

PSYCHOLOGICAL AND SOCIAL IMPACT OF ROAD CRASHES

CHAPTER 6

Road Crash deaths and serious injuries have diverse impacts on the victims and their families. While many studies have documented the impact of road crash outcomes on victims, the impact of the crash at the household level is an understudied area. Death of a family member due to a road crash can have serious social and mental health impact on the rest of the family. Serious injuries on the other hand, impacts the quality of life of the whole household including the victim. This chapter examines the psychological, health and associated impact of mortality and morbidity due to road crashes.

KEY FINDINGS

- 50% of LIH and 1/4th of HIH category respondents stated "depression" among their family members due to the impact of the road crash; this was higher in cases where fatalities were reported.
- Impact on sleeping pattern was found among around three-fourth (72.8%) of poor category (LIH) respondents while among richer counterparts (HIH), it was about six-tenth (60.7%).
- A significant difference was found in the proportion of LIH (64%) and HIH (29%) respondents that have confirmed that their living standard has deteriorated since the crash.
- Over 1/3rd of LIH respondents (38%) stated that members of their families suffered from health

complications after the crash, while it was about 21% for HIH category.

- Among those who survived road crashes, three out of ten (29.5%) victims from poor families (LIH) suffered disability, while among the victims from rich families (HIH) the percentage was 7.7%
- Among those who returned to previous occupation, LIH victims took 92 days while HIH victims took 43 days. And to find a new job, LIH victims took 107 days and HIH victims took 65 days.
- Pre- crash, about 6.6 percent of LIH victims were unemployed, while such proportion was increased by about 11 percent and accounted for 18% on resuming work after the crash.
- In terms of impact on household, compared to HIH category (27%), a significant proportion of LIH respondents (43.9%) confirmed change in working pattern of family after crash.

The financial impact of road crashes on LIH respondents is disproportionate and more severe in comparison to road crash impact on HIH respondents. A broad overview of the responses on various aspects of psychological, emotional and social impact suggests that poor families suffer more. Out of the total sample, about 42 percent victims shared their first-hand experience while 58 percent respondents were family members who responded on behalf of family members as well as the whole household.

6.1. MENTAL HEALTH ISSUES AMONGST THE HOUSEHOLD

In order to understand the impact of road crashes on the mental health of victims and their family members, respondents were asked about mental health of household members. A direct question about anyone in their family suffering from depression³⁴ was asked.

Overall, close to half (48.5%) of LIH respondents stated that their family members suffered from depression due to the impact of the road crash, while about one-fourth (26.2%) HIH respondents stated the same.

The respondents from Bihar & Uttar Pradesh reported a higher percentage than Maharashtra and Tamil Nadu. Further in the LIH category, a higher proportion of respondents (75%) stated depression in their family where the victim had died compared to where the victim sustained serious injuries (43.2%).

Similarly, in cases amongst LIH families where the road crash victim was an earning member of the family, depression was reported by 50% of the respondents. However, in the case of HIH respondents the proportions were 30 percent. This again demonstrates that depression could be more related to financial impacts on the family due to crashes.

Further, overall, over one-third of LIH respondents (38%) stated that members of their families suffered from health

34. The respondents were asked to self-evaluate their mental health and therefore undiagnosed cases, where respondents 'felt' depressed were also considered. Further the questionnaires were translated in Hindi and other vernacular languages and the respondents were asked if they felt "low or sad without any reason"

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complications, while such proportion of respondents was about 21 percent for HIH category. Category-wise, two trends were observed amongst both LIH and HIH category respondents: respondents reported more adverse impact in cases of death and compared to non-earning members, more complications were reported when road crash victims were earning members of the family.

Motor vehicle crashes can result in 'significant post-traumatic psychiatric morbidity'. The psychological impact of road crashes is an understudied area and the data on the subject is extremely fragmented or non-existent. Academic and other institutions should analyse the trends for psychological distress due to road crashes in India. The Ministry of Health and Family Welfare should also update the National Mental Health Policy (NMHP) notified in 2014. NMHP acknowledges the linkage between poverty and mental health however it does not categorise crash victims as "Vulnerable Population". The state government should also ensure implementation of NMHP right from Primary Health Care level.

