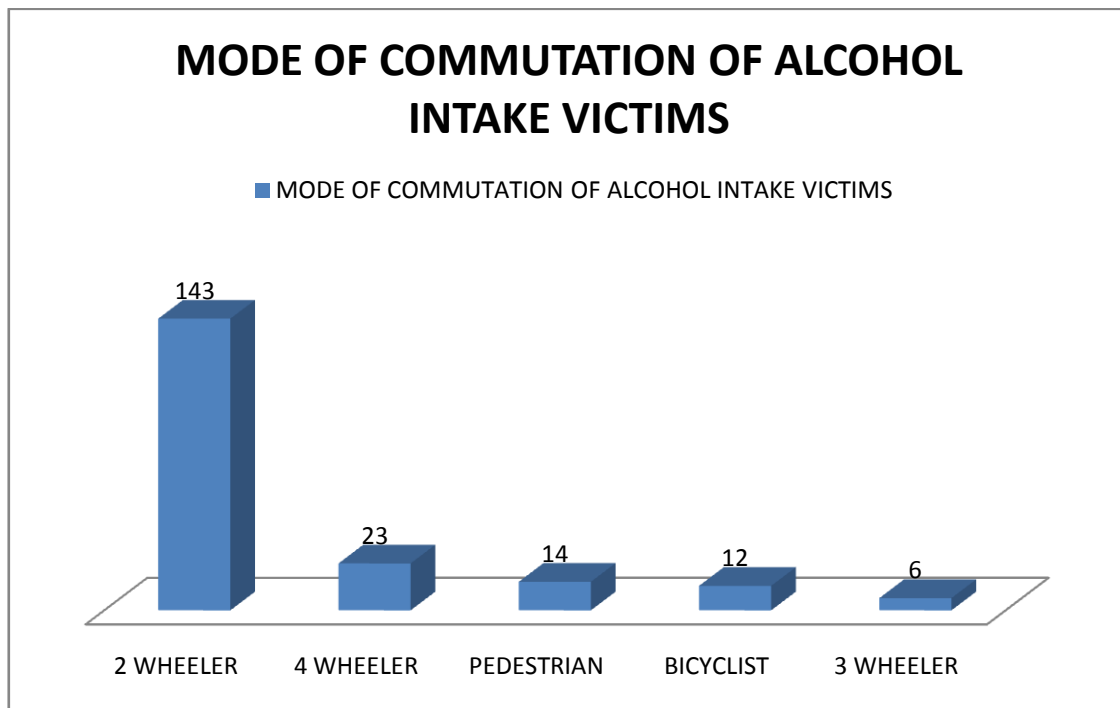


Fig 22: Mode of commutation of alcohol intake victims

The most common injury noted in alcoholics were soft tissue injury in 30% of victims followed by injury to brain 29 % .Overall injury to head and face was the common region involved in 42% followed by injury to extremity in 28%. Two wheeler was the most common mode of commutation in these alcohol intake victims and the most common mode of injury was skid and fall.

FRACTURES :

Table 10 : Upper limb fracture

UPPER LIMB	CASES
CLAVICLE	25
SCAPULA	4
HUMURES	7
RADIUS	8
ULNA	4
METACARPAL	15
DISLOCATION	3
TOTAL	66

Table 11: Facial bones fracture

FRACTURE	CASES
MAXILLA	12
MANDIBLE	20
NASAL BONES	6
ZYGOMA	16
TOTAL	54

Table 12: Lower limb fracture

LOWER LIMB	CASES
PELVIS	4
FEMUR	33
TIBIA/FIBULA	10
BOTH BONES	36
METATARSAL	13
PATELLA	6
OTHERS	12
TOTAL	115

A total of 285 fractures were recorded among these Road traffic accident victims. The commonest site for fracture was noted in the lower limb in 40% of victims (n=115) , skull 21% (n=60), upper limb 23% (n=66) followed by facial bones 19% (n=54). Other sites were ribs 5.2 % (n=15), and spine 5.2% (n=15). The commonest bone fractured were both bones of leg involving tibia and fibula (n=46), followed by fracture femur (n=33), fracture frontal bone (n=30) and fracture clavicle (n=25). Most commonly associated visceral injury was the

head injury in 15.3 percent cases (n=126).Injuries to the lower and upper extremities constitute the leading cause of hospitalization and causality visits related to non fatal injuries. Degloving / crush injury of extremities were noted in 10 cases.



Fig 23: The photographs show crush injury foot sustained by motorcycle crash injuries victims

HEAD INJURY

Table 13: Injury to brain

TYPE OF BRAIN INJURIES :	TOTAL CASES
FRONTAL CONTUSION	22
TEMPORAL CONTUSION	14
CEREBRAL EDEMA	7
EDH	18
SDH	14
SAH,TENTORIAL BLEED	14
DAI	3
OPTIC NERVE INJURY	4
OTHERS	14
TOTAL	110

Table 14: Skull fracture

SKULL FRACTURE	
FRONTAL	30
PARIETAL	14
TEMPORAL	10
OCCIPITAL	6
TOTAL	60

Injury to the brain was the common viscera to be injured in this study. Extra dural, intra dural hemorrhage were the most common type of brain injury noted n=32 followed by fracture frontal bone n=30.

Around 38 patients underwent surgical intervention of which 17 patient 44.4 % had died in the immediate post op period. Most of the head injured patients were managed in Surgical Intensive Care set up.

Of the total 822 cases 126 patient had head injury .

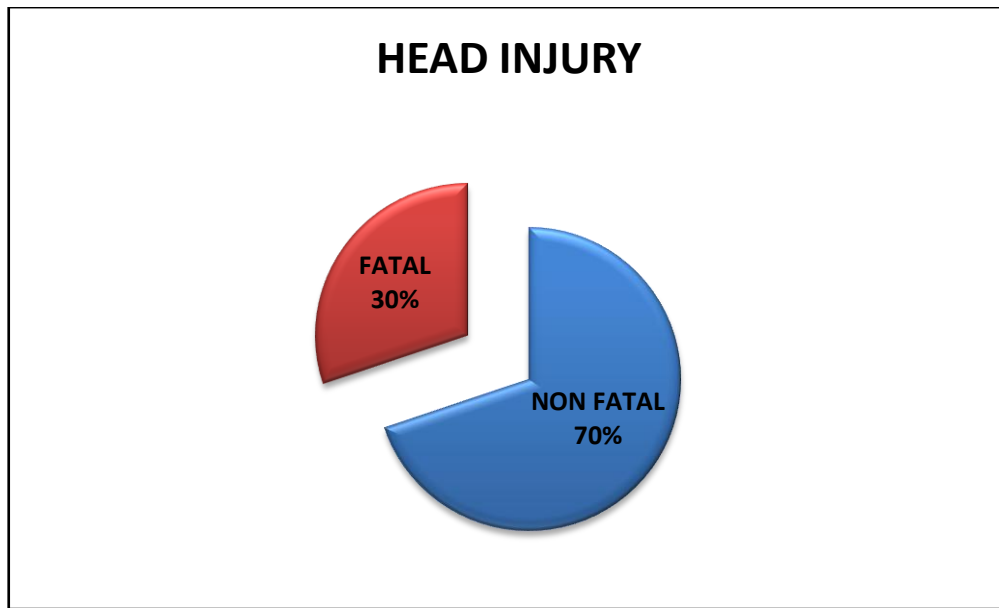


Fig 24: Head injury

Head injuries were common among bicycle riders, pedestrians and riders of motorized two wheelers.

INJURY SEVERITY SCORE:

The severity of injuries occurred in these Road traffic accident victims was recorded and categorized according to the "New Injury Severity Score". These injuries were categorized as minor injuries with a score of 0-7, moderately severe injuries with a score of 8-18 and severe injuries with a score of > 18.

Table 15: Injury severity score

INJURY SEVERITY SCORE	TOTAL CASES	%
MILD - 0-7	532	64.8
MODERATE- 8-18	242	29.4
SEVERE- >18	48	5.8
TOTAL	411	100

Most of the cases had mild injuries 64.8% (n=532). Moderate injuries were noted in 242 (29.4 %) cases and severe type of injuries in 48 RTA cases. Score ranged between 1-28

Majority of the cases (99.6%) of Road traffic accident reporting to Thanjavur medical college and hospital were managed in our hospital itself and only 2 cases had to be referred to other higher centre for further management. Abbreviated Injury Scale (AIS) and Injury Severity Scale (ISS) were used to score individual injuries and the overall severity of injuries.

NUMBER OF DAYS HOSPITALIZED

Maximum number 374 (45.2%) of patients remained in the hospital for a period of 1 to 7 days and 180 (22%) cases remained in hospital for less than 1 day.

Table 16: Number of days hospitalized

No. of days hospitalized	No. of Cases	%
< 1	180	22
1 – 7	374	45.2
8 – 14	115	14
15 – 21	55	6.8
22 – 30	29	3.6
> 30	69	8.4
Total	822	100

CAUSE OF DEATH

Out of 1000 cases studied there were 48 mortality accounting to 4.8 %.

The highest mortality rate of 4.8% when compared to other study may be due to that our hospital is the main referral centre for neurosurgical intervention in the whole Thanjavur district.

Table 17: Cause of Death

CAUSE OF DEATH	TOTAL	%	OPERATED
FATAL HEAD INJURY	44	92	17
ABDOMINAL INJURY	5	10	2
THORAX INJURY	5	10	2
OTHERS (FR-FEMUR)	1	2	0

All the 48 mortality cases were analyzed. Their Post Mortem findings were noted. It was inferred that majority of death are due to fatal head injury 92% (n=44) including 17 operated cases. Fatal abdomen and thorax injury found in 10% each. The cause of death in one fracture femur may be due to fat/pulmonary embolism. From our study males of middle age group (21-40yrs) were more involved in accidents . Moreover, in the above study, other than pedestrians and 2 wheelers , LMV were the most common vehicles involved, and fracture of the skull bones was the common injury afflicted in accidents, as reported in our study and subdural hemorrhage (SDH) were commonest.

DISCUSSION OF RESULTS

The study results were analyzed and compared with various international and national journals.

DISTRIBUTION OF INFORMANTS OF RTA

In our study friends and relatives accounts 52 % of the informant who gave all the required information to the researcher.

A study from Bangalore ⁵⁶ found that majority of the times the relatives (59.1%) of the patient gave the information about Road traffic accident, followed by the victims themselves and the friends.

The study conducted at NIMHANS⁴⁷ found that in majority of cases, a family member or a friend accompanying the Road traffic accident victims gave all the required information about Road traffic accident to the investigators.

The information given by persons other than the victims may not be as accurate as given by the RTA victims themselves. As Road traffic accident victims suffer from physical and mental trauma, they were not in a position to give the information.

A hierarchy of consent exists on the basis that the people most probably to understand a patient's desires are those who know the patient well. Thus the hierarchy is the patient themselves, a relative or a friend, an independent clinician, a clinician caring for the patient and, finally, a research ethical committee (waiver of consent).⁴⁸

AREA WISE DISTRIBUTION OF RTA

Even for whole of India (2011), it was noted that trauma in the rural region accounting 53.5 % (n=2, 66,231) is more than the trauma in the urban region which is 46.5% (n=2, 31,455) of total Accidents.¹

The reasons for more number of RTA cases in rural areas may be a

1. The bad condition of the roads in rural area,
2. The inadequate knowledge about road safety among rural people ,
3. No proper traffic rules implementation in rural areas.
4. Proximity to national / state highway.

DAY WISE ADMISSION AND ALCOHOL INTAKE

More number of cases were admitted on Friday than on any other day and more than one third of cases were admitted on the weekends.

Similarly type of observations were made in studies conducted by Jha N et al²⁰ , Mehtha et al,²⁸ Stallones et al,³⁴ and Ghimire⁴⁵ et al, Jirojwong S et al⁵⁷

Our study had reported highest number of accidents on weekends and Friday. This is expected, as Thanjavur is a popular tourist destination in Tamilnadu and most of the tourists visit this place during weekends.

In contrast to our study, the study conducted by Ghosh PK,⁴³ Bharadwaj et al,³² and Jolly MF²⁹ observed highest number of Road traffic accidents on Wednesdays. However, no significant difference was found in the incidence of road traffic accident on weekdays and weekends in the study conducted by Kumar et al.⁷

More amount of alcohol consumption was noted on the weekends . similar observations were also made in these above studies.

COLLISION

In our study about 33.5% Road traffic accident's had self fall followed by 31% sideways collision, collisions from behind in 17.2% , head on collisions were 15% , and the type of collision was unknown in 3.2% of the cases. Unknown type of collision includes those who do not know the mechanism of Road traffic accident.

The study by Suhas babu⁵⁶ found that majority of the times it was a sideways collision 46.7% followed by head on collision 27.5%. Victims were hit from behind 16.9 % of the times and 8.9% of them gave history of self fall. However in contrast to present study, the study conducted at NIMHANS⁴⁹ showed that 41.9% Road traffic accidents were due to skid & fall followed by 15.2% head on collisions and 6% sideway collisions.

Injuries to the face and lower extremities were significantly greater in frontal collisions; thorax, abdominal, and pelvic injuries were significantly greater in lateral collisions. In addition, drivers in lateral collisions were found to have significantly more multiple injuries to the abdomen and thorax.⁵⁸

MODE OF INJURY

In our study, a total of 310 different type of vehicles were involved, out of them 60.8% were two wheeler, four wheeler 29%, pedestrians 13.4%,three wheeler 5.2%, bicycle 4.7% and bullock cart 0.8%.

Similar type of results found at study conducted at Bijapur ⁵⁹ where maximum number of vehicles were 2-wheeler accounting for 40% whereas least number of vehicles were bullock cart. Study conducted at Puducherry found that a total of 685 different types of vehicles were involved; out of them 19.4% were bicycles, 16.8% were trucks, 14.9% were buses and 22.8% were two wheelers respectively.²⁰

Rapid increase in two wheelers were mainly due to the affordability rendered by the hire purchase schemes and second hand vehicle market , at the hands of village youth making two wheelers preferred mode of commutation.

