

Road Accidents in India & Role of The Family - A Sociological Exploration with Special Reference to Ajmer

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Abstract:

According to the recent report released by the WHO every year around 1.25 million people die due to road accidents. It is indeed a loss for any society, especially when people aged between 18-39 is the maximum and dies from road accidents. Every death has a socio-economic 'cost' that can't be repaid by any government. According to the Ministry of Road Transport and Highways' 2020 report, there were a total of 1,31,714 deaths due to road accidents in India. India accounts for almost 10% of all crash-related deaths while accounting for only 1% of the world's vehicles. Road Traffic Injuries (RTIs) are the eighth leading cause of death globally for all ages and the first cause in the 5-29 years age group. This paper is an attempt to explore if there is any relation between road accidents and the role of family in lessening them.

Keywords: risk society, accidents, deaths, family, health

Introduction:

Human resource is the most important resource any nation can have. With the over-arching population, the need of urbanisation has increased ever so much. As we try to understand the sociality of urbanisation, one refers to the process of moving and settling from rural to urban areas along with a transformation in the social, political, economic and cultural relationships in cities. One of the features of the urban cities is the presence of smooth and comprehensive road networks. They spread across in entirety and facilitates the users. However, what Beck (1992) mentions as a 'risk society' is manifested through the road accidents and the deaths that follow. According to him, "one is no longer concerned with attaining something 'good', but rather with preventing the worst; self-limitation is the goal which emerges. The dream of class society is that everyone wants and ought to have a share of the pie. The utopia of the risk society is that everyone should be spared from poisoning". The loss of lives is so much so that it has become a priority in the global order. Agencies like the WHO, United Nations have extensively started working on road accidents. Road safety also finds mention in the Sustainable Development Goals in:

SDG GOAL 3: Ensure healthy lives and promote well-being for all at all ages

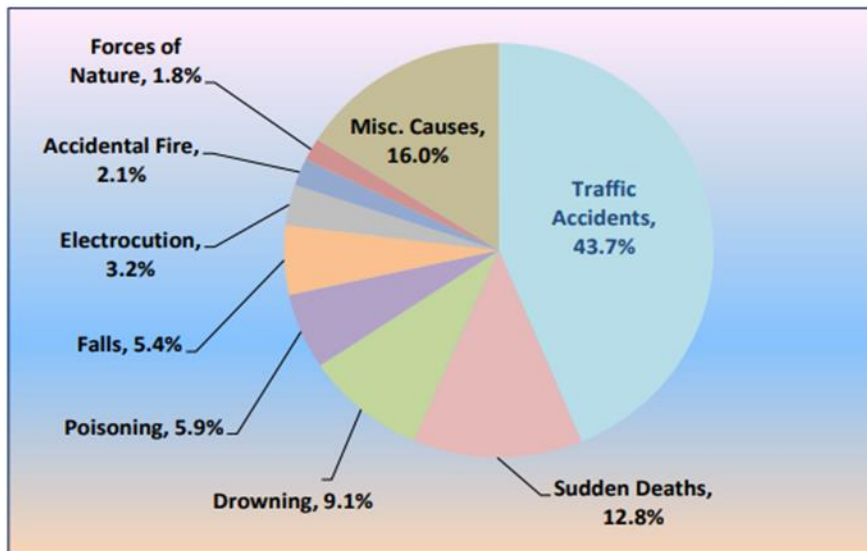
TARGET 3.6: By 2020, halve the number of global deaths and injuries from road accidents

SDG GOAL 11: Make cities and human settlements inclusive, safe, resilient and sustainable

TARGET 11.2: By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.

India- An accident -prone country: According to the recently released NCRB data 2022, over 1.55 lakh lives were lost in road crashes across India in 2021 - an average of 426 daily or 18 every single hour. Causes- Of the total deaths in road accidents, 44.5 per cent were riders of 'two-wheelers' followed by cars (15.1 per cent), trucks or lorries (9.4 per cent) and buses (3 per cent), the report revealed. Also, a majority (59.7 per cent) of the road accidents were due to over-speeding, accounting for 87,050 deaths and injuries to 2.28 lakh persons, it showed. Dangerous or careless driving or overtaking contributed to 25.7 per cent road accidents which caused 42,853 deaths and injuries to 91,893 persons, it added. Only 2.8 per cent of the road accidents were due to poor weather conditions, the NCRB noted. Of the total road accidents, 59.7 per cent were reported in rural areas (2.40 lakh cases) and 40.3 per cent in urban areas (1.62 lakh cases), the report added.