6.2. DIP IN NUTRITION AMONGST HOUSEHOLD MEMBERS

With respect to change in dietary habits/ food intake, about 44 percent respondents in LIH category stated that there was a negative change in the dietary habits of the household members after the crash. Compared to LIH category, such impact was lower amongst HIH respondents where one-fourth of respondents (24.3%) confirmed the same.

During Focus Group Discussions, respondents also mentioned that after the crash certain food items were prescribed to the victims, however due to lack of financial

resources, they could not afford the same over a long time. Ensuring better nutritional intake for victims impacted the nutritional intake of children since they were not able to provide them with certain food categories like dairy and animal protein.

6.3. IMPACT ON LIVING STANDARD OF VICTIMS' HOUSEHOLD

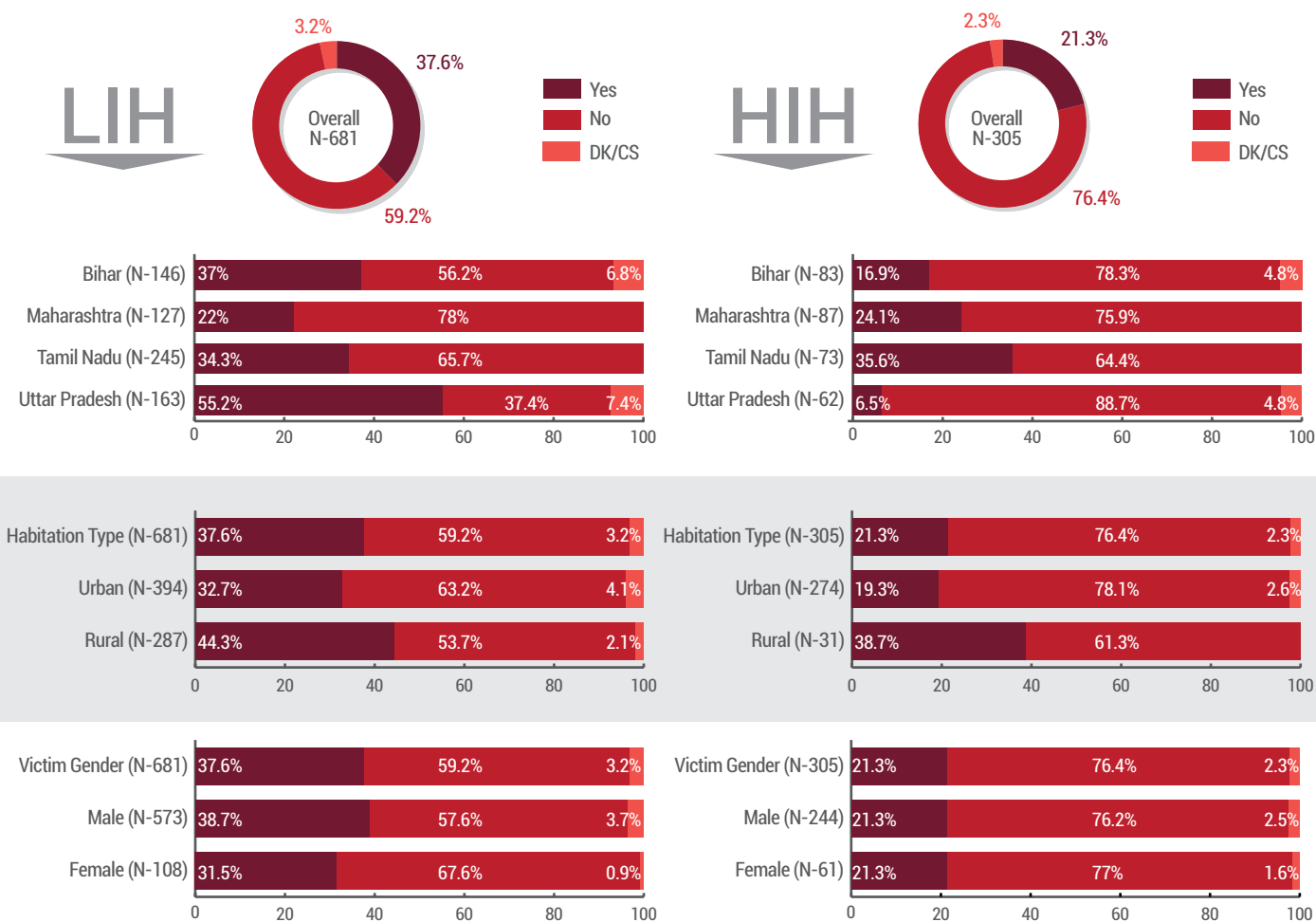
Road crash outcomes and their consequences affect victims and their families both in short and long term. This includes wage loss, loss of employment, financial hardships, reduced quality of life and negative impact on the functioning of the whole family. During the survey, respondents were probed about the social impact of road crashes.