Risky driving like high speed driving for thrill , rash driving , driving under alcohol influence, not using safety gadgets like helmets, not following traffic rules were all responsible for high incidence of road traffic accidents in two wheeler riders of age group 20 -30 years.

AGE AND SEX DISTRIBUTION

As per ministry of road transport report, age profile of Road traffic accident victims, for the previous year 2013, shows that the age group between 25 and 65 years accounted for the 53.2% , followed by the younger age group between 15 and 24 years 32.29 %. Earning age group constitute more than half of RTA victims. The tragic loss of the main bread winner by means of death can be disastrous, leading to enormous economic burden on the family and even poverty .²⁰

The people of young age group who are the most proactive and economically productive were involved in these road traffic accidents, which leads to major economic loss to the community and the nation. Similar findings were also noted by Agarwal et al,²² Khare N et al,²³ Rakhi Dandona et al,³⁶ Mishra B et al,³⁸, Ghimmire et al.⁴⁵ Guru raj G et al⁴⁷ and Bener A,⁶⁰ Jirojwong S,⁵⁷

This can be attributed to the truth that this younger age group both males and females are a frequent road traveler due to educational and occupational purposes. Similar findings also observed in studies conducted at Delhi, and Puducherry.²⁰

In our study, people in the extremes of age group comprised the minimum number of cases. Least cases in older persons may be they are more experienced, have more traffic sense, less inclination to take undue risks and they remain indoors most of the times ,and lead a less active life.

Young drivers and riders are in more risk of crash accidents. Young often tend to be overconfident, less experienced, run with high speed. Unnecessary travel and joy ride with risky driving, and choice of less safe travel modes are a habit with adolescents.

In total more than half (51%) of RTA victims were of the younger age group 20-39 years in this present study. This may be due to the reason that younger people lead more proactive lifestyle , more mobile and go out for work and keep themselves outdoors most of the time.

Gender distribution of accident cases showed male preponderance, accounting for 85% of cases and male: female ratio was 8:1. Among 21-30 years age group 29% were males and 1.8% were females, followed by among 31-40years age group 18% were males and 3% were females. Female victims in the present study accounted for 15 % demonstrating the male predominance of more mobility in the Indian Context.

The study conducted by Ganveer G B et.al,⁵¹ showed that the M:F ratio of 6:1 may be due to the reason that in our society sex ratio is in favour of males as compared to females and males are the earning member for the family, therefore involved more in outdoor activities exposing themselves to increased risk of road traffic accidents. Frank et.al, also observed a higher male: female ratio.

The study by Choudhary et al,⁶² had found that 83.2% were males, and remaining were females. M:F ratio was also almost similar 5.9:1.

Similar findings were shown by Soori H et al,⁶² Suryanarayana SP et al,⁶³ and Jha N et al,⁷ NIMHANS⁴⁷ and Delhi⁶⁴.

The male preponderance may be due to paternalistic nature of our society where males keep themselves most of the time outdoors and male gender lead a much more proactive life and in most of the time are involved in activities such as risky driving , alcohol consumption and travelling. On the contrary, females keep themselves indoor mostly due to cultural background.

EDUCATION :

In the present study, maximum no. of accident victims were from low education status group. Maximum no. of victims (41%) were of the education

status of High school, followed by secondary school (37%), college and above (8%) and 2% were illiterate.

The study by Burgut HR⁶⁰ showed that 26.6% were educated up to secondary level, while in contrast Jha N⁷ found that 23.5 percent of RTA victims were found to be either illiterates or had only low-level of education and victims with higher education were lesser in proportion.

In a study conducted at JIPMER Hospital,²⁰ found that 21.4% had education up to 5th class, 19.3% had education up to 8th class, while 16.5% were illiterate and victims highly educated were lesser in proportion.

The present study revealed most victims were young, pedestrians and drunk drivers. On socio-educational front, majority of them were educated up to school and belonged to middle and lower socioeconomic classes. Similar observations were made by researchers from neighboring countries including India^{65,66}

Similar type of observations was also seen by Agarwal et al,²² Mishra et al,³⁸ sixty five percent was educated up to secondary level.

We cannot completely rule out that highly educated and rich people might have had received the necessary treatment at a private hospital.

MODE OF TRANSPORT TO THE HOSPITAL

About 365 (44.5%) of the cases were brought through EMRI 108 ambulance to our hospital and by other vehicles in 55.5% of the cases. Of the 192 referred cases most of them around 118 victims were transported by EMRI 108.

A study conducted at Haryana⁶⁷ shows that victims were brought through Ambulances (43.62%) to the hospital, followed by private vehicle (25.36%), police vehicle (17.77%), taxi (8.32%), bus/minibus (4.93%) and ambulances (43.62%).

The study conducted at NIMHANS⁴⁷ shows that more private vehicles accounting to 23% and wide locally available autorickshaws were used in transport of cases in 31% and in 22% ambulance was used to transport the injured patients to the hospitals.

Free and easy availability of 108 ambulance was the major factor responsible for transport of victim to the hospital. It was observed that almost everyone knew that it was a toll free number which further increased its utilization.

The role of 108 in transporting victims is commendable. They just don't "scoop and run" the victim from the accident site they also gave much valuable pre hospital care right from simple wound care to maintenance of airway, breathing and circulation at the golden hour. They have also transported the victim to a nearby government hospital or else the victim would have taken multiple consultation before reaching a definitive health care facility.

As per study conducted in Puducherry majority (59%) of patients were referred, with stopovers at two consecutive referral centers (30%), needing at least two vehicles to transport to definitive care (70%), clocking unnecessary distances (67%), and delayed due to non therapeutic intervention (87%). The majority of deaths (66%) were due to head injury.⁶⁸

SAFTEY WARES / HELMETS/SEAT BELTS

A study conducted by Morais Neto et al, found that 50% of 2 wheeler riders were not using helmets at the time of RTA.

In a study, Jha et al⁷ had shown that 71% were not wearing any protective helmet. Majority of the vehicle occupants had not worn any seatbelt. Studies in Bengaluru⁴⁷, Nagpur (74%)²⁷ and Haryana(100%)⁶¹ of India had also

shown that drivers were not using safety measures.

About 52% drivers don't have the knowledge about safety measures and this may be one of the reasons for not using the safety measure before the RTA. The reasons for not using safety measures may be lack of seriousness about the use, feels uncomfortable, ignorance, lack of strict implementation of legislation.

From safety perspective a helmet is the most important part of a motorcycle. Its use has been shown to have a 72% effectiveness in reducing the incidence of head injuries on a crash.⁶⁹ It has been shown that an unprotected rider is 40% more likely to die in a crash than a rider who is wearing a helmet⁷⁰ In Taiwan, after introducing a law which required mandatory wearing of helmet for the riders and their passengers the motorcycle crash fatalities decreased by 14% and head injury fatalities by 22% .

DRIVING LICENCE

The study conducted by Jha⁷ et al found that 15.2% drivers had no valid license. Supriya Satish Patil et.al found that 29.4% of the drivers involved in the RTA had no valid driving license may be due to lack of awareness, inadequate law enforcement particularly in rural areas and very casual

attitude towards applying a valid license .⁴⁰

ALCOHOL

In the WHO supported study in Nepal,³⁸ a much higher percentage of drivers (16.9%) were noted to consume alcohol 3 hours prior to accident. Sreedharan J (2010)⁷¹ had found that 20 % of the motorcycle riders had consumed alcohol. Drinking alcohol and driving should never be mixed. Increased use of alcohol in drivers expose them to the risk of accidents as the judgment gets impaired and control over vehicles is lost due to the effect of alcohol and other drugs. National maximum legal blood alcohol concentration is 30 mg/100ml.¹⁰

The role of alcohol consumption in impairing the driving capability is well known and proved. The level of impairment increases as the blood alcohol concentration increases. Alcohol intake had increased the death from serious injury and its outcome. Intoxicated patient are twice likely require intubation for effective airway control and CT Brain as reliability of physical examination is reduced particularly GCS.

Increased alcohol consumption in this study may be due to wide locally and legally available of alcohol in state government run wine shops in all

over rural areas and along major state and national highways. State government run wine shops had more than 500 outlets all along state and national highway⁷².

All these 196 patients with H/O alcohol intake were referred to alcohol de-addiction clinic in Psychiatry department in thanjavur medical college and hospital and were further encouraged to abstain from it.

CASE REFERREL

As per study conducted in Puducherry forty-four percent of cases reached directly from the scene of injury in contrast to 28.2% in Bengaluru³⁷ and 66% in the Ontario province of Canada⁷³. The majority (87.40%) were from District headquarter/Taluk hospitals from the neighboring state, far higher than the 40.1% reported from Bengaluru³⁷

NATURE OF INJURY

The study conducted by Gudadinni MR showed that Out of 540 accident victims, 67% victims had simple injuries and 33% had grievous injury⁵⁹.

A study conducted by Sathyasekaran had revealed that among the RTA

victims, 11.5% had very serious injuries, and 11.4% with serious disabling injuries, 38.4% with mild disabling injuries. 38% of injured victims had serious injury to head and facial region²⁵. The study conducted by Varghese showed that 87% victims had suffered simple injury²⁶.

More grievous injury when compared to simple injury may be contributed to higher case referral from the periphery hospitals since Thanjavur medical college and hospital being a tertiary care centre due to concentration of bad cases.

FRACTURES

Study by Huda, Gupta et al revealed that the commonest injury was a fracture in 68.64 percent cases, most common site was lower limbs in 48.16 percent cases (n=367) with the tibia/fibula being the most common bones to be fractured (32.97 percent, n=121). Followed by upper limbs 28.8%⁷⁴

INJURY SEVERITY SCORE

The New Injury Severity Score is a more accurate predictor of in-hospital death than the Injury Severity Score and should be chosen over the Injury Severity Score for case-mix control in trauma research, especially in certain subpopulations such as head/neck-injured patients.⁷⁵

CAUSE OF DEATH

The study conducted by Pati SS⁴⁰ et al showed that mortality rate was 0.8percent. The study conducted by Deepak Sharma et al⁷⁶ showed that mortality rate was 1.65%. The main reasons for death in RTA are injury of vital organs like brain, organ failure and septicemia.

The study by Gururaj⁷⁷ found that mortality rate among different age groups was: 8.2% (<14 years), 62% (15–44 years), 20% (45–59 years) and 9.2% (>60 years).

STUDY LIMITATIONS

This study was done in one hospital and data were collected over a period of time so the findings may fail to reflect the true picture of motorcycle crashes; injuries pattern and associated factors in Thanjavur district.

SUMMARY OF THE STUDY

In this study , one third of victims were in second and third decade and 85% were males. The highest number 31% of victims were between 20-29 years of age(n=255) and average age is 36.5 years. Accidents involving 2 wheelers accounts most of the victims, 4 wheelers 29%, pedestrians 13.4 % ,3wheelers 5.2%,cycle 4.7%, bullock cart 1%.Only 99 victims had a valid driving licence. Only 25 victims wore a helmet and none of the four wheeler drivers used the safety seat belts.

Most of the victims were educated up to high school levels (22.9%) and were unskilled laborers (32.6%). About 44.5% of the accident victims were brought through 108 ambulance to Thanjavur medical college and hospital. More than 90% of the victims were conscious and 48.5% had simple injury. Drivers (57.6%) comprised largest group among RTA victims and 43.2% were in the younger age group of 20 to 29 years. About 52% drivers didn't have knowledge about safety measures and 91.2% drivers did not practice safety measures before RTA. About 24% of victims had H/o alcohol consumption within 6 hrs of RTA and 26.6% were familiar with road. Around 192 patients were referred from other peripheral primary and secondary care hospitals in and around Thanjavur district. EMRI 108 ambulance was a major mode of transport..

Summary of injuries

Majority of patients 51.5 (n=424) admitted were grievously injured. Fracture both bones of leg involving tibia and fibula was the most common fracture observed in the study. Brain was the most common viscera to be involved in the injury. It was also the most common cause of death in the road traffic accident victim. Injury to abdomen and thorax were observed in less number of cases.

As per New injury severity score mild injury with a score of 0-7 accounted for 64.8% cases. Majority of patient was hospitalized less than one week in 67.2% cases and less than 10% of cases were hospitalized more than one month.

Overall the younger adults male of age 20-29 were commonly involved in the vehicular accidents. Most of these economically productive adults were from rural areas driving their two wheeler when these accidents happened . Riding their two wheeler and during the peak hours of traffic i.e. 9.00 am to 12.00 pm and 6.00 pm to 9.00 pm without a valid license or any safety gadgets like helmets were common as there were no traffic laws implementation in the rural areas . Most of them have history of alcohol abuse and 24% had actually consumed alcohol 6 hours prior to accident.

Maximum number of accidents occurred on Saturdays and Sundays .

After injury they received first aid in a nearby medical centre and were referred to our hospital if they were grievously injured particularly for CT investigation and neurosurgical intervention. Almost all of them knew about free 108 ambulance service and used them for transport.

SURGEONS ROLE IN INJURY PREVENTION

One third to one –half of trauma deaths still occur in the field before any possibility of treatment even by the most advanced trauma treatment system. Such deaths can only be decreased by prevention efforts.

Injury prevention efforts do work. Though it relay on multidisciplinary effort , surgeons particularly in the trauma setting could play a big role in injury prevention notably unintentional injury.

As surgeons have direct contact with acutely injured patients they can play a major role in injury prevention in the following ways

- To give **Individual patient counseling** regarding safety at a time when many injured patients would be in a receptive state,
- To **Screen the patients for alcohol abuse,**
- **Trauma research** to demonstrate the extent of problem,
- Encouragement and maintenance of **Trauma Registry,**
- Participation at community level in **Creating public awareness** regarding the gratitude of road traffic accident and its morbidity,

- Give valuable **Feedback to policy making authorities** in changing or strongly implementing current legislation pertaining to road safety.

