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# Two Wheeler Rider's Behaviour in Urban Area of Marathwada, Maharashtra, India

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**Abstract:** *A major proportion of motor vehicles on the Indian roads especially in cities comprise of motorized two wheelers. Aggressive driving behaviours in traffic violations increase the risk of accidents. After 1980 growth of two wheelers users increased it next than China and Japan. More adolescents are drive motor bike without proper learn drive and issued legal driving licence by regional transport office. The problem of adolescent risky driving is a matter of concern not only because of high crash rates, but also because of the developmental continuity of risky driving behaviour. The number of bike riders who use alcohol or drugs and drive the bike at public place and traffic rush place, these bikers create the traffic problem to other vehicle drivers who are not taken any narcotic drugs and drive. Motorcycle driving is need to safe drive on road for rider and other travellers but motorcycle riders are drive careless.*

**Keywords:** *Automobile, adolescent, behaviour, traffic, helmet.*

## I. INTRODUCTION

The rapid urbanization, industrialization and migration with other changes of life style has resulted in increasing in travel in all age groups in the all over country. For the common and more populations travel used cars, bus but individual travel chooses the motorcycle P. Shruti et, al, (2013). India has abundance users of motor-cycle so it is one of the largest manufacturers and producers of two-wheelers in the world. India stands next to Japan and China in terms of number of two-wheelers produced. The Indian two-wheeler industry made a minute establishment in the early 1950 when Automobile Products of India started manufacturing scooters in the country. After 1980 growth of two wheelers users increased it next than China and Japan. Majority of Indians give preference to two wheelers specially youngster Priyanka Jain (2015). A major proportion of motor vehicles on the Indian roads especially in cities comprise of motorized two wheelers. Aggressive driving behaviours in traffic violations increase the risk of accidents. Riders ride the bike by the behaviour with physical movement, verbal communication, gestural activity, sometime frustration anger, rage, dejection, jealousy (Dr. Seema Mehrotra et, al.,(2017). A defensive driving style could save lives S. de Craen et, al, (2011). We describe the behaviour of bike riders on road in city. Motorcyclists are the most vulnerable vehicle users in India. The objectives of this study were to identify the reason of motorcycle is vulnerable vehicle by users Shirin Wadhvaniya et, al., (2015). The World Health Organization has defined "adolescents" as persons in the 10 to 19 year age group WHO (2002). More adolescents are drive motor bike without proper learn drive and issued legal driving licence by regional transport office. The problem of adolescent risky driving is a matter of concern not only because of high crash rates, but also because of the developmental continuity of risky driving behaviour Jesser et, al., Turbin, Frances, (1997), Bingham & Shope (2004). The 70% present students used motorcycle always or often for attend college and class Asonganyi Edwin Nyagwui et, al, (2016). Riders with the intention to wear a helmet it is stronger safety beliefs compared to non-intenders, after wearing helmet would prevent head injury and increase visibility and feelings of safety. But riders wear a helmet less likely to express the inconvenience and discomfort possibly associated with helmet use such riders feeling after wear a helmet would make me feel uncomfortable, hot and impair vision and hearing M. A. Eelliott et, al, (2003). The better understanding of the factors that contribute to adolescent driving behaviour as well as early intervention against risky driving might help to prevent fatal consequences of driving in adulthood. Parental non-restrictiveness, more problem-behaviour friends, more emphasis on egocentric values and a higher score on psychosocial function of driving are associated with adolescent's higher intentions of risky driving. The number of bike riders who use alcohol or drugs and drive the bike at public place and traffic rush place, these bikers create the traffic problem to other vehicle drivers who are not taken any narcotic drugs and drive.

## II. MATERIAL AND METHOD

The survey was carried out in some cities of Marathwada region which is placed in Maharashtra, India. These cities includes are Nanded, Latur, Jalna, Parbhani, and Aurangabad. Surveys are arranged at main roads and chowks where established signals for keep right traffic and justice to all vehicle drivers. Check the motorcycle and bifurcate for related class.

### III. RESULT AND DISCUSSION

Table No.:1.1 Observations about some opposite behaviour to safe motorcycle driving.

Observations	6.00 am to 9.00 am	9.00 am to 12.00 pm	12.00 pm to 3.00 pm	3.00 pm to 6.00 pm	6.00 pm to 9.00 pm	9.00 pm to 12.00 pm
Adult Triple sits	24	9	6	5	14	18
Speed over limit	82	6	8	12	16	86
Indicator not used	76	84	86	78	58	24
Side stand on	00	8	12	10	4	00
Over weight Luggage	32	14	4	2	6	00
Talking on Cell phone with head phone	4	10	12	16	13	6
Talking on Cell phone without head phone	8	19	22	27	23	12
Single side leg hang pillion rider (Women)	68	132	112	128	184	78
Double side leg hang pillion rider (Women)	38	24	28	20	42	12

Table No.:1.2 Helmet wears while motor cycle driving.

Observations	6.00 am to 9.00 am	9.00 am to 12.00 pm	12.00 pm to 3.00 pm	3.00 pm to 6.00 pm	6.00 pm to 9.00 pm	9.00 pm to 12.00 pm
Nanded	00	12	4	6	10	00
Latur	00	2	2	3	1	00
Jalna	02	3	4	4	2	00
Parbhani	00	4	5	3	2	00
Aurangabad	14	568	472	486	594	68

During the observations bike riders are appeared adult triple sits in the 6.00 am to 9.00 am are 24 in numbers in this period the students who are going to college and classes these use triple sit motorcycle riders and labour which is going to construction use the triple sit motorcycle. During the 6.00 am to 9.00 am no start signals and not a traffic rules except Aurangabad so riders are fearless and operate triple sit motorcycle. During 9.00 am to 12.00 pm the triple sit riders are appeared 9, during 12.00 pm to 3.00 pm triple sit riders appeared 6, during 3.00 pm to 6.00 pm triple sit riders appeared 5, during 6.00 pm to 9.00 pm triple sit riders appeared 14, in this period the signals start and traffic police start their duty on every signal, so fear of fine and action riders were less and convert into double sit near signal place. During 9.00 pm to 12.00 pm triple sit riders appeared 18, it is period of signal off and no traffic police on duty so its effect goes to fearless triple sit motorcycle driving. Speed Thrills but Kills, but still people wants to speed in daily life Singh et, al., (2011) . Speed over limit bikers were appeared more in 6.00 am to 9.00 am. In this period bikers were appeared 82 in numbers; this period was off signals and no traffic police on duty. During this period more were student who goes to college and attend the classes, students are always hurry for attending classes so they drive the motorcycle in over limit speed. During 9.00 am to 12.00 pm speed over limit bikers were 6, during 12.00 pm to 3.00 pm speed over limit bikers were 8, during 3.00 pm to 6.00 pm speed over limit bikers were 12, during 6.00 pm to 9.00 pm speed over limit bikers were 16, during 9.00 pm to 12.00 pm speed over limit bike riders were 86. During 9.00 am to 9.00 pm, this period the signals were on and traffic police are on duty so avoid fine and action and during related period traffic was rush so bikers reduced the speed of motorcycle, after 9.00 pm there was no signals and traffic police so riders were drive motor cycle over limit. Indicators were not used while bike is turn at cross, during the period of 6.00 am to 9.00 am there was 76 bikers