A significant difference was found in the proportion of LIH and HIH respondents reporting decline in their living standards.

While close to two-third (63.5%) of poor families (LIH) reported decline in living standard, less than three out of ten (29.4%) rich families (HIH) have faced such consequences.

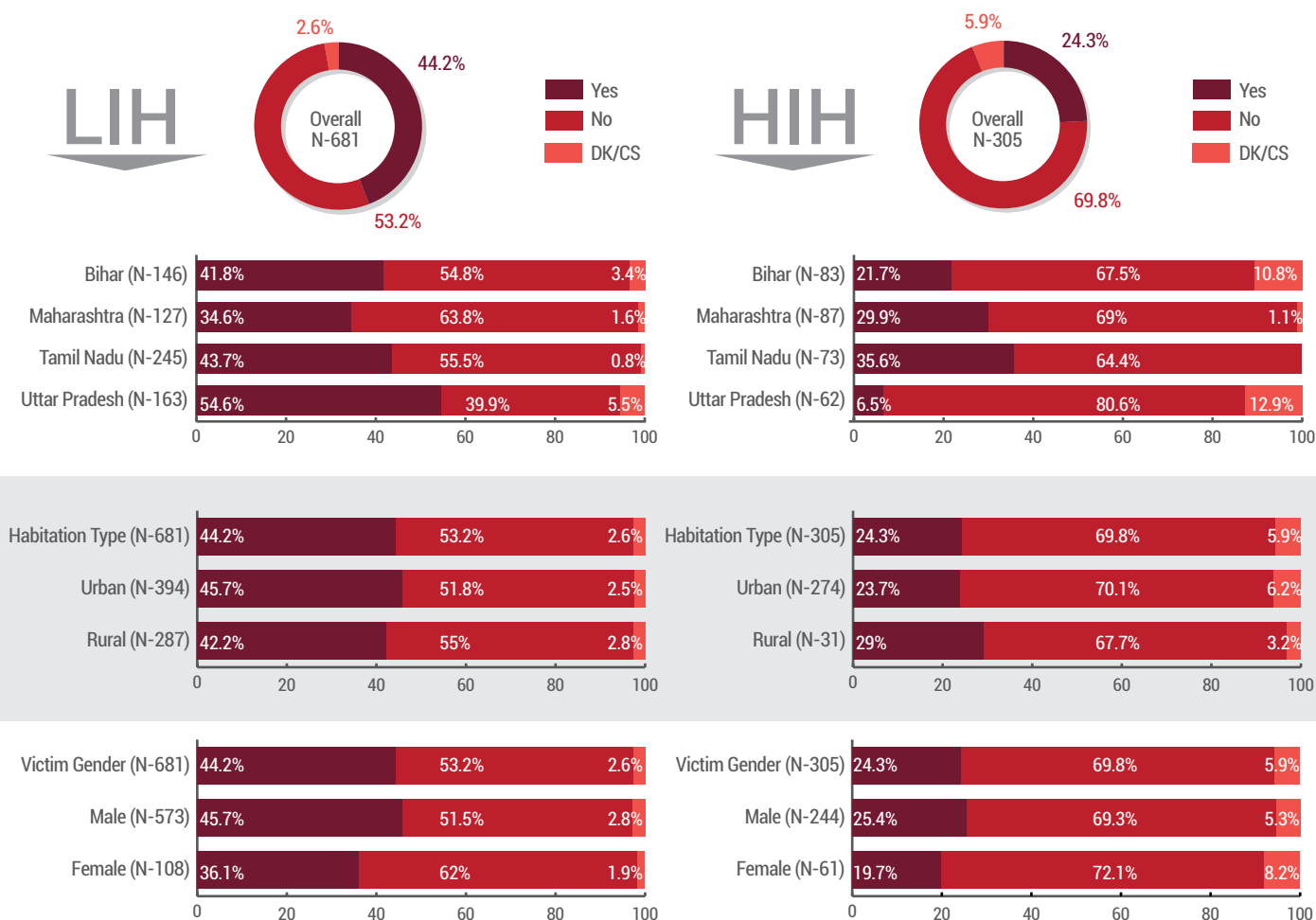
The impact on living standard was confirmed by a higher proportion of respondents where road crash victims died as well as where victims were male earning members of the family. In order to understand the severity of impact on the household, respondents were asked to rate the level of impact on 3-point scale i.e. 'Severe', 'Moderate' and 'None'. The proportion of those who said there was a severe decrease in living standard were almost three times (38.5%) more in poor families. Further, compared to male respondents, more female respondents have confirmed the same.