Thus surgeons not only treat the acutely injured vehicular accident victim but also can help in preventing the future injury. Trauma surgeons in particular could contribute to a greater extent in the area of trauma research and trauma registry which are in infantile stages in our country.

RECOMMENDATIONS

The Road traffic accidents are rapidly becoming a social menace as most of the times it results in death or disability of the Road traffic accidents victim.

A constant rise in the number of motor vehicles, rampant encroachment of roads, unscientific construction of subways and under passes at highways, very high speed levels of driving at the highways, godly ignorance for wearing helmets among two wheeler riders, tendency to violate traffic rules, anarchic traffic systems and rapid population explosion have greatly attributed to rapid increase in road traffic accidents and therefore injury cases. Hence, preventing the occurrence of such injuries can reduce fatalities. Therefore, the old saying, “PREVENTION IS BETTER THAN CURE” holds good even here. The life of majority of the victims can be saved by early treatment, as the initial few hours following injury forms the critical time. Thus the injuries due to Road traffic accidents can be prevented or at least can be reduced by preventing the occurrence of traffic accidents and by early hospitalization and treatment. Vehicular accidents can be prevented or minimized by proper maintenance of existing roads, improving quality of road surface, removing obstacles present on roads, designing to separate road users travelling at different speeds and in

opposite directions; improving the lightings in the roads ,road signals during both day in and night out; strict enforcement of traffic rules and regulation, proper legislation to avoid drunken driving etc.

Injuries in road crashes can be prevented or reduced by single means like use of seat belts by drivers and occupants of four wheelers, encouraging the inclusion of air bags in new cars, as well as crush proof helmets by motorcyclists, modification in structure of motor vehicle etc. In case of accident, establishing first aid post and proper maintenance at suitable distances on the highways to assist the injured and also to transport the injured. Establishment of mobile trauma care units by the government as well as by non government organizations can assist in preventing fatalities by providing timely assistance. Further the traffic safety education should be given to children's at school level.

If Road traffic accidents are considered an epidemic of modern times, then prevention is its vaccine.

Suggestions and recommendations to:

A) Reduce exposure to road traffic

- Avoid travelling long distances in private vehicles like two wheelers and cars, instead prefer public transportation system.
- Plan road layouts such that, different types of lanes are used for different type of vehicles.
- Provide safe road crossings and separate pathways for pedestrians and cyclists.
- Travel at low velocity in unknown places or where the roads are unfamiliar.

B) Reduce the occurrence of accidents

- Improve the visibility of roads, road signs during both day and night.
- Enforce strict laws that set maximum blood alcohol content levels for drivers.

- Control speed with traffic calming road design such as roundabouts and
- Enforce speed limits consistently with speed breakers.
- Follow the traffic signal and signal boards without fail especially at vulnerable areas like accident zones, school areas.
- Avoid usage of mobile telephones while driving.
- General health check-up at least twice a year for drivers.

C) Reduce harm done when crashes occur

- As seat belts are more effective for motor vehicles which are moving at a lower speed, on urban roads, more attention should be paid for enforcement of seat belt by the law enforcement.
- Helmets should be made compulsory for all riders of bicycles, motorcycles and the mopeds.

D) Reduce post crash harm

- Detect and swiftly respond to accidents in a very timely manner with a good network systems. Give appropriate first aid at the scenes of the

accident, appropriate level of medical treatment in the emergency room settings and appropriate post emergency medical care and rehabilitation.

- Timely and adequate treatment for Road traffic accident cases at hospitals
- There should be specialized trauma care Centre's at every 100 kms especially on NH and SH.

CONCLUSION

Road traffic accident is a complex phenomenon of multiple causation, and there is no single remedy that will avoid it, what is needed is a organized teamwork by experts in various branches such as education, medical ,engineering and law enforcement for much effective prevention of Road traffic accidents and their fatalities and disabilities.

Road traffic accidents are on the rise, globally. This study was conducted to document the epidemiology and the injury pattern of road traffic accidents. Road traffic accident victims predominantly belonged to the age group of 21 to 30 years and had of low educational status. Maximum number of accidents occurred on Saturdays and Sundays and during the peak hours of traffic i.e. 9.00 am to 12.00 pm and 6.00 pm to 9.00 pm. Two wheelers were more involved in the accidents.

Good numbers of drivers were found to be under the effect of alcohol. Since large majority of accidents have occurred in rural areas, it has resulted in simple injuries to large extent. It is also noticed that both the slow moving and fast moving vehicles ply on the roads, resulting in accidents occurring within 30 minutes of driving to a great extent. Very few victims have received treatment before reaching the hospital.

To sum up younger age group, low educational status, alcoholic intoxication, careless attitude by the pedestrians plying of slow and fast moving vehicles on the same road during the peak hours are the main reasons for road traffic accidents in this area.

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Annexure 3

TRAUMA SURVEY PROFORMA

TRAUMA No:

NAME : AGE : SEX: INFORMANT :
IP NO : DATE OF ADMISSION : TIME OF
ADMISSION :
ADDRESS : CONTACT
NUMBER:
OCCUPATION : LABAROUR /FARMER/BUSINESS/STUDENT/OTHERS INCOME :
EDUCATION : ILLITERATE/ UPTO 5th std/10th/12th/DEGREE/PROFFSSIONAL
PLACE OF INJURY : DATE / TIME OF INJURY :
MODE OF INJURY : 2 WHEELER (rider/ pillion rider) 3 /4W/PEDASTRIAN VS:
2 WHEELER (rider /pillion rider) 3 /4WHEELER/PEDASTRIAN SPECIFY VEHICLE
TYPE:
IMPACT: FRONTAL IMPACT/LATERAL IMPACT/BUMPER/ROLL OVER /SIDE SWIPE
/EJECTION
CAUSE OF ACCIDENT: ALCOHOL, RASH DRIVING, POOR ROAD, POOR VISIBILITY, OTHERS
MODE OF TRANSPORT: 108/OWN VEHICLE/BYSTANDER
HELMET / SEAT BELT: YES / NO DRIVING LICENSE: YES / NO
FIRST AID / INITIAL TREATMENT AT: G.P.H.C/G.H/PRIVATE ON DATE: TIME:
ALCOHOL CONSUMPTION: YES / NO TIME OF ALCOHOL CONSUMPTION:
AMOUNT:
POST TRAUMA H/O : LOC ; VOMITING ; ENT BLEED ; SEIZURE ; HEADACH ; DYSYPNOEA
COMORBIDITY: YES / NO DIABETIC: HYPERTENSIVE: CHD: SEIZURE DISORDER
AT ADMISSION: CONCIOUS /DROWSY/UN CONCIOUS ORIENTED/DIS ORIENTED
PALLOR : HYDRATION : PUPIL :
GCS: /15 E: V: M: BP: / mmHg PR: / min
RR: /min
C.V.S: R.S: P/A: GENITO
URINARY:



List Injuries Identified to Date: (HEAD TO FOOT)	TREATMENT :

Consults (Date):

_____ Neurosurgery _____ Plastics _____ C.T.S _____
 _____ Orthopedics _____ Urology _____ E.N.T _____

NEW INJURY SEVERITY SCORE:

REGION	AIS	Injury	
HEAD AND NECK		1	Minor
FACE		2	Moderate
THORAX		3	Serious
ABDOMEN AND VISERA		4	Severe
EXTREMITY		5	Critical
EXTERNAL		6	Unsurvivable

RADIOLOGICAL INVESTIGATION	FINDINGS	
CXR		
OTHER XRAYS		
CT BRAIN		
CT ABDOMEN/CHEST		

LAB TRENDS :

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Annexure 2

CONSENT FORM

I _____ hereby give consent to participate in the study **“A PROSPECTIVE STUDY ON ROAD TRAFFIC ACCIDENTS AND THEIR INJURY PATTERN ADMITTED TO THANJAVUR MEDICAL COLLEGE”** conducted by **DR.N.VIJAYESWARAN** Post graduate in the Department of General Surgery ,Thanjavur Medical College & Hospital, Thanjavur – 613004 and to use my personal, clinical data and result of investigation for the purpose of analysis and to study the nature of disease. I also give consent for further investigations and publication of the results.

Place :

Date :

Signature of participant

1	2	3	4	5	6	8	7	12
TR No	Name	Age	M/FeM	IP No	Date of Admission	Edu. Quali.	Time of Admission	Date of Injury
1	MALLIGA	35	F	11535	01/03/2013	Illeterate	4.08AM	28/02/
2	INDIRANI	35	F	11536	01/03/2013	Illeterate	4.08AM	01/03/
3	DURAIKANNU	35	M	11382	02/03/2013	8th	8.15PM	01/03/
4	ASAITHAMBI	32	M	11538	02/03/2013	10th	10:30PM	01/03/
5	RAJENDRAN	45	M	11420	02/03/2013	5th	10.00AM	02/03/
6	PARAMESH	26	M	11542	02/03/2013	10th	5.45PM	02/03/
10	SIVAKUMAR	35	M	11560	02/03/2013	8th std	10.00PM	02/03/
11	MARIAMMAL	50	F	11565	02/03/2013	8th	10.00PM	02/03/
14	VALLAVARASU	10	M	11582	04/03/2013	5th	10.30PM	04/03/
15	PREMKUMAR	31	M	11584	04/03/2013	5th	10.30PM	04/03/
19	KATHERSAN	52	M	11600	04/03/2013	10th	12:45PM	04/03/
20	BHARATHIDASAN	36	M	11598	06/03/2013	8th	12:45PM	06/03/
21	NAVANEETHAN	28	M	11676	07/03/2013	10th	12:45PM	07/03/
22	LAKSHMANAN	22	M	11722	07/03/2013	5th	5:00PM	07/03/
25	PRABAHGARAN	46	M	11752	08/03/2013	10th	5:00PM	07/03/
27	ASHOK	38	M	11761	08/03/2013	8th std	11:45PM	08/03/
28	DAVIDRAJ	34	M	11763	09/03/2013	8th	11:45PM	09/03/
30	RAMKUMAR	17	M	11778	09/03/2013	7th	11:45PM	09/03/
31	RAJENDRAN	55	M	11796	10/03/2013	5th	11:30PM	10/03/
32	PALANISAMY	57	M	11799	10/03/2013	10th	12:10PM	10/03/

33	ANANDHAVALLI	48	F	11801	11/03/2013	8th	12:10PM	09/03/
34	MUTHUKUMAR	49	M	11806	11/03/2013	10th	12:15PM	11/03/
35	KOKILA	45	F	11805	11/03/2013	5th	2:43PM	11/03/
36	SIVAKUMAR	46	M	11815	11/03/2013	10th	3:15PM	11/03/
37	VADAMALAI	27	M	11834	12/03/2013	degree	5:41PM	12/03/
38	HAKIM	34	M	11825	12/03/2013	degree	5:41PM	12/03/
39	PITCHAI	55	M	11831	12/03/2013	degree	5:41PM	12/03/
40	RENGAIYAN	30	M	11841	13/03/2013	8th std	8.30PM	13/03/
41	KAVITHA	37	F	11849	13/03/2013	8th	11.30PM	13/03/
42	ARIVAZAGAN	40	M	11850	13/03/2013	10th	9.11PM	13/03/
43	SHARIF	25	M	11852	14/03/2013	5th	9.20PM	14/03/
44	SOUNDARAVALLI	45	F	11875	14/03/2013	10th	1:20AM	14/03/
45	NAGARAJ	58	M	11876	15/03/2013	8th	1:25PM	15/03/
46	LENIN	38	M	11884	15/03/2013	10th	3.32AM	15/03/
47	ARULANANDAN	33	M	11883	15/03/2013	5th	2:55PM	15/03/
48	VENNILA	34	F	11883	16/03/2013	10th	2:55PM	16/03/
49	ANADHARAJ	40	M	11939	16/03/2013	8th std	2:41PM	16/03/
50	KANNAN	30	M	11989	17/03/2013	8th	2:41PM	17/03/
51	RAJENDRAN	45	M	11998	17/03/2013	10th	3:50PM	17/03/
52	MURUGANANDAM	28	M	12021	18/03/2013	8th std	6:51PM	18/03/
53	BARATHI	23	M	12022	18/03/2013	8th	4:30PM	18/03/
54	BOOPATHIRAJ	19	M	12025	19/03/2013	10th	7:31PM	19/03/
55	NATARAJAN	50	M	12031	19/03/2013	5th	8.00PM	19/03/

56	UDAYAKUMAR	21	M	12031	20/03/2013	10th	8:41PM	20/03/
57	IRUDHAYASAMI	60	M	12040	20/03/2013	8th	10:33PM	20/03/
58	RAJA	24	M	12049	21/03/2013	10th	11.48PM	21/03/
60	ARAVINDH	18	M	12051	21/03/2013	12th	2.10PM	21/03/
61	PANEERSELVAM	46	M	12142	22/03/2013	10th	2:10PM	22/03/
62	RAMASAMY	40	M	12206	22/03/2013	degree	9:52PM	22/03/
63	MANIKANDAN	14	M	12207	23/03/2013	5th	10:20PM	23/03/
64	PRATHEESH	26	M	12184	23/03/2013	degree	6:59PM	23/03/
65	SARAVANAN	35	M	11879	24/03/2013	8th std	1:43AM	24/03/
66	PALANIVEL	51	M	12312	24/03/2013	8th	3:34PM	24/03/
67	PANDIYAN	32	M	12295	24/03/2013	10th	12:36PM	24/03/
68	RAMESH	32	M	12483	25/03/2013	5th	3:20PM	25/03/
69	GOPLALKRISHNAN	53	M	12483	25/03/2013	10th	9.30PM	25/03/
70	ANANDHAN	42	M	12492	25/03/2013	8th	5:08PM	25/03/
71	SRINIVASAN	45	M	12494	26/03/2013	10th	5:20PM	26/03/
72	KARUPIYA	80	M	12396	26/03/2013	5th	8:45PM	26/03/
73	SELVARAJ	50	M	12304	26/03/2013	10th	2:05PM	26/03/
74	JAYARAMAN	60	M	12408	27/03/2013	8th std	10:15AM	27/03/
75	SHANKAR	38	M	12409	27/03/2013	8th	9:55PM	27/03/
76	THIRUNAVUKARASU	35	M	12412	27/03/2013	8th std	10:10PM	27/03/
78	MUTHUKUMAR	43	M	12316	28/03/2013	8th std	3:50PM	28/03/
79	SATHEESH	19	M	12460	28/03/2013	8th	12:52PM	28/03/
80	BARANI	21	M	12459	28/03/2013	10th	12.45AM	28/03/