**Percentage Share of Various Major Causes of Accidental Deaths during 2021
(Forces of Nature and Other Causes)**



• As per data provided by States/UTs.

*Source: NCRB 2022

Objectives:

1. To analyse the driving profile of sampled youth of Ajmer district
2. To explore if any relationship exists between road safety and role of family
3. To find out various impacts due to road accidents on society and family

Hypothesis

1. There is no significant role of family in road safety (H0).
2. There is a significant role of family in road safety (H1).

Review of Literature:

- **Road Safety Strategy for the United Nations System and its Personnel: A Partnership for Safer Journeys, 2019.** In the report, The UN has established a multi-sectoral, comprehensive strategy for managing road safety for the first time. The Strategy controls how cars, road users, speed, and road

infrastructure interact. The five pillars of the Plan are management of road safety, safer cars, safer drivers, safer pedestrians, and post-crash action.

- **WHO Road traffic injuries, 2022** published by World Health Organization suggests The safe system strategy: allowing for human mistake. A safe transportation system for all road users is the goal of the safe system approach to road safety. Such an approach understands that the system should be built to be forgiving of human mistake and takes into account people's sensitivity to significant injuries in traffic accidents. Safe roads and roadsides, safe speeds, safe vehicles, and safe road users are the cornerstones of this strategy, all of which must be addressed to prevent fatal crashes and lessen catastrophic injuries.
- **NCRB report, 2022** published by Ministry of Home Affairs it was revealed that a total of 4, 03,116 road accident cases were reported during 2021. Road accident cases in the country have increased from 3,54,796 in 2020 to 4,03,116 in 2021. 4,03,116 road accidents caused 1,55,622 deaths and injuries to 3,71,884 persons during 2021. Generally, road accidents have caused more injuries than deaths. Time of occurrence - wise analysis of traffic accidents reveal that maximum number of 'Traffic Accidents' have taken place during 18:00 hrs – 21:00 hrs and 15:00 hrs – 18:00 hrs, accounting for 19.9% (84,221) and 7.6% (74,241) of total traffic accidents (4,22,659) respectively during the year 2021. Maximum number of 'Traffic Accidents' have occurred in the month of January which accounted for 9.9%.
- **Ahluwalia, Kanbur & Mohanty, 2014**- There are 10 papers in the volume. Urban Planning, Infrastructure, and Sustainability; Finance and Governance and Inclusion; and Governance are the three headings under which these papers are arranged. The papers address many different topics, including Planning and Markets for Urban Development in India, Sustainable Urban Living, Urban Infrastructure and Service Delivery, Municipal Financing Framework, Market Worthiness and Urban Local Government Public Private Partnership (PPP), Governance and Fiscal Federalism, Generating Demand for Good Governance, Integrating Redevelopment of Slums in City Planning, and Affordable Housing in Urban India. These publications were written by policymakers, scholars, and practitioners with extensive experience in the development field.
- **Beck, 1992**- The risk society is one of the most ambitious, comprehensive, and contentious social theories of risk, having been created by sociologists Ulrich Beck and Anthony Giddens. The shift from the contemporary industrial society to a new era marked much more by technical hazards is the focus of this grand theory of society. The distribution of "bads" is more important in defining the risk society than the distribution of "goods" (wealth) (pollution, contamination, and other by-products of production). Contrary to "natural" dangers, which have traditionally been the focus of hazards study, these technological hazards are thought to be avoidable because society produces them. Having said that, both sorts of dangers have effects that can be exacerbated or reduced by socioeconomic, political, and other factors.

Research Gaps: After examining a significant amount of literature, both online and offline sources, it is evident that almost all the literatures, there have not been any sociological studies that try to find a significant relationship between road safety and the role of family. There is an opening that needs to be acknowledged and filled. Thus, there is a need to focus on this aspect especially when human health is of prime concern.