TABLE 6.1: TABLE INDICATING STATE- WISE, HABITATION- WISE, AND GENDER- WISE DETAILS ON WHETHER HOUSEHOLD MEMBERS/ VICTIM DEVELOPED HEALTH ISSUES DUE TO ROAD CRASH [ALL FIGURES IN PERCENT]



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TABLE 6.2: TABLE INDICATING STATE-WISE, HABITATION- WISE, AND GENDER- WISE DETAILS ON WHETHER THE FOOD CONSUMPTION OF HOUSEHOLD MEMBERS OF THE VICTIM HAS DECREASED



6.4. DISABILITY DUE TO ROAD CRASH

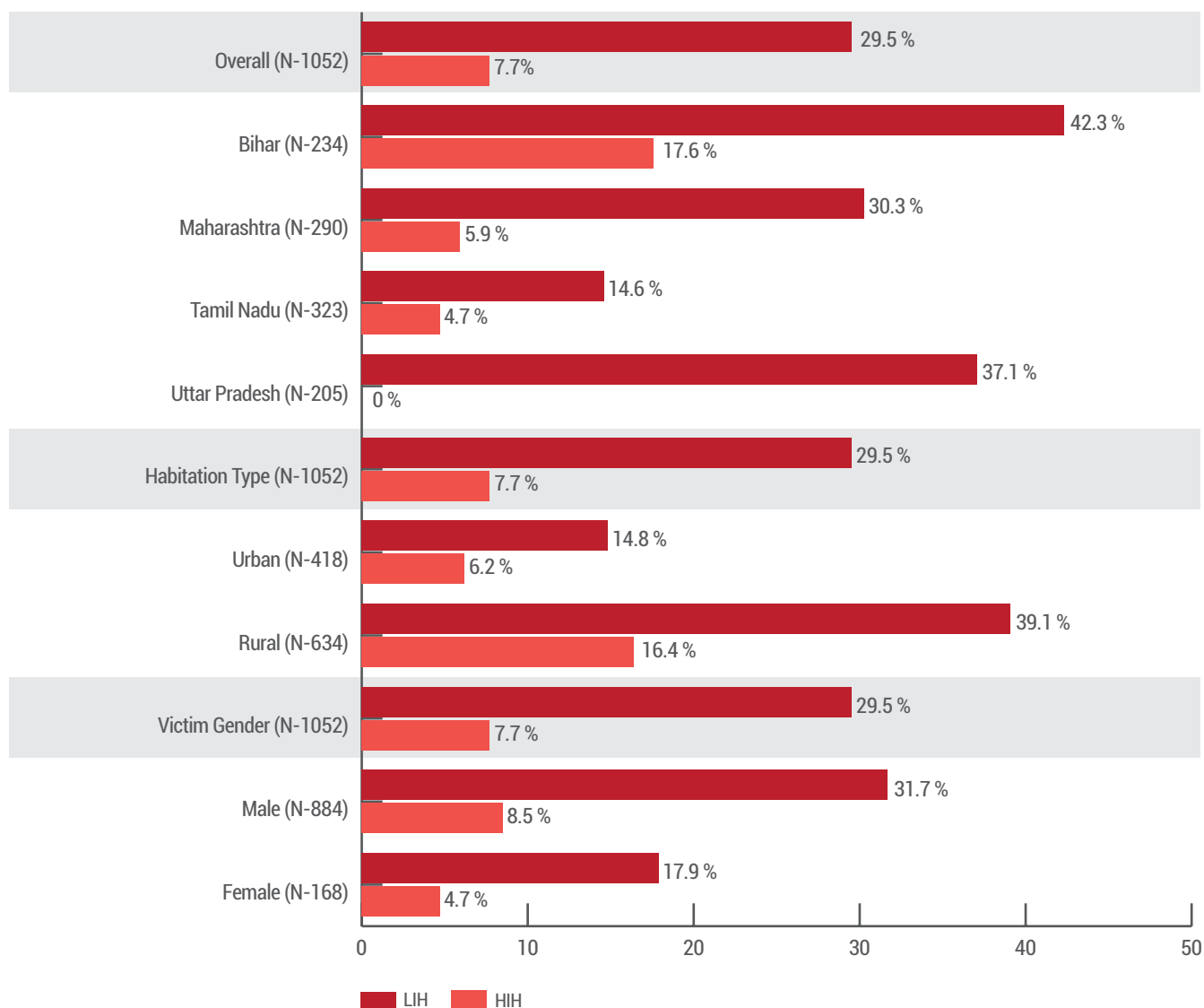
This section of the report looks at the social impact of road crashes on households and specifically focuses on cases of serious injuries. This part of the survey was conducted amongst the respondents who reported to have either survived the road crash themselves or family members who were speaking on behalf of a victim who suffered serious injuries.