81	BARANITHARAN	20	M	12469	29/03/2013	5th	10.00PM	29/03/
83	RENGARAJ	60	M	12517	29/03/2013	10th	10.00PM	29/03/
84	THOMAS	60	M	12528	29/03/2013	8th	10:00PM	29/03/
85	PANDIYAN	38	M	12526	30/03/2013	10th	9.50PM	30/03/
86	NAGARAJ	60	M	12523	30/03/2013	5th	10:00PM	30/03/
87	MAHENDRAN	41	M	12535	31/03/2013	10th	10:30PM	31/03/
88	MUTHIYA	32	M	12537	31/03/2013	8th std	1.00PM	31/03/
89	RAJKUMAR	38	M	12545	01/04/2013	8th	1.00PM	01/04/
90	PAKIRISAMY	64	M	12347	01/04/2013	10th	7:11PM	01/04/
95	SENTHIL	32	M	18534	01/04/2013	5th	1.10AM	01/04/
96	VEERAMANI	22	M	13490	02/04/2013	10th	3:55PM	02/04/
97	PUNIAMOORTHY	49	M	12651	02/04/2013	8th	3:05PM	02/04/
101	PITHAIPILLAI	80	M	13231	02/04/2013	10th	7.36AM	02/04/
102	SILAMBARASAN	27	M	12531	03/04/2013	5th	7.36AM	03/04/
103	RENGANATHAN	30	M	12541	03/04/2013	10th	11.30 AM	03/04/
105	MALLIGA	30	F	12570	04/04/2013	degree	10.15 PM	04/04/
106	SAIVARAJ	55	M	12611	04/04/2013	degree	11.50AM	04/04/
107	KRISHNAN	45	M	12648	05/04/2013	degree	2.55PM	05/04/
108	BABU	30	M	12622	05/04/2013	8th std	12.50PM	05/04/
109	PASSIYAMMAL	60	F	12655	06/04/2013	8th	6.15PM	06/04/
110	PALANIVEL	24	M	12667	07/04/2013	10th	6.15PM	07/04/
112	BALU	30	M	12622	07/04/2013	5th	12.50PM	07/04/
113	MURUGESAN	26	M	12699	07/04/2013	10th	10.50PM	07/04/

114	MANIKANDAN	29	M	12700	07/04/2013	8th	10.50PM	07/04/
115	PALANISAMY	57	M	12704	07/04/2013	10th	11.28PM	07/04/
116	DHARMARAJ	29	M	12706	08/04/2013	5th	11.28PM	08/04/
117	MUTHU	24	M	12703	08/04/2013	10th	11.21PM	08/04/
118	PURUSHOTHAMAN	21	M	12707	08/04/2013	8th std	11.30AM	08/04/
119	SATHYAMOORTHY	24	M	12708	08/04/2013	8th	12.00PM	08/04/
120	SENTHILRAJA	30	M	12709	09/04/2013	10th	12.00PM	09/04/
122	MURALI	35		12712	09/04/2013	8th std	4.31PM	09/04/
124	SEIKMOHAMED	38	M	13147	09/04/2013	8th	11.01AM	09/04/
125	ASHOK	33	M	12761	09/04/2013	10th	8.04PM	09/04/
126	RAMAKRISHNAN	30	M	12835	10/04/2013	5th	4.31PM	10/04/
127	MUTHUKRISHNAN	35	M	12812	10/04/2013	10th	4.55PM	10/04/
128	SIVACHANDRAN	25	M	12817	10/04/2013	8th	10.00AM	10/04/
129	SATHISH BABU	30	M	12825	11/04/2013	10th	4.43PM	11/04/
130	SHIVACHANDRAN	25	M	12817	11/04/2013	5th	4.43PM	11/04/
131	RAMESHKUMAR	25	M	12837	12/04/2013	10th	8.20PM	12/04/
133	SASIKUMAR	40	M	12845	12/04/2013	degree	8.42PM	12/04/
134	CHELLAIYAN	55	M	12867	13/04/2013	degree	1.00AM	13/04/
135	VENKATESH	46	M	12871	13/04/2013	degree	1.00AM	13/04/
136	MAHENDRAN	24	M	12872	14/04/2013	8th std	8.00PM	14/04/
137	GANESAN	55	M	12886	14/04/2013	8th	4.15AM	14/04/
142	RAJAGOPAL	24	M	12940	15/04/2013	10th	2.25PM	15/04/
143	VIGNESH	21	M	12958	15/04/2013	5th	2.25PM	15/04/

144	JAYASILMARY	36	F	12866	16/04/2013	10th	12.52AM	16/04/
147	KALIMUTHU	28	M	12961	16/04/2013	8th	5.26PM	16/04/
148	DINESH	20	M	12960	16/04/2013	10th	5.30PM	16/04/
149	PANDIYAN	20	M	13139	16/04/2013	5th	2.10PM	16/04/
150	NATARAJAN	19	M	13140	16/04/2013	10th	2.10PM	16/04/
151	THANGARAJ	60	M	13145	17/04/2013	8th std	3.05PM	17/04/
152	THIYAGARAJAN	31	M	12935	17/04/2013	8th	3.05PM	17/04/
153	MAHESHWARAN	19	M	12994	17/04/2013	8th std	11.37AM	17/04/
154	SELVARAJ	60	M	13146	18/04/2013	5th std	3.06PM	18/04/
155	RAJESH	21	M	13003	18/04/2013	8th std	12.31PM	18/04/
156	KANNAGI	25	M	13149	19/04/2013	8th	3.19PM	19/04/
157	SELVARAJ	26	M	13166	19/04/2013	10th	5.06PM	19/04/
158	ULAGANATHAN	50	M	13120	20/04/2013	5th	5.18PM	20/04/
159	MURALI	18	M	12981	20/04/2013	12th	9.16PM	20/04/
160	SHEIK MOH	38	M	13147	20/04/2013	8th	3.20PM	20/04/
161	RAVI	29	M	13185	20/04/2013	10th	7.24PM	20/04/
162	CHANDRASEKAR	35	M	12379	20/04/2013	5th	11.13AM	20/04/
163	SHANMUGA	65	M	13130	20/04/2013	10th	1.21PM	20/04/
164	TAMIL	35	F	12965	21/04/2013	8th std	5.30PM	21/04/
165	ARUMUGAM	25	M	13206	21/04/2013	8th	10.35PM	21/04/
166	UNKNOWN	38	M	13147	21/04/2013	10th	10.30PM	21/04/
167	RAJESHKANNAN	21	M	173003	22/04/2013	5th	10.30PM	22/04/
168	ARUMUGAM	55	M	13183	22/04/2013	10th	10.30PM	22/04/

169	MAHARAJ	19	M	13112	23/04/2013	8th	1.39PM	23/04/
171	SURIYAMOORTHY	23	M	13219	23/04/2013	10th	12.20AM	23/04/
172	SIVAKUMAR	38	M	13223	23/04/2013	5th	1.30AM	23/04/
174	KALIYAPERUMAL	64	M	13320	24/04/2013	10th	3.10PM	24/04/
175	THIRUNAVUKARASU	60	M	13226	24/04/2013	degree	3.55PM	24/04/
177	SUBRAMANIYAN	49	M	11977	24/04/2013	degree	9.41PM	24/04/
178	ASIRVADAM	45	M	11979	25/04/2013	degree	9.50PM	25/04/
179	MURALI	21	M	12031	25/04/2013	8th std	8:41PM	25/04/
180	SUGUMAR	60	M	12040	25/04/2013	8th	10:33PM	25/04/
181	VENKAT	24	M	12049	26/04/2013	10th	11.48PM	26/04/
185	SHIVA	33	M	11989	26/04/2013	5th	9.50PM	26/04/
184	JAYARAMAN	28	M	11991	27/04/2013	10th	11.30AM	27/04/
186	SELVAM	40	M	13375	28/04/2013	8th	12.24AM	28/04/
187	KALIYAPERUMAL	46	M	12979	28/04/2013	10th	8.22PM	28/04/
188	MOHAN	32	M	13372	29/04/2013	5th	12.20AM	29/04/
189	SENTHILKUMAR	25	M	13498	30/04/2013	10th	5.07PM	30/04/
196	ANANDHAN	35	M	13502	30/04/2013	8th std	5.17PM	30/04/
197	VEERAMANI	22	M	13909	01/05/2013	8th	5.55PM	01/05/
198	GANESAN	15	M	13507	01/05/2013	10th	5.55PM	01/05/
200	NARASIMAN	19	M	13527	01/05/2013	8th std	8.46PM	01/05/
201	KUMAR	35	M	13544	02/05/2013	8th	10.32PM	02/05/
202	GOVINDHARAJ	19	M	13536	02/05/2013	10th	11.22PM	02/05/
203	MEENA	21	F	13590	02/05/2013	5th	10.26AM	02/05/

204	ARUN	30	M	13608	03/05/2013	10th	11.06AM	03/05/
205	SHIVA GHANDHI	43	M	13617	03/05/2013	8th	9.34AM	03/05/
206	VICTOR RAVI	42	M	13658	04/05/2013	10th	2.02PM	04/05/
207	AZHAGARASAN	46	M	13662	04/05/2013	5th	2.36PM	04/05/
208	KAYAMBU	4	M	13665	04/05/2013	NA	3.00PM	04/05/
209	DAVID	30	M	13672	05/05/2013	degree	3.31PM	05/05/
210	ROBERTRAJ	42	M	13673	05/05/2013	degree	3.37PM	05/05/
211	MARIYA ROMEO	29	M	13679	05/05/2013	degree	4.16PM	05/05/
212	NAVIN	34	M	13678	06/05/2013	8th std	4.16PM	06/05/
213	MURUGAMANI	42	M	13682	06/05/2013	8th	4.44PM	06/05/
216	TAMIL	30	F	13692	06/05/2013	10th	6.44PM	06/05/
217	BALAKRISHNAN	27	M	13756	07/05/2013	5th	2.16AM	07/05/
218	DHARMALINGAM	28	M	13791	07/05/2013	10th	1.50PM	07/05/
220	DHANACHEZIYAN	28	M	13751	07/05/2013	8th	1.30AM	07/05/
222	KAMARAJ	45	M	13846	08/05/2013	10th	12.50PM	08/05/
224	BASKAR	38	M	13856	08/05/2013	5th	1.10PM	08/05/
225	SELVI	48	F	13859	08/05/2013	10th	1.10PM	08/05/
228	GANESHKUMAR	27	M	13883	09/05/2013	8th std	5.48PM	09/05/
229	DINESH	24	M	13882	09/05/2013	8th	12.40PM	09/05/
230	JAYAMARY	40	F	13880	09/05/2013	8th std	5.37PM	09/05/
231	NARAYANANA	55	M	14708	10/05/2013	8th std	5.37PM	10/05/
232	NARAYANANA	40	M	14700	10/05/2013	8th	5.37PM	10/05/
233	SHIVANI	8	F	13864	10/05/2013	3RD	2.59PM	10/05/

234	SHANKAR	48	M	14202	11/05/2013	5th	11.30PM	11/05/
235	MOH	27	M	13861	11/05/2013	10th	2.45PM	11/05/
236	RAJESH	20	M	13888	11/05/2013	8th	6.25PM	11/05/
237	BALAKRISHNAN	34	M	13901	12/05/2013	10th	9.01PM	12/05/
238	KANAGARAJ	18	M	13903	12/05/2013	12th	9.20PM	12/05/
239	KALIDOSS	25	M	13905	12/05/2013	10th	9.50PM	12/05/
240	DURAISAMY	55	M	13906	12/05/2013	8th std	10.05PM	12/05/
241	SUBBU	46	M	12979	12/05/2013	8th	8.22PM	12/05/
242	MURALI	32	M	13372	12/05/2013	10th	12.20AM	12/05/
243	KAMESH	25	M	13498	14/05/2013	5th	5.07PM	14/05/
244	MAHESH	35	M	13502	14/05/2013	10th	5.17PM	14/05/
245	KANNAN	38	M	13909	15/05/2013	8th	10.58PM	15/05/
246	MADHIYAGAN	55	M	13916	15/05/2013	10th	11.05PM	15/05/
247	MARAGADAM	49	F	13879	15/05/2013	5th	5.25PM	15/05/
248	SAVITHRI	47	F	13918	16/05/2013	10th	11.10PM	16/05/
251	SATHYAMOORTHY	40	M	13922	16/05/2013	degree	11.30PM	16/05/
252	RAMESHKUMAR	34	M	13884	17/05/2013	degree	5.47PM	17/05/
253	RAJKUMAR	30	M	13925	17/05/2013	degree	11.53PM	17/05/
254	NEDUNCHEYAN	30	M	13933	18/05/2013	8th std	12.55AM	18/05/
256	RAJA	45	M	13131	18/05/2013	8th	12.40PM	18/05/
258	MURUGESAN	27	M	13504	19/05/2013	10th	5.46PM	19/05/
259	SURENDRAN	35	M	13386	19/05/2013	5th	3.24PM	19/05/
260	VANITHA	36	F	12502	20/05/2013	10th	6.33PM	20/05/