Rationale:

Road accidents costs millions of lives and leave many million people either disabled or injured every year across the globe (Toroyan, 2015). The current figure of road related deaths showed that by 2030 it would

be the world's leading cause of deaths, while the introduction of two and three-wheeled vehicles has further worsened the situation (Astrom, Moshiro, Hemed, &Heuch, 2006 &Peden, 2004). It is predicated from the present rapid increase in motorbikes that by 2035 the two and three wheelers will increase by 175% reaching 550 million (The Clean Air Initiative for Asian Cities, 2011). The rapid rise is increasingly linked to the socio-economic situation of a country, as more citizens mainly purchase two and three wheeled vehicles, which results in the rise of road-traffic injuries and deaths (Kopits& Cropper, 2005; Paulozzi, Ryan, Espita&Hardeman, 2007). In this influx motorcycles are of particular concern because motorcycles are more dangerous than any other type of motorized vehicle, and motorcyclists were about 30 times more likely to die in a traffic crash than a passenger in a car (National Highway Traffic Safety Administration, 2012). Every year the lives of approximately 1.3 million people are cut short as a result of a road traffic crash. Between 20 and 50 million more people suffer non-fatal injuries, with many incurring a disability as a result of their injury. (WHO, 2021). Similarly, road traffic injuries are the leading cause of death among 15–19-year-olds teenagers; the second leading cause of death for those in the 10–14-years; 20–24-years age (Beeck, Borsboom, &Mackenbach, 2000). Besides, many children and young people who have been involved in road traffic collisions are left with long-term or permanent injuries or disabilities (Jacob, Aeron &Astrop, 2000). Road accidents among teenage motorbike riders is a social issue having multiple socio-economic and cultural factors. But the issue is always dealt with Road Safety Strategy for the United Nations System and its Personnel: A Partnership for Safer Journeys.

The family is believed to be one of the primary agents of socialisation and its role in creating responsible citizens. The family here refers to a functional unit of socialisation who are related by blood, sexual mating or legal ties. According to Burgess and Locke (1963) "Family is a group of persons united by ties of marriage, blood or adoption constituting a single household interacting and inter-communicating with each other in their respective social roles of husband and wife, father and mother, son and daughter, brother and sister, creating a common culture". Thus, in the context of the present study, a family refers to a social unit which has its core members as child(ren) and /or mother, and/or father and may have grandparent(s) living together under one roof.

Methodology:The study was conducted in Ajmer district, Rajasthan. Primary data was collected through online questionnaire. A total of 200 participants were selected using snowball sampling between the age of 18-25 years. The respondents were students of various schools and colleges in and around Ajmer city, Rajasthan.

Percentage method is used to analyse the driving profile of sampled persons.

Chi Square test - a non- parametric test is used to test the null hypothesis. It has been used to find correlation between role of family and the road safety measures followed by youths

$\chi^2 = \sum (O_i - E_i)^2/E_i$, where O_i = observed value (actual value) and E_i = expected value.

Result and Discussion:

- Out of the total participants, 116 were females and 84 were males. While 36.4 percent were taught driving by their parents, same percentage of people claimed that they were self taught. 18.2% responded that their siblings taught them to drive. Also, 7.3% of them said they were taught by others (neighbors/spouse etc.) and only three were found that were taught by their peer. While answering were any road safety measures discussed with them by their family members before they started driving, 57.% of the respondents answered yes while only 43% denied it. While answering whether the family members follow road safety measures, 47% respondents said yes, always. 29% out them denied and the rest were unsure

about the same. In extension, out of the 64% who follow road safety measures, almost 76% respondents said that they follow because of personal safety. However, rest 16% and 8% of them follow road safety measures to save themselves from Chalan(s) and under parents’ pressure respectively. 81% of the respondentst believe that respondents feel that family plays a very important role in safe driving and spreading awareness about road safety measures while 14.5% were unsure about it and only 3.6% beleive it otherwise.

- A Chi square test was run on SPSS software to test the null hypothesis. The parameters taken role of family and road safety rules. It yielded the following results:

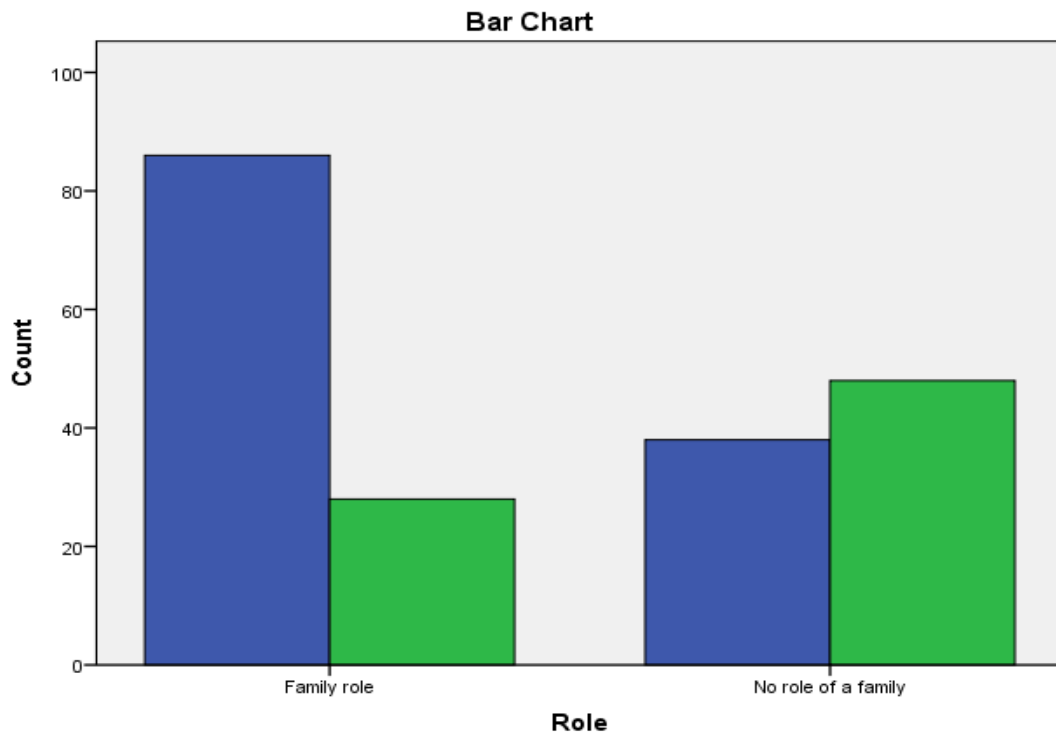
Role * Rules Crosstabulation				
Count				
		Rules		Total
		Follow rules	Not following rules	
Role	Family role	86	28	114
	No role of a family	38	48	86
Total		124	76	200

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	20.322 ^a	1	.000		
Continuity Correction ^b	19.017	1	.000		
Likelihood Ratio	20.468	1	.000	.000	.000
Fisher's Exact Test					
Linear-by-Linear Association	20.221	1	.000		
N of Valid Cases	200				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 32.68.

b. Computed only for a 2x2 table



- 86 respondents follow road safety rules with active participation from their families and 28 respondents do not follow road safety rules despite active participation of their families.
- 38 respondents follow road safety rules with a dormant role of family and 48 participants do not follow road safety rules with a dormant role of family.
- As zero percent cell has expected count less than 5 so, we are considering Pearson's Chi square value which is 20.322 at degree of freedom= 1. The result shows significant role of family in determining the road safety measures at 95% confidence. Hence, the null hypothesis is not accepted.

Other Findings:

- **Burden on Households:** Every road accident death causes depletion of nearly seven months' household income in poor families and pushes the kin of victims into a cycle of poverty and debt.
- It is often the poor, especially male road-users of working age, that constitute the category of VRUs.
- **Gender Specific Impact:** Women in the families of victims bore the burden across poor and rich households, often taking up extra work, assuming greater responsibilities, and performing caregiving activities.
- About 50% of women were severely affected by the decline in their household income after a crash.
- About 40% of women reported a change in their working patterns post-accident, while around 11% reported taking up extra work to deal with the financial crisis.

- The income decline for low-income rural households (56%) was the most severe compared to low-income urban (29.5%) and high-income rural households (39.5%). (Data as per NCRB report, 2022)

Coping Mechanism:

According to the Global Plan for the Decade of Action for Road Safety, 2011–2020. Geneva, World Health Organization, 2011 there are five pillars to manage, lessen and sustain health standards in context to road safety. These are:

1. **Road safety management**- Includes Strengthening the policy framework, improving governance, Improving road safety data management and Funding
2. **Safer vehicles** - Includes quantity, quality, condition and types of vehicles available in relation to the condition of the roads and the type of terrain in the operational area
3. **Safer road users**- Includes awareness raising and training, driver authorization, and enforcement
4. **Post-crash response**- includes increase preparation and response to road traffic crashes,
5. **Safer driving environment**- Promote safe operation, maintenance and improvements of public roads

The study lay emphasis on point number 3 and tries to include family's socialisation of the child towards road safety and related aspects. Family by means of both formal and informal education is a potential instrument that may help reduce the deaths and mishaps due to road accidents.

The study also suggests and conceptualises Individual Social Responsibility (ISR) vis-à-vis post- crash response. ISR may vary to assisting the injured within the golden hour or in case of any emergency without any expectation of reward, fear of police/ public harassment/ detention at medical facilities etc. The family may play a significant role in developing individuals and sensitizing them through the process of socialization and thus instilling ISR.

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