Among those who survived the road crash, about three out of ten (29.5%) respondents from poor families (LIH) reported undergoing disability. Amongst (HIH) respondents 7.7% reported disability. The vulnerability of poor families was four times higher than those from rich families probably due to the lack of safe mode of transport at the time of crash.

Amongst the LIH category, proportion of victims that have undergone any sort of disability was higher in rural areas (39%) compared to urban areas (15%). Almost the same trend was seen for the HIH category as well.

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TABLE 6.3: TABLE INDICATING THE STATE- WISE, HABITATION- WISE, AND GENDER- WISE DETAILS ON WHETHER THE VICTIM WAS AFFLICTED WITH A DISABILITY



The respondents who reported disability were further probed the severity of disability, type of disability and the need for assistance. Respondents were asked if the road crash victims have undergone any sort of disability required on-going mobility assistance i.e. wheelchair, walking frames etc. Overall, about 6 out of 10 respondents in LIH (64%) and HIH (62%) category require on-going mobility assistance.

Among the respondents (N=339) that reported victim disability a follow up question was asked to ascertain the severity of the disability. About four out of ten (39%) LIH respondents stated that road crash victims suffered from serious disabilities while among HIH category, such proportion was about one in five (20.7%).

In the LIH category, Bihar has the highest proportion of victims that have undergone serious/permanent disability (45.5%), followed by Maharashtra and Uttar Pradesh. Gender wise, a higher proportion of male victims (51%) suffered from serious/permanent disability than female victims (33%). For cases where victims had sustained serious disability (N=121), respondents were further asked about the type of disability. Overall, about two-third of LIH victims survived amputation of a limb followed by brain injury (22%).

According to 2011 census, nearly 50% of the disability burden is borne by one of the five States namely Uttar Pradesh (15.5%), Maharashtra (11.05%), Bihar (8.69%), Andhra Pradesh (8.45%), and West Bengal (7.52%)³⁵. Bihar

government also launched Bihar State Disability Pension Scheme to cover those persons with disabilities who are not covered under the Indira Gandhi National Disability Pension Scheme (IGNDPS). Additionally Bihar Government has also launched, Mukhyamantri Viklang Shashaktikaran Yojna – “SAMBAL- An Integrated Scheme for PwDs”, to protect & promote the rights of PwDs. SAMBAL was approved in 2012 and has three major components to empower PwDs - Educational Rehabilitation, Economic Rehabilitation and Social Rehabilitation.