261	DINESH	19	M	12982	20/05/2013	8th	9.22PM	20/05/
262	RAJAYA	60	M	13623	21/05/2013	10th	12.01PM	21/05/
263	GANDHI	31	M	13315	21/05/2013	5th	7.51PM	21/05/
264	BALAKRISHNAN	27	M	13156	21/05/2013	10th	2.16PM	21/05/
265	MAHESHWARAN	19	M	12994	22/05/2013	8th std	11.37AM	22/05/
266	MANIKANDAN	22	M	12320	22/05/2013	8th	4.42PM	22/05/
267	ANANDHAN	38	M	15302	22/05/2013	10th	5.17PM	22/05/
268	MARIYAMMAL	48	F	13503	23/05/2013	8th std	5.50PM	23/05/
269	VEERAMANI	22	M	13490	19/03/2013	8th	3.55PM	19/03/
270	MURUGESAN	45	M	13508	19/03/2013	10th	6.04PM	19/03/
271	VEERAMANI	22	M	13505	24/05/2013	5th	5.53PM	24/05/
272	JAYACHANDRAN	35	M	12991	24/05/2013	10th	11.17PM	24/05/
273	SARAVANAN	26	M	14741	24/05/2013	8th	12.20PM	24/05/
274	GOVINDHARAJ	55	M	14689	25/05/2013	10th	3.04PM	25/05/
275	SARAVANAN	20	M	14741	25/05/2013	5th	12.09PM	25/05/
276	RAJESHKUMAR	29	M	15318	26/05/2013	10th	1.02PM	26/05/
277	MAYILRAJ	32	M	15032	26/05/2013	degree	10.14AM	26/05/
278	SENTHIL	38	M	15174	26/05/2013	degree	11.45PM	26/05/
279	SEKAR	34	M	18168	26/05/2013	degree	8.09AM	26/05/
280	RAJAPPA	58	M	18162	27/05/2014	8th std	8.55PM	27/05/
281	NATESAN	40	M	16439	27/05/2014	8th	6.08PM	27/05/
282	KARTHIKEYAN	50	M	16488	28/05/2014	10th	1.06AM	28/05/
283	GOPINATH	27	M	16021	28/05/2014	5th	9.09PM	28/05/

284	VEERAMANI	22	M	13490	29/05/2014	10th	3.57PM	29/05/
285	NAVANEETHAN	50	F	11402	29/05/2014	8th	11.03PM	29/05/
286	RAJENDRAN	55	M	16138	29/05/2014	10th	11.03PM	29/05/
287	RAJESH	20	M	13888	30/05/2014	5th	6.15PM	30/05/
288	SANTHA	65	F	15171	30/05/2014	10th	12.35PM	30/05/
289	VAIRAMUTHU	35	M	15611	31/05/2014	8th std	3.05PM	31/05/
290	VELU	60	M	14677	31/05/2014	8th	2.02PM	31/05/
291	PUSHPARAJ	32	M	16416	01/06/2013	8th std	4.04PM	01/06/
292	SRINIVASAN	50	M	16259	01/06/2013	8th	2.50PM	01/06/
293	MUTHUKUMAR	26	M	16025	02/06/2014	10th	4.00 PM	02/06/
294	VENNILA	33	F	16637	03/06/2014	5th	2.28PM	03/06/
295	SASISEKAR	19	M	16413	03/06/2014	10th	4.00 PM	03/06/
296	MOOKIYAN	60	M	16230	03/06/2014	8th	2.47PM	03/06/
297	MARIYAMMAL	68	F	13904	05/06/2014	10th	2.47PM	05/06/
298	KARTHIKEYAN	48	M	10671	05/06/2013	5th	2.20AM	02/03/
299	RAMESH	38	M	14906	05/06/2013	10th	2.27PM	27/03/
300	SUDHAKARAN	15	M	14120	06/06/2013	8th std	10.51AM	23/03/
301	MANIKANDAN	27	M	13952	22/03/2013	8th	10.51AM	22/03/
302	MARAGADAM	49	M		21/03/2013	10th	5.25PM	21/03/
303	RAJENDRAN	52	M	13940	22/03/2013	5th	2.00AM	21/03/
304	VELU	25	M	13941	22/03/2013	10th	2.45AM	21/03/
306	RAJAN	66	M	13948	22/03/2013	8th	8.15PM	22/03/
309	MURUGAN	37	M	14023	22/03/2013	10th	2.44PM	22/03/

311	KARTHIKEYAN	29	M	14020	22/03/2013	5th	2.34PM	22/03/
312	VALLIYAMMAI	60	F	14024	22/03/2013	10th	3.10PM	22/03/
313	POUNRAJ	50	M	14025	22/03/2013	degree	12.30PM	22/03/
314	MADHIYAGAN	40	M	14036	22/03/2013	degree	4.35PM	22/03/
315	VINCENT	40	M	14058	22/03/2013	degree	7.39PM	22/03/
316	GOVINDHARAJ	53	M	14027	22/03/2013	8th std	3.20PM	22/03/
317	SELVARAJ	40	M	14063	22/03/2013	8th	3.14PM	21/03/
318	RAMAMOORTHY	51	M	14061	22/03/2013	10th	7.09PM	22/03/
320	RAMALINGAM	24	M	14078	23/03/2013	5th	10.45PM	23/03/
321	JAYARAJ	45	M		23/03/2013	10th	1.45PM	22/03/
323	KAMARAJ	40	M	14131	23/03/2013	8th	12.33PM	22/03/
324	RAVI	48	M	14077	23/03/2013	10th	10.42PM	22/03/
326	SHANMUGA	62	M	14137	23/03/2013	5th	1.04PM	23/03/
327	IRUDYARAJ	30	M	14122	23/03/2013	10th	11.08AM	23/03/
328	MOH	46	M	14188	23/03/2013	8th std	11.08AM	23/03/
331	SAMITHEVAR	27	M	14161	23/03/2013	8th	4.30PM	23/03/
336	VENKATASAN	23	M	14165	23/03/2013	10th	5.35PM	23/03/
338	PRITHIVIRAJ	23	M	14188	23/03/2013	8th std	9.20PM	23/03/
339	VEDAVALLI	45	F	14209	23/03/2013	8th	11.27PM	23/03/
340	MADHIYAGAN	28	M	14189	23/03/2013	10th	9.30PM	23/03/
342	PALANIYAPPA	22	M	14217	24/03/2013	5th	12.56AM	23/03/
343	ARUL KUAMR	26	M	14225	24/03/2013	10th	3.30AM	24/03/
345	KARTHIKEYAN	23	M	14355	24/03/2013	8th	3.54AM	24/03/

347	VEERAYAN	60	M	14345	24/03/2013	10th	2.40AM	24/03/
348	HONESTRAJ	29	M	14390	24/03/2013	5th	8.35PM	24/03/
349	VIGNESH	25	M	14263	24/03/2013	10th	10.44AM	16/03/
353	SURESH	29	M	14362	24/03/2013	degree	4.40 PM	24/03/
354	PRABHU	48	M	14371	24/03/2013	degree	5.24PM	24/03/
356	PUSHPARAJ	35	M	14383	24/03/2013	degree	7.42PM	24/03/
357	SUBRAMANIYAN	65	M	14389	24/03/2013	8th std	8.30AM	20/03/
358	HONESTRAJ	27	M	14390	24/03/2013	8th	8.35PM	24/03/
361	MALLIGA	44	F	14396	24/03/2013	10th	8.50AM	23/03/
362	PALANISAMY	64	M	14433	25/03/2013	5th	8.53AM	25/03/
363	PRATHEEBA	21	F	14455	25/03/2013	10th	8.53AM	25/03/
364	UNKNOWN JANAKUMAR		M	14489	25/03/2013	8th	12.07PM	25/03/
365	MALAIYAPPAN	60	M	15212	25/03/2013	10th	2.38PM	16/03/
366	ARUNKUMAR	22	M	14728	26/03/2013	5th	8.39PM	26/03/
367	SIVA	25	M	14515	25/03/2013	10th	3.00PM	25/03/
368	ARUNKUMAR	23	M	14777	26/03/2013	8th std	8.40 PM	26/03/
369	SUDARSAN	17	M	14525	25/03/2013	8th	5.00PM	24/03/
370	KIRUBHAKARAN	21	M	14526	25/03/2013	8th std	5.10PM	25/03/
371	CHANDRABOSE	36	M	15542	28/03/2013	8th std	11.38PM	28/03/
372	SURESH	40	M	14533	25/03/2013	8th	5.55PM	23/03/
373	MANIKANDAN	29	M	14539	25/03/2013	10th	6.44PM	23/03/
374	NIROSHA	24	F	14543	25/03/2013	5th	7.30PM	25/03/
375	SANTHOSH	16	M	14564	25/03/2013	10th	11.00PM	25/03/

376	SUBRAMANIYAN	40	M	14571	26/03/2013	8th	12.15AM	23/03/
377	THIRUGYANAM	58	M	14722	26/03/2013	10th	8.11AM	26/03/
378	RAJENDRAN	48	M	14561	25/03/2013	5th	10.43PM	24/03/
379	KARUPAIYAN	54	M	14084	23/03/2013	10th	12.10AM	22/03/
381	VAIRAKANNU	68	M	14815	27/03/2013	12th std	1.15PM	26/03/
382	RAJAKANNU	54	M	14749	27/03/2013	12th std	2.16PM	27/03/
383	VEERAMANI	19	M	14567	25/03/2013	8th std	11.11PM	25/03/
384	RADHA	45	F	14844	27/03/2013	8th	3.24AM	27/03/
385	ARJUNAN	52	M	14858	27/03/2013	10th	6.35PM	27/03/
386	GOVINDHASAMY	65	M	14858	27/03/2013	5th	6.40PM	27/03/
387	GEORGE	27	M	14878	27/03/2013	10th	10.05PM	27/03/
388	MUBARAK	21	M	14877	27/03/2013	8th	9.58PM	27/03/
389	XAVIER	35	M	14879	27/03/2013	10th	10.20PM	27/03/
390	RAMESH	38	M	14906	28/03/2013	5th	2.28PM	27/03/
391	RAJADURAI	19	M	14934	28/03/2013	10th	10.31AM	28/03/
392	DHANAVEL	15	M	14935	28/03/2013	5th	10.34PM	29/03/
393	PASUPATHY	58	M	14938	28/03/2013	10th	10.44PM	28/03/
394	PRIYADHARSHANA	18	F	14947	28/03/2013	12th	1125AM	27/03/
395	RAMACHANDRAN	24	M	14863	28/03/2013	8th std	6.49 PM	27/03/
396	PANCHAMOORTHY	50	M	14975	28/03/2013	8th	2.36PM	28/03/
397	ANJAMAL	70	F	14956	28/03/2013	10th	5.40PM	27/03/
398	MAHENDRAN	27	M	14976	28/03/2013	5th	2.36PM	28/03/
399	KUMAR	30	M	14978	28/03/2013	10th	2.46PM	28/03/

400	MOH	23	M	14808	28/03/2013	8th	12.26PM	26/03/
401	GOVINDHARAJ	75	M	14968	28/03/2013	10th	2.00PM	28/03/
402	RAMESH	36	M	14971	28/03/2013	5th	2.52PM	28/03/
403	NATARAJAN	50	M	14980	28/03/2013	10th	2.52PM	28/03/
404	OVIYARASAN	32	M	14985	28/03/2013	degree	3.45PM	28/03/
405	ANANDHAN	29	M	14991	28/03/2013	degree	5.16PM	28/03/
407	THILAGAR	29	M	14995	28/03/2013	degree	6.11PM	28/03/
408	VIJAY	17	M	15003	28/03/2013	8th std	7.05PM	28/03/
409	DEVADARSHINI	31/2	F	15015	28/03/2013	8th	8.08PM	28/03/
410	RASU	64	M	15014	28/03/2013	10th	8.10PM	28/03/
412	MUTHULAKSHMI	45	F	13392	19/03/2013	5th	1.00AM	19/03/
413	ARUMUGAM	28	M	15173	29/03/2013	10th	11.38PM	29/03/
414	KEERTHIVASAN	8	M	15173	29/03/2013	3rd	3.15AM	29/03/
415	PAYATHAKUMAR	17	M	15135	29/03/2013	10th	9.40AM	29/03/
416	MUKILAN	19	M	15083	29/03/2013	5th	9.40AM	29/03/
417	SHANKAR	37	M	15033	28/03/2013	10th	10.13PM	28/03/
419	NAGARAJAN	29	M	18037	28/03/2013	8th std	10.29PM	28/03/
420	RAJ	24	M	14988	28/03/2013	8th	4.29PM	28/03/
421	RAJA	28	M	15219	30/03/2013	10th	12.55PM	29/03/
422	VINOTH	23	M	15206	30/03/2013	5th	9.11AM	29/03/
423	RAHUL	22	M	14796	27/03/2013	10th	11.16AM	27/03/
424	ADAKALAIANTONY	13	M	15227	29/03/2013	8th	11.36AM	29/03/
425	KARTHIKEYAN	49	M	15000	28/03/2013	10th	6.45PM	28/03/