6.5. PROCESS OF REHABILITATION OF THE VICTIM

This section analyses the rehabilitation process of the victims back into their pre-crash social and work life. This section covers aspects such as return to previous occupation, days taken for recovery, change in occupation etc.

All the respondents who reported that they themselves or the victim survived the road crashes were further probed on whether they/ victim could return to the previous occupation/ educational institution after the crash. Overall, three-fourth of LIH respondents and 90% of HIH respondents confirmed that the victims returned to their previous occupation/ educational institution after the crash.

35. Censuse 2011, MoSPI: https://censusindia.gov.in/census_and_you/disabled_population.aspx

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Gender-wise, compared to men, less proportion of women victims returned to their previous profession after the crash. Profession wise, about one-fourth of LIH students could not return to studies after the crash.

Respondents (N=1142) were asked a follow up question about the average time they had taken to return to the previous occupation. Among LIH category, the average time taken to rejoin the previous occupation was about 92 days (about 3 months) whereas it was 43 days (about 1.5 months) amongst HIH category.

Amongst HIH category the average number of days it took to return to work is significantly less (nearly less than half in most of the cases). This is a direct indicator of disproportionate impact of road crashes on LIH category. State-wise, the highest time was taken by LIH victims of Bihar and HIH victims of Uttar Pradesh to return back to their previous occupation. Comparatively, lowest time was taken by victims of Tamil Nadu across both the categories.

Habitation wise, urban victims took less time than rural victims to return to the previous occupation after the crash. Similarly, gender-wise, men victims took a longer time to return to the previous occupation than women victims.

Those respondents who informed that crash victims could not return to their previous occupation (N=288) were further

explored if the victims could find a new job. The time taken to find the job after the crash was also captured. Out of total, about 36 percent of respondents confirmed that victims of their household found a job. Further those victims that have found a new job (N=104) were further asked about the time they had taken to find a new job. Overall, on an average LIH category victim took about 107 days to find a new job from the day of the crash whereas it was about 65 days in case of HIH victims.

This marked disparity between the two categories indicates that victims in the LIH category faced more difficulty in getting a new job post-crash. This might be also because of better social integration and support systems available for the HIH category.

6.6. CHANGES IN EMPLOYMENT STATUS

The comparison of the victims' employment status at three different times – a) pre-crash, b) on resuming work after the crash and c) current (as on 31st Jan 2020) was also done. Respondents were asked to mention the occupation of victims during these phases.

Pre- crash, about 6.6 percent of victims were unemployed, while such proportion increased by about 11 percent and

accounted for 18 percent on resuming work after the crash. Further, this proportion reduced to 14.4 percent as on 31st Jun 2020. This increase in unemployment could be understood due to injuries and disabilities among victims after crashes.

Among LIH category, the highest proportion of victims were salaried employees' pre-crash (33.5%), on resuming work after crash this reduced (28.3%), whereas a slight increase was observed in the current scenario to 33 percent (as on 31st Jan 2020). A similar trend was observed in occupations like agriculture labourer/ farmer and petty trader/ shop owners.

A decline was observed in sectors like farming and skilled and unskilled manual labour. This indicates that the labour-intensive jobs are more difficult to resume post-crash simply due to the injuries, disabilities, and nature of the job where more physical strength is required, which resulted in more unemployment.

6.7. OCCUPATIONAL IMPACT AT THE HOUSEHOLD LEVEL

Respondents were also probed on factors such as a change in working pattern of household members, additional jobs

taken by household members and dropping out of school due to financial constraints.

Compared to the HIH category (27%), a significant difference was observed among the LIH category where a higher proportion of respondents (43.9%) stated that the working pattern of household members changed due to road crash. While about 14 % of LIH respondents acknowledged that someone in their household had to take up additional jobs/ shifts because of a road crash, a smaller 4% of HIH respondents acknowledged the same regarding their families. In cases where the victim had died due to an crash, more respondents confirmed the same.

Further, as high as one in five (20%) respondents of LIH category have mentioned that someone in their household had to give up education due to the crash. Again, such a proportion of respondents among the HIH category was only 5 percent. In cases where the crash victim was male and the earning member of the family, a higher proportion of respondents had to give up education.

In rural habitations, such changes were more prevalent than in urban habitations, amongst both the categories (LIH and HIH).

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6-POINT POLICY RECOMMENDATIONS:

1. Integrating Road Crash Victims as a special category in Social Security Schemes.

Policy makers need to acknowledge the interplay between road crashes and various social hierarchies of class, gender, location that intersect to render certain disadvantaged groups more vulnerable to the shocks of crashes. The spatial context and lived experiences of poor households makes it harder for them to respond to the harsh impact of road crashes, pushing them into a vicious cycle of debt and suffering. Therefore, all existing social security schemes should recognize victims of road crashes as a special category that needs Government support at various levels.

2. Comprehensive Rehabilitation Support.

Injury caused by crashes is the 3rd largest cause of disability. According to a report by NIMHANS, 'nearly 100% of the severely injured, 50% of the moderately injured and 10-20% of the mildly injured will have lifelong disabilities'. In India there are multiple structural, social and economic barriers to accessing Rehabilitation. The Central and State Ministers of Social Welfare and Empowerment should create comprehensive programmes for rehabilitation of crash victims. Similarly, District Road Safety Committees should also maintain a database of people in each district

who should receive such care and support them through community based programmes.

3. Mental Health Support

Motor vehicle crashes can result in 'significant post-traumatic psychiatric morbidity'. The psychological impact of road crashes is an understudied area and the data on the subject is extremely fragmented or non-existent. Academic and other institutions should analyse the trends for psychological distress due to road crashes in India. The Ministry of Health and Family Welfare should also update the National Mental Health Policy (NMHP) notified in 2014. NMHP acknowledges the linkage between poverty and mental health however it does not categorise crash victims as "Vulnerable Population". The state government should also ensure implementation of NMHP right from Primary Health Care level. State Governments should also conduct awareness drives on already existing schemes like – 'KIRAN 24x7 Mental Health Rehabilitation Helpline. Most importantly, mental health of road crash victims should be covered under health insurance.

4. Access to Upskilling and Jobs.

The National Skill Development Corporation (NSDC) can undertake a special programme to upskill crash victims from rural areas. The programme can set up specific

targets of skilling 1 million people for the next 5 years and so on.

Most rural poor are injured in road crashes, this is also validated by the 2011 census data as 71% of India's 26.8 million Persons with Disability (PwD) live in rural India. Out of the total population of PwD, about 15 million are male and 11.8 million, female. Poor households have a lesser ability to respond to road crashes and find it difficult to mitigate their financial burden in the event of an unforeseen emergency. Since the impact is more severe on LIH than HIH. Ministry of Social Welfare and Empowerment, Ministry of Small and Medium Enterprises, Ministry of Skill Development and Ministry of Agriculture should create priority programs for upskilling of PwD in rural areas and also create specific programs for female PwD in rural areas.

5. Support to Continue Education.

Throughout FGDs and IDIs many respondents stated the impact of crash on Education with many male respondents having to leave education to support the household financially. Ministry of Education should create specific schemes to ensure children from households that have been impacted due to road crashes can continue their education.

Indian Training Institutes (ITIs) impart skills in various vocational trades to meet the skilled manpower

requirements in the country. An automatic enrolment policy should be created at the district level for road crash victims or their family members who had to dropout of schools or forsake education owing to a road crash.

6. Improving access to emergency medical care.

There is a need to publicize emergency numbers and create more awareness around it. 112 has been declared a pan-India emergency helpline number for immediate assistance services for police, fire, health and women. People in rural areas have poor access to medical facilities. Primary Care and Secondary Care infrastructure and resources in rural areas are inadequate to provide proper care to victims of road crashes. The Central and State Governments should ensure placement of adequate number of Basic Life Support (BLS) and (ALS) ambulances with life support equipment, and a trained paramedic. Each district should be equipped with a secondary trauma care facility with infrastructure and resources for initial evaluation, resuscitation, stabilization and initiation of transfer to a higher-level trauma care facility.