426	ELANGO VAN	20	M	15251	30/03/2013	8th std	3.10AM	29/03/
427	UTHIRAPATHY	38	M	14984	28/03/2013	8th	3.35PM	28/03/
428	ANBUTAMILAN	23	M	13268	28/03/2013	10th	5.25PM	28/03/
429	PRAVEEN	19	M	15235	30/03/2013	5th	12.38PM	30/03/
430	SENTAHMIL SELVAN	20	M	15261	30/03/2013	10th	4.24PM	30/03/
431	VEERAMANI	19	M	15181	30/03/2013	8th	12.12AM	29/03/
432	RAJU	22	M	15247	30/03/2013	10th	2.35PM	30/03/
433	RAVEENDRAN	23	M	15248	30/03/2013	5th	2.30PM	30/03/
434	SIVAGURUNATHAN	37	M	15263	30/03/2013	10th	4.00 PM	30/03/
435	PURUSHOTHAMAN	20	M	15266	30/03/2013	5th	5.13PM	30/03/
436	DHARMALINGAM	35	M	15267	30/03/2013	10th	5.25PM	30/03/
437	ANBHAZAGAN	23	M	14992	28/03/2013	8th	5.25PM	28/03/
438	SAROJA	40	F	15393	31/03/2013	8th std	12.00AM	31/03/
439	VIGNESH	22	M	15289	31/03/2013	8th	8.03PM	31/03/
440	SENTHIL KUMAR	28	M	13570	31/03/2013	10th	11.15PM	31/03/
441	MUTHUKUMAR	26	M	15392	31/03/2013	5th	12.00AM	30/03/
442	DHANALAKSHMI	33	F	15729	31/03/2013	10th	7.03PM	30/03/
443	CHINNARASU	28	M	15671	31/03/2013	8th	11.04PM	01/04/
444	MUNYANDI	40	M	15423	31/03/2013	10th	1.44PM	31/03/
445	RAMAIYAN	60	M	15426	31/03/2013	5th	2.03PM	31/03/
446	AZHAGARSAMI	55	M	15445	31/03/2013	5th	4.03PM	28/03/
447	MUTHAIYAN	60	M	15466	31/03/2013	10th	6.23PM	31/03/
448	ARULMURUGAN	23	M	15467	31/03/2013	8th	6.41PM	31/03/

449	ANEESH	9	M	15567	01/04/2013	4th	11.28AM	01/04/
450	RAMESH	35	M		06/04/2013	5th	3.10PM	04/04/
452	MAHESH	38	M	15655	01/04/2013	8th std	9.28PM	01/04/
453	ARIVALAGAN	34	M	16485	07/04/2013	8th	12.55AM	06/04/
454	UMESH	20	M	14553	06/04/2013	10th	9.55PM	06/04/
455	KESAVAN	46	M	15451	31/03/2013	5th	4.43AM	31/03/
456	MUREGASAN	48	M	15676	01/04/2013	10th	11.21PM	01/04/
457	ANANDHAN	6	M	15678	01/04/2013	na	11.21PM	01/04/
458	KARTHIKEYAN	24	M	15681	02/04/2013	10th	12.10AM	01/04/
459	MURUGANANDAM	29	M	15674	01/04/2013	5th	11.00PM	01/04/
461	RAMKUMAR	19	M	16323	05/04/2013	10th	10.39PM	05/04/
462	VENKATASAN	35	M	15798	02/04/2013	5th	2.04PM	01/04/
463	SHAKTHIVEL	35	M	16681	07/04/2013	10th	1.20PM	07/04/
464	AYYAPAN	20	M	15805	02/04/2013	8th	2.58PM	02/04/
465	ABROJAKANI	38	F	16326	05/04/2013	10th	10.47PM	05/04/
466	KULATHAN	28	M	16097	04/04/2013	5th	2.29AM	04/04/
467	JAYARAMAN	45	M	16045	04/04/2013	8th	2.25AM	03/04/
468	RAVICHANDRAN	34	M	16022	03/04/2013	10th	9.20PM	03/04/
469	GOVINDHAMAL	44	F	14146	03/04/2013	5th	10.51PM	03/04/
470	MUTHUKUMAR	29	M	16025	03/04/2013	10th	9.45PM	03/04/
471	CHAKARABARTHY	42	M	16457	06/04/2013	8th	8.43PM	06/04/
472	SWAMINATHAN	22	M	15883	03/04/2013	10th	4.45AM	03/04/
473	BALACHANDAR	37	M	15882	03/04/2013	8th std	4.38AM	03/04/

474	MANIKARAJ	23	M	15850	02/04/2013	8th	9.06PM	02/04/
475	SURIYA	19	F	15812	02/04/2013	10th	6.24PM	02/04/
476	SEKAR	39	M	14651	06/04/2013	5th	8.00AM	06/04/
477	PANNERSELVAM	36	M	16445	06/04/2013	10th	7.19PM	06/04/
478	JOSEPH	80	M	16152	04/04/2013	8th	8.10PM	04/04/
479	SHAKTHIVEL	19	M	16153	04/04/2013	10th	8.25PM	04/04/
480	RAMAN	55	M	16154	04/04/2013	5th	9.31PM	04/04/
481	SIVANANDAM	12	M	16144	04/04/2013	5th	5.55PM	04/04/
482	MARIYAMMAL	68	F	16425	06/04/2013	8th	4.45PM	06/04/
483	KARUNANITHI	24	M	16125	05/04/2013	10th	12.08PM	04/04/
484	CHOKALINGAM	47	M	16166	05/04/2013	5th	12.14PM	05/04/
485	SENTHIL KUMAR	24	M	16174	05/04/2013	8th std	01.05AM	05/04/
486	ARAVINTHAN	20	M	16174	05/04/2013	8th	1.16AM	05/04/
487	PADMA	39	F	16010	03/04/2013	10th	7.58PM	03/04/
488	PRAVEEN	25	M	16184	05/04/2013	5th	5.09AM	04/04/
489	MOORTHY	60	M	16293	05/04/2013	10th	7.00PM	05/04/
490	RAJALAKSHMI	55	F	16306	05/04/2013	8th	8.56PM	05/04/
491	RAMESH	32	M	16307	05/04/2013	10th	9.05PM	05/04/
492	SHANKAR	29	M	16316	05/04/2013	8th std	10.08PM	05/04/
493	SULTAN	18	M	16151	04/04/2013	8th	7.59PM	04/04/
494	ASAN	40	M	16325	05/04/2013	10th	10.56PM	05/04/
495	RAJANGAM	47	F	16395	06/04/2013	5th	1.20PM	06/04/
496	SUNDARAJAN	45	M	14631	06/04/2013	10th	5.18PM	06/04/

497	DHIVAKAR	22	M	15804	02/04/2013	8th	2.47PM	02/04/
498	DINESH	20	M	16405	06/04/2013	10th	2.41PM	06/04/
499	BOOPATHY	21	M	16408	06/04/2013	5th	2.50PM	06/04/
502	MURUGAN	45	M	16491	07/04/2013	8th std	2.00AM	06/04/
503	PRABHAKARAN	25	M	16503	07/04/2013	8th	2.50PM	06/04/
504	JAYARAMAN	60	M	15307	30/03/2013	10th	2.00AM	06/04/
512	MUTHUKRISHNAN	16	M	16110	04/04/2013	5th	1.40PM	04/04/
513	PUSHPARAJ	45	M	16116	06/04/2013	10th	4.04PM	05/04/
534	GOVINDHARAJ	29	M	17090	09/04/2013	8th	10.11PM	08/04/
539	SOORYAMOORTHY	49	M	17180	10/04/2013	10th	12.03PM	10/04/
551	FLORA	16	F	16640	07/04/2013	5th	2.44PM	07/04/
552	MANIMARAN	44	M	15514	01/04/2013	8th	1.18AM	01/04/
553	SUBASHNI	21	F	18058	15/04/2013	10th	4.17PM	15/04/
555	BALASIGAMANI	45	M	16669	07/04/2013	5th	6.09PM	07/04/
556	TAMILARASAN	21	M	16660	07/04/2013	10th	5.18PM	06/04/
557	BALAMURUGAN	28	M	16658	07/04/2013	8th std	5.04PM	07/04/
558	VENKAT	50	M	168550	08/04/2013	8th	5.17PM	08/04/
559	RAGAVAN	19	M	16674	07/04/2013	10th	6.32PM	07/04/
561	LEO	35	M	16685	07/04/2013	5th	7.32PM	07/04/
562	SUKUMAR	24	M	16690	07/04/2013	10th	8.10PM	07/04/
563	GANESAN	55	M	16691	07/04/2013	8th	7.44PM	07/04/
565	PRABAKARAN	33	M	16708	07/04/2013	10th	9.37PM	07/04/
566	JAYARAJ	33	M	16706	07/04/2013	5th	9.20PM	07/04/

567	RANGARAJ	37	M	16753	08/04/2013	10th	9.11AM	08/04/
568	BANU	36	F	16953	09/04/2013	5th	9.11AM	09/04/
569	SHAKTHIVEL	43	M	16710	07/04/2013	10th	9.57PM	07/04/
570	KARNAN	49	M	16766	07/04/2013	8th std	9.51AM	07/04/
571	VEERAYAN	50	M	168550	08/04/2013	8th	5.17PM	08/04/
573	ARAVINTHAN	21	M	16816	08/04/2013	10th	1.30PM	08/04/
575	KANAGARAJ	26	M	16858	08/04/2013	5th	6.54PM	07/04/
576	SATHISH	32	M	16912	09/04/2013	10th	7.40AM	09/04/
577	JAYANTHI	36	F	16953	09/04/2013	8th	12.33PM	09/04/
578	SELVAN	20	M	16995	09/04/2013	10th	4.00 PM	08/04/
579	THIRUMARAI	20	M	16999	09/04/2013	5th	12.33PM	08/04/
581	KARIYAM	70	F	17031	09/04/2013	10th	4.00 PM	09/04/
582	PALANI	40	M	17401	09/04/2013	5th	3.09PM	10/04/
583	RAVI	33	M	16900	09/04/2013	10th	12.59PM	08/04/
584	ANBALAGAN	58	M	17042	09/04/2013	8th	5.21PM	09/04/
585	RAJAPANDI	16	M	17043	09/04/2013	10th	5.20PM	09/04/
586	RAMESH	9	M	17041	09/04/2013	4th	3.08PM	09/04/
587	AZHAGAMUTHU	48	M	17040	09/04/2013	10th	5.01PM	05/04/
588	SIVAKUMAR	30	M	16894	09/04/2013	8th std	12.33AM	08/04/
589	KARTHIKEYAN	46	M	17037	09/04/2013	8th	4.38PM	09/04/
590	MOHAN	48	M	17039	09/04/2013	10th	4.15PM	09/04/
591	PRABHU	28	M	17050	09/04/2013	5th	5.49PM	09/04/
592	JAYAKUMAR	28	M	17051	09/04/2013	10th	5.29PM	09/04/

593	KARUNANITHI	39	M	17052	09/04/2013	8th	6.08PM	09/04/
594	PRAKASH	26	M	17265	10/04/2013	10th	9.46PM	09/04/
595	ANNADURAI	50	M	17057	09/04/2013	5th	6.31PM	09/04/
596	GANAPRASANA	34	M	17062	09/04/2013	10th	7.09PM	09/04/
597	JAISUDARSAN	1	M	17073	09/04/2013	NA	7.09PM	09/04/
598	SARAVANAN	24	M	17063	09/04/2013	10th	7.13PM	09/04/
599	RAJIV	38	M	17411	11/04/2013	8th std	3.16PM	03/04/
600	SAMINATHAN	62	M	17118	09/04/2013	8th	2.21AM	09/04/
601	SUNDARAJAN	50	M	17286	11/04/2013	10th	12.56PM	11/04/
602	TAMILARASAN	40	M	17314	11/04/2013	5th	9.43AM	11/04/
603	PAPPATHI	60	F	17316	11/04/2013	10th	10.49AM	11/04/
604	MUTHUVELAN	11	M	17338	11/04/2013	4TH	1.35AM	11/04/
605	RANI	45	M	17278	10/03/2013	10th	1.35AM	10/04/
606	SURESH	28	M	17289	11/04/2013	5th	1.35AM	11/04/
607	KARUPAIYAN	53	M	17457	11/04/2013	5th	10.43PM	11/04/
608	MOHAN	38	M	17288	11/04/2013	10th	1.14AM	10/04/
609	MAYAVEL	26	M	17241	10/03/2013	8th std	3.25PM	07/04/
610	RANJITH	15	M	17229	10/03/2013	8th	4.10PM	10/03/
611	RAMACHANDRAN	45	M	17459	11/04/2013	10th	10.53PM	11/04/
612	MARIMUTHU	43	M	17584	12/04/2013	5th	7.30PM	12/04/
613	DHAVAMANI	40	F	17582	12/04/2013	10th	7.11PM	12/04/
614	BALU	60	M	17587	12/04/2013	8th	7.36PM	12/04/
615	SURESH	30	M	17597	12/04/2013	10th		12/04/

616	JAYASHANKAR	45	M	17629	12/04/2013	5th	11.47PM	12/04/
618	JAYAKRIS	18	M	17640	13/04/2013	10th	7.45AM	12/04/
619	SELVI	43	F	17642	13/04/2013	5th	8.25AM	13/04/
620	RAJESHWARAN	45	M	17643	13/04/2013	10th	8.27AM	13/04/
621	MARUTHAM	67	F	17656	13/04/2013	8th std	11.28AM	13/04/
622	RANGANATHAN	56	M	17657	13/04/2013	8th	12.10PM	13/04/
623	MAHAMAYI	50	F	17726	13/04/2013	10th	9.10PM	13/04/
625	SHANTHI	45	F	15510	13/04/2013	5th	2.11PM	12/04/
626	KUMARESAN	24	M	17879	13/04/2013	10th	8.00PM	14/04/
627	PRABHU	18	M	17722	13/04/2013	8th	8.15PM	13/04/
628	MURUGAN	36	M	17710	13/04/2013	10th	11.24PM	13/04/
629	NAGOORALI	27	M	17742	14/04/2013	5th	12.05AM	14/04/
630	KAMALAM	84	F	15609	01/04/2013	5th	2.35PM	01/04/
631	KUMAR	42	M	17789	14/04/2013	10th	10.49AM	14/04/
633	ASOKAN	45	M	17842	21/04/2013	8th	4PM	21/04/
635	GANESHAMOORTHY	38	M	17608	10/04/2013	10th	10.37PM	10/04/
636	MUTHUKUMAR	32	M	17113	10/04/2013	5th	1.24AM	09/04/
637	BAKIYARAJ	27	M	17714	10/04/2013	10th	2.00AM	09/04/
638	SURESH	26	M	11715	10/04/2013		12.03PM	09/04/
639	SOORYAMOORTHY	49	M	17180	10/04/2013		12.03PM	10/04/
642	THANGAMANI	32	M	17847	14/04/2013	8th std	5.02PM	14/04/
643	HARSHITHA	5	F	17847	14/04/2013	NA	5.02PM	14/04/
644	VARSHINI	17	F	17849	14/04/2013	10th	5.27PM	14/04/

645	MARIYAMMAL	48	F	13503	19/04/2013	5th	5.37PM	19/04/
646	ABUDUBAN	3	M	13503	14/04/2013	NA	5.37PM	14/04/
647	LAKSHMANAN	37	M	17865	14/04/2013	8th	6.41PM	14/04/
649	MOH	25	M	17876	13/04/2013	10th	7.59PM	13/04/
650	KOTTAISAMI	22	M	17429	11/04/2013	5th	5.42PM	11/04/
651	RAJARAJA CHOLAN	32	M	17468	11/04/2013	10th	11.15PM	11/04/
652	MANOHARAN	40	M	17683	11/04/2013	8th std	11.15PM	11/04/
653	SAMIYYAH	52	M	17496	12/04/2013	8th	8.31AM	10/04/
654	MOH	36	M	17555	12/04/2013	10th	3.05PM	12/04/
655	UNKNOWN		M	17556	12/04/2013	5th	3.23PM	12/04/
656	SENTHIL KUMAR	29	M	17558	12/04/2013	10th	4.15PM	12/04/
657	THANGAVEL	42	M	17571	12/04/2013	8th	5.57PM	12/04/
658	SELVAN	45	M	17572	12/04/2013	10th	6.00PM	12/04/
660	RAMU	55	M	12886	10/03/2013	5th	4.15AM	15/03/
661	MANIKANDAN	24	M	12940	16/03/2013	8th	2.25PM	16/03/
662	SURESH	21	M	12958	16/03/2013	10th	2.25PM	16/03/
663	KALA	36	F	12866	16/03/2013	5th	12.52AM	16/03/
664	NAVEEN	28	M	12961	16/03/2013	10th	5.26PM	16/03/
665	ARJUNAN	20	M	12960	16/03/2013	8th std	5.30PM	16/03/
666	VIMALAN	20	M	13139	17/03/2013	8th	2.10PM	17/03/
667	SIVA	19	M	13140	17/03/2013	10th	2.10PM	17/03/
668	VIMALA	60	F	16640	07/04/2013	5th	2.44PM	07/04/
669	MARUTHAM	40	F	17574	12/04/2013	10th	6.06PM	12/04/

670	MARIKOZUNTHU	43	M	17575	12/04/2013	8th	6.30PM	12/04/
671	RAJALINGAM	29	M	17521	12/04/2013	10th	6.30PM	12/04/
672	LAKSHMANAN	59	M	17687	13/04/2013	5th	4.40PM	13/04/
673	MERLIN	2	F	17866	13/04/2013	NA	4.40PM	13/04/
674	AROKIARAJ	23	M	17685	14/04/2013	degree	4.06PM	13/04/
675	SUBRAMANIYAN	45	M	17685	13/04/2013	degree	5.00PM	13/04/
676	RAJAMMAL	68	F	17688	13/04/2013	degree	4.10PM	13/04/
677	JAYALAKSHMI	48	F	17684	13/04/2013	8th std	3.35PM	13/04/
679	BASKAR	30	M	17880	14/04/2013	8th	8.16PM	14/04/
680	RAJENDARAN	40	M	17881	14/04/2013	10th	8.26PM	14/04/
681	SATHISH	27	M	17882	14/04/2013	5th	8.34PM	14/04/
683	RAMAR	32	M	17894	14/04/2013	10th	9.43PM	14/04/
684	KALAINGAN	20	M	17908	14/04/2013	8th	11.22PM	14/04/
685	AJITH	14	M	17903	14/04/2013	10th	10.34PM	14/04/
686	SELVARAJ	50	M	17921	16/04/2013	5th	12.08AM	16/04/
689	RAJKUMAR	22	M	17875	14/04/2013	10th	8PM	14/04/
690	KALIYAMOORTHY	48	M	17689	13/04/2013	8th std	4.19PM	13/04/
692	JAYAKUMAR	28	M	17051	09/04/2013	8th	5.29PM	09/04/
693	VIJAY	39	M	17052	09/04/2013	10th	6.08PM	09/04/
694	AMBADI	26	M	17265	10/04/2013	8th std	9.46PM	09/04/
695	ANNADURAI	50	M	17057	09/04/2013	8th	6.31PM	09/04/
696	KARNAN	34	M	17062	09/04/2013	10th	7.09PM	09/04/
697	LAKSHMI	60	F	16640	07/04/2013	5th	2.44PM	07/04/

693	JAGADESH	25	M	17878	14/04/2013	10th	8.10PM	14/04/
700	VENNILA	33	F	16637	07/04/2013	8th	2.28PM	07/04/
701	BALAKRISHNAN	70	M	16905	09/04/2013	10th	1.45AM	22/03/
702	MURUGESAN	18	M	17449	11/04/2013	5th	9.08PM	07/04/
703	RAJENDARAN	55	M	16138	04/04/2013	10th	4.16PM	02/04/
704	VISALATCHI	53	F	16545	07/04/2013	degree	10.03AM	07/04/
705	FLORA	60	F	16640	07/04/2013	degree	2.44PM	07/04/
706	GANESHAMOORTHY	38	M	17608	12/04/2013	degree		11/04/
707	SIVA	60	M	17409	11/04/2013	8th std	3.03AM	09/04/
708	KARTHICK	40	M		21/04/2013	8th	6.55PM	21/04/
709	VENGATESAN	27	M	18483	17/04/2013	10th	8.47PM	17/04/
710	VIJAYAKUMAR	22	M	18043	15/04/2013	5th	3.36PM	15/04/
711	SATHYARAJ	25	M	19602	24/04/2013	10th	7.19PM	24/04/
712	GANDHI	27	M	20422	28/04/2013	8th	5.18PM	27/04/
713	RAJA	45	M	19358	22/04/2013	10th	11.18PM	21/04/
714	CHINNAMBAL	60	F	19837	25/04/2013	5th	6.08PM	25/04/
715	MARIYAMMAL	50	F	19139	21/04/2013	10th	3.55PM	21/04/
716	GAYATHRI	13	F	18805	19/04/2013	5TH	5.36PM	19/04/
717	RAJARAJA CHOLAN	32	M	17468	11/04/2013	8th	11.50PM	11/04/
718	SAMIYAMMAL	40	F	20007	26/04/2013	8th std	11.12PM	26/04/
719	PARVATHY	45	F	20221	27/04/2013	8th		25/04/
720	RAJENDARAN	42	M	18989	20/04/2013	10th		20/04/
721	ANBALAGAN	45	M	20347	28/04/2013	5th	1.51PM	28/04/

722	KARUNAGARAN	17	M	21595	27/04/2013	10th	3.42PM	26/04/
723	PAUTHICA	16	F	20504	29/04/2013	8th	9.07AM	29/04/
724	SYED	51	M	21422	04/05/2013	10th	9.06PM	03/05/
725	SHAKTHIVEL	23	M	21495	04/05/2013	5th	9.00PM	04/05/
726	SIVAJI	35	M	21679	05/05/2013	10th	3.47PM	01/05/
727	RAMESHKUMAR	24	M	21691	05/05/2013	degree	5.05PM	05/05/
728	PALANIVEL	58	M	21560	04/05/2013	degree	6.32PM	03/05/
729	RAJENDARAN	49	M	21512	04/05/2013	degree	7.54PM	04/05/
730	BALAJI	25	M	21484	04/05/2013	8th std	4.32PM	04/05/
731	RAJA	25	M	21483	04/05/2013	8th	4.30PM	04/05/
732	SIVA	20	M	22086	07/05/2013	10th	11.56PM	07/05/
734	BALAKRISHNAN	70	M	16905	09/04/2013	5th	1.45AM	22/03/
735	RAJA	45	M	19358	22/04/2013	10th	11.18PM	21/04/
736	CHINNAMBAL	60	F	19835	25/04/2013	8th	6.08PM	25/04/
737	UDAYA	21	M	20483	29/04/2013	10th	2.42PM	29/04/
738	KUMUDAVALLI	32	F	20400	28/04/2013	5th	1.58PM	28/04/
739	AYYAPAN	28	M	20610	29/04/2013	10th	4.30AM	29/04/
740	CHOLA	27	M	20625	29/04/2013	8th std	7.14PM	27/04/
741	RAJENDARAN	47	M	20649	29/04/2013	8th	11.10PM	29/04/
744	ARUMUGAM	21	M	17307	11/04/2013	10th	8.14AM	11/04/
745	GANDHI	27	M	20422	28/04/2013	8th std	5.18PM	27/04/
746	ADAIKALAM	35	F	21202	02/05/2013	8th	10.17PM	02/05/
747	ANANDH	28	M	21200	02/05/2013	10th	11.15PM	02/05/

748	KARTHICK	48	M	10671	03/05/2013	5th	2.20AM	03/05/
749	RAMAN	60	M	21158	02/05/2013	10th		02/05/
750	RAJARAJA CHOLAN	29	M	21181	02/05/2013	8th	9.03PM	02/05/
751	VELAMMAL	30	F	18822	19/04/2013	10th	8.24PM	19/04/
752	ARUMUGAM	38	M	21626	05/05/2013	5th	11.32AM	02/05/
753	GOPALAKRISHNAN	35	M	21527	04/05/2013	10th	10.45PM	04/05/
754	KALAISELVAN	26	M	21541	04/05/2013	degree	11.58PM	04/05/
755	ANBALAGAN	58	M	21671	05/05/2013	degree	2.54PM	05/05/
756	PARAMASIVAM	30	M	18069	15/04/2013	degree	6.08AM	15/04/
757	SARAVANAN	22	M	21730	06/05/2013	8th std	2.57AM	05/05/
758	VIZHUMANI	36	M	18497	17/04/2013	8th	11.59PM	17/04/
759	SIVAKUMAR	28	M	18660	18/04/2013	10th	10.04PM	18/04/
760	PUSHPARAJ	32	M	16416	06/04/2013	5th	4.04PM	05/05/
761	SATHYARAJ	25	M	19602	24/04/2013	10th	7.19PM	24/04/
762	MAHADEVAN	16	M	18453	19/04/2013	8th	12.15PM	18/04/
763	SENTHIL KUMAR	25	M	13498	19/04/2013	10th	5.07PM	19/04/
764	RAMALINGAM	39	M	16343	06/04/2013	5th	12.50AM	05/04/
765	VADIVELU	45	M	17302	11/04/2013	10th	7.06AM	11/04/
766	SURESH	28	M	18128	16/04/2013	8th std	1.29AM	16/04/
767	XAVIER	43	M	18646	18/04/2013	8th	8.22PM	18/04/
768	VEDHAVALLI	45	F	14205	23/04/2013	10th	11.27PM	23/04/
771	SELVAM	36	M	18343	17/04/2013	10th	12.06AM	16/04/
772	PANDIYAN	33	M	18372	17/04/2013	5th	11.45AM	17/04/

773	KANAGARAJ	65	M	18374	17/04/2013	10th	9.01AM	17/04/
774	SELVARAJ	46	M	18366	17/04/2013	8th	8.20AM	16/04/
775	CHANDRAN	48	M	18384	17/04/2013	10th	10.30AM	17/04/
776	SHANMUGASUNDARAM	24	M	18391	17/04/2013	5th	10.45AM	17/04/
778	PALANIRAJ	43	M	18314	16/04/2013	10th	8.10AM	16/04/
782	MANIKANDAN	22	M	18108	15/04/2013	8th std	11.54AM	15/04/
784	PARAMESHWARI	34	F	18221	16/04/2013	8th	7.47AM	16/04/
786	SATHISH	20	M	18682	19/04/2013	10th	2.58AM	18/04/
787	ASWAMANI	22	M	18681	19/04/2013	5th	2.58AM	18/04/
792	MARIYAPPAN	55	M	18747	19/04/2013	10th	11.35AM	15/04/
793	ULAGANATHAN	55	M	18770	19/04/2013	8th	12.59AM	19/04/
794	SUNDARAM	62	M	18040	15/04/2013	10th	3.00PM	15/04/
795	JAVED	20	M	18877	19/04/2013	5th	8.11PM	19/04/
796	GUNASEKAR	48	M	18805	20/04/2013	10th	10.00AM	20/04/
797	LAWRENCE	38	M	18887	20/04/2013	degree	10.00AM	18/04/
798	MAHESHWARI	40	F	18893	20/04/2013	degree	11.19AM	20/04/
800	GOPAL	9	M	18982	20/04/2013	4th	9.43PM	20/04/
801	ANBUDAS	48	M	18921	24/04/2013	8th std	2.57PM	24/04/
802	PALANISAMY	47	M	18941	20/04/2013	8th	5.35PM	20/04/
803	ARJUNAN	35	M	18935	20/04/2013	10th	5.20PM	20/04/
804	SOWNDARYA	4	F	18943	20/04/2013	NA	5.44PM	20/04/
805	LOKESH	35	M	18960	24/04/2013	10th	8.04PM	24/04/
806	POONGOTHAI	25	F	18940	20/04/2013	8th	5.45PM	20/04/

807	LOKESH	10	M	18562	24/04/2013	5TH	8.04PM	24/04/
809	MATHIYALAGAN	43	M	18959	20/04/2013	5th		20/04/
810	PARIMALA	30	F	18971	20/04/2013	10th	8.54PM	19/04/
811	RAJANGAM	55	M	19722	20/04/2013	8th std		20/04/
812	LOKESH	10	M	18960	24/04/2013	5TH	8.04PM	
815	NANDAKUMAR	20	M	18569	18/04/2013	10th	12.00AM	18/04/
816	MANIKANDAN	20	M	18575	18/04/2013	8th std	12.12PM	18/04/
818	CHITRA	25	F	18546	18/04/2013	8th	10.23AM	18/04/
820	RAMAIYAN	50	M	18973	24/04/2013	10th	9.10PM	24/04/
821	VINOTH	29	M	18928	24/04/2013	5th	9.17PM	24/04/
823	DOSS	65	M	19168	21/04/2013	10th	8.41PM	21/04/
824	MOHAN	27	M	19170	21/04/2013	8th	8.52PM	21/04/
825	RAJANAYAKI	35	F	19175	21/04/2013	10th	10.15PM	21/04/
826	LAKSHMANAN	22	M	19176	21/04/2013	5th	10.22AM	21/04/
827	VINOTH	29	M	18978	20/04/2013	10th	9.17PM	20/04/
828	KARUNA	45	M	19185	21/04/2013	8th std	11.05PM	21/04/
830	ESWARAN	20	M	19208	22/04/2013	8th	1.43AM	22/04/
831	PALANISAMY	38	M	19192	21/04/2013	10th	11.30PM	21/04/
832	NILAVALAGAN	32	M	19209	22/04/2013	10th	2.15AM	22/04/
833	VENKATESAN	27	M	18483	17/04/2013	5th	8.47PM	17/04/
834	MAHESHWAR	19	M	19216	22/04/2013	10th	4.57AM	22/04/
835	SAKTHIVEL	22	M	19305	22/04/2013	8th	2.49PM	22/04/
836	SELVAM	26	M	21562	03/05/2013	10th	1.37PM	03/05/

837	PARTHIBAN	24	M	16823	24/04/2013	5th	3.30PM	22/04/
838	VIJAYAKUMAR	38	M	21356	03/05/2013	8th std	2.43PM	03/05/
839	VIJAYALAKSHMI	38	F	21324	03/05/2013	8th	3.00PM	03/05/
840	VENKATESAN	42	M	21325	03/05/2013	10th	2.46PM	03/05/
841	ARUN	50	M	19094	21/04/2013	5th	12.00PM	21/04/
842	ANANDH	28	M	21210	02/05/2013	10th	11.15PM	02/05/
843	MAHALINGAM	65	M	21344	03/05/2013	8th	4.32PM	03/05/
844	RAMESHKUMAR	24	M	21611	05/05/2013	10th	5.00PM	05/05/
845	MATHIYALAGAN	45	M	21748	06/05/2013	5th	8.50AM	06/05/
846	KANAN	57	M	21360	03/05/2013	10th	6.00PM	03/05/
847	PITCHAIKANNU	70	M	21320	03/05/2013	degree	2.04PM	03/05/
848	SARASEELAN	24	M	22198	08/05/2013	degree	8.10PM	08/05/
851	PANEERSELVAM	47	M	18990	20/04/2013	degree	11.37PM	20/04/
852	BABU	27	M	18992	20/04/2013	8th std	11.20PM	20/04/
853	RAMALINGAM	45	M	19336	22/04/2013	8th	7.59PM	22/04/
854	KIRUBAGARAN	50	M	19126	21/04/2013	10th	1.38PM	21/04/
855	MONISHA	14	F	19140	21/04/2013	5th	3.43PM	21/04/
856	ANBALAGAN	40	M	19144	21/04/2013	10th		21/04/
857	JAYASHANKAR	33	M	18871	21/04/2013	8th	4.00AM	21/04/
860	VIMALRAJ	25	M	19147	21/04/2013	10th	5.50PM	21/04/
861	JAYARANI	48	F	19732	23/04/2013	5th	5.05PM	23/04/
862	VEL	60	M	19403	23/04/2013	10th	10.27AM	23/04/
864	KANNIYAMMAL	65	F	19431	23/04/2013	8th std	1.10PM	23/04/

865	ANANDH	28	M	19430	23/04/2013	8th	5.20PM	23/04/
866	VIMAL	15	M	19454	23/04/2013	10th	6.35PM	23/04/
867	AYYAPAN	27	M	19462	23/04/2013	10th	8.00PM	23/04/
868	TAMILSELVAN	49	M	19510	24/04/2013	8th std	9.34AM	24/04/
869	SIVANANDAM	65	M	19529	24/04/2013	8th	12.00PM	24/04/
871	PUGALENDI	30	M	19536	24/04/2013	10th	12.51PM	24/04/
872	MARIYAMMAL	50	F	19530	24/04/2013	10th	12.45AM	24/04/
873	MARIYAPPAN	26	M	19542	24/04/2013	5th	12.51AM	24/04/
874	REVATHY	28	F	10553	24/04/2013	10th	2.33PM	24/04/
875	THAYAMANAVAN	52	M	19555	24/04/2013	8th	2.42 PM	24/04/
876	RADHAKRISHNAN	42	M	19405	23/04/2013	8th std	10.50AM	12/04/
877	GUBENDRAN	8	M	19556	23/04/2013	4th	2.42PM	23/04/
878	SELVAM	38	M	19554	24/04/2013	10th	2.15PM	24/04/
880	MOORTHY	30	M	19566	24/04/2013	5th	4.06PM	24/04/
881	VINOTH	27	M	19582	24/04/2013	10th	6.07PM	24/04/
882	KATHER	33	M	19586	24/04/2013	8th	6.46PM	24/04/
883	JERIAH BEGAM	30	F	19559	24/04/2013	10th	6.33AM	24/04/
884	NAGEERA	2	F	19590	24/04/2013	NA	6.45PM	24/04/
885	PURUSHOTHAMANAMBIK A	46	F	196901	24/04/2013	10th	7.20PM	24/04/
886	NATHISEELAN	12	M	19613	24/04/2013	degree	8.20PM	24/04/
887	RAJU	56	M	19625	24/04/2013	degree	9.15PM	24/04/
888	MARUTHIYAN	45	M	19638	24/04/2013	degree	10.10PM	24/04/
889	VELU	50	M	19670	24/04/2013	8th std	6.40 PM	24/04/

890	THANGAVEL	51	M	19671	25/04/2013	8th	6.45PM	25/04/
891	SELVARAJ	42	M	19691	25/04/2013	10th	9.22PM	25/04/
892	RAJA	20	M	19784	25/04/2013	5th	1.54PM	25/04/
895	RAMALINGAM	67	M	19780	25/04/2013	10th	1.31PM	25/04/
896	PUNITHAVATHY	39	F	19790	25/04/2013	8th	2.17PM	25/04/
897	KRISHNAN	39	M	19791	25/04/2013	10th	2.20PM	25/04/
898	VEERASEMU	45	M	19824	26/04/2013	5th	5.05PM	26/04/
899	GOPAL	27	M	19998	26/04/2013	10th	1.56PM	26/04/
900	SAIVARAJ	43	M	19827	25/04/2013	8th std	5.14PM	25/04/
901	SEVAGAN	61	M	19858	25/04/2013	8th	8.40PM	25/04/
902	SATHISH	35	M	19830	25/04/2013	10th	5.31PM	25/04/
903	ISHWARYA	21	F	19886	25/04/2013	degree	10.55PM	25/04/
904	LAWRENCE	25	M	19887	25/04/2013	8th std	11.15PM	25/04/
905	ARUL	25	M	19888	25/04/2013	8th	9.30PM	25/04/
908	MANIVEL	24	M	19894	25/04/2013	10th	11.43PM	25/04/
909	BABU	20	M	19897	24/04/2013	5th	11.43PM	24/04/
910	KARUNANITHI	54	M	19944	26/04/2013	10th	11.50PM	26/04/
912	BARATHIRAJA	35	M	19921	26/04/2013	8th	5,41AM	26/04/
913	UNKNOWN	28	M	19922	26/04/2013	10th	5.49AM	26/04/
915	THANGARASU	62	M	19924	26/04/2013	5th	6.27PM	26/04/
917	PRITHIVIRAJ	28	M	19925	26/04/2013	10th	6.39AM	26/04/
918	PALANI	21	M	19931	26/04/2013	8th std	8.35AM	26/04/
919	MAHESH	21	M	19972	26/04/2013	8th	8.35AM	26/04/

920	LAWRENCE	29	M	19979	26/04/2013	10th	12.27PM	25/04/
922	JANA	19	M	20009	26/04/2013	10th	3.30PM	26/04/
923	TAMIL	22	F	20017	26/04/2013	degree	4.30PM	26/04/
925	RAJENDARAN	37	M	20044	26/04/2013	degree	6.55PM	23/04/
926	RISHI	34	M	20061	26/04/2013	degree	9.14PM	24/04/
927	ANBARASI	14	F	20010	26/04/2013	8th std	3.07PM	26/04/
929	MANIKANDAPRABHU	29	M	20075	26/04/2013	8th	11.30PM	26/04/
930	VIJAYADOSS	17	M	20077	26/04/2013	10th	11.40PM	26/04/
931	PANDIYAN	45	M	20082	27/04/2013	5th	12.25AM	26/04/
933	SIVA	19	M	20098	27/04/2013	10th	3.04AM	26/04/
935	NADANASIGAMANI	27	M	20123	26/04/2013	8th	11.36AM	26/04/
936	MANJULA	28	F	20125	27/04/2013	10th	11.30AM	27/04/
937	KOTTAIMUTHU	21	M	20129	27/04/2013	5th	12.12PM	27/04/
938	MARIYADOSS	55	M	20133	27/04/2013	10th	2.08PM	27/04/
939	MUTHUVELAN	50	M	20150	27/04/2013	8th std	1.32PM	27/04/
940	GAYATHRI	20	F	18805	19/04/2013	8th	5.36PM	19/04/
942	VIJAMBAL	58	F	20164	27/04/2013	10th	4.10PM	27/04/
943	RAJENDARAN	58	M	20169	27/04/2013	8th	5.00PM	26/04/
944	KALYANI	55	F	20170	27/04/2013	10th	4.50PM	25/04/
946	GUNASEKAR	46	F	20173	27/04/2013	5th	5.18PM	27/04/
948	KALIMUTHU	34	M	20188	27/04/2013	10th	2.01PM	27/04/
949	KARTHICK	22	M	20211	27/04/2013	8th	10.18PM	27/04/
950	MURUGANANDAM	22	M	20192	27/04/2013	10th	7.49PM	27/04/

951	JAYANTHI	33	F	20634	29/04/2013	5th	9.00PM	29/04/
952	ILAVARASAN	34	M	20513	29/04/2013	10th	9.45PM	29/04/
953	ELANGO VAN	40	M	20630	29/04/2013	degree	8.30AM	29/04/
954	RAMASAMY	80	M	21708	05/05/2013	degree	9.01AM	05/05/
955	SENTHAMIL	28	M	20648	29/04/2013	degree	11.06PM	27/04/
956	PRABHU	21	M	20482	29/04/2013	8th std	11.40AM	28/04/
957	MATHIYALAGAN	47	M	20587	29/04/2013	8th	1.47PM	28/04/
958	CHINNAYA	25	M	20637	29/04/2013	10th	9.31PM	29/04/
964	PRABHU	29	M	20783	30/04/2013	5th	6.29PM	30/04/
965	CHINNASAMY	47	M	21420	04/05/2013	10th	8.55PM	04/05/
967	SUBRAMANIYAN	40	M	20807	30/04/2013	8th	8.47PM	30/04/
968	GANESAN	67	M	20834	01/05/2013	10th	10.40PM	30/04/
969	KARTHICK	23	M	20818	30/04/2013	5th	1.15PM	30/04/
970	SHANTHI	26	F	22169	08/05/2013	10th	2.20PM	08/05/
971	SHANKAR	45	M	21463	04/05/2013	8th std	2.46PM	04/05/
972	KARUPAIYAN	48	M	22079	07/05/2013	8th	11.14AM	07/05/
973	AMALRAJ	37	M	21013	01/05/2013	10th	1.15PM	01/05/
974	SELVAM	36	M	21882	06/05/2013	10th	8.15PM	06/05/
975	RAMACHANDRAN	28	M	20451	28/04/2013	8th	9.14PM	28/04/
976	KARUPUSAMY	22	M	20833	30/04/2013	10th	10.22PM	30/04/
977	SUSEELA	44	F	20836	30/04/2013	5th	12.00PM	30/04/
978	MANIKANDAN	22	M	18108	01/05/2013	10th	11.24PM	15/04/
979	VIGNESH	19	M	20843	01/05/2013	8th std	12.56AM	01/05/

980	VIJAYADOSS	19	M	20845	17/05/2014	8th	1.03AM	17/05/
981	AYYAPAN	27	M	20913	17/05/2014	10th	11.45AM	17/05/
982	AJMAL	2	M	20919	18/05/2014	NA	11.52PM	18/05/
983	MUBARAK	28	M	20918	18/05/2014	10th	11.51PM	18/05/
984	BANU	42	F	20922	19/05/2014	8th	12.05PM	19/05/
985	SETHU	47	M	20925	20/05/2014	10th	12.08PM	20/05/
986	SHARMILABANU	18	F	20926	20/05/2014	12th	12.08PM	20/05/
987	TAMILSELVI	45	F	20942	21/05/2014	10th	12.47PM	21/05/
988	ALLAIDIN	15	M	20951	01/05/2013	10th	1.06PM	01/05/
989	FRANCIS	52	M	20976	22/05/2014	degree	3.15PM	22/05/
990	CHELLADURAI	35	M	21551	22/05/2014	degree	1.32AM	22/05/
991	REVATHY	29	F	21687	23/05/2014	8th std	5.00PM	23/05/
992	SHANKAR	28	M	20994	24/05/2014	8th	7.07PM	24/05/
993	THILLI	40	F	21228	26/05/2014	10th	11.48PM	26/05/
994	JEYAKUMAR	18	M	21237	30/05/2014	5th	12.18AM	30/05/
995	SEDHUMANI	28	M	21138	30/05/2014	10th	2.08PM	30/05/
996	KANNAN	37	M	21213	30/05/2014	8th	11.15PM	30/05/
997	SHANKAR	34	M	21154	30/05/2014	10th	7.07PM	30/05/
998	PALANIAMMAL	55	F	21166	30/05/2014	5th	6.15PM	30/05/
999	PADMANABAN	40	M	21250	30/05/2014	10th	11.30PM	30/05/
1000	SARAVANAN	30	M	21293	30/05/2014	8th std	12.01PM	30/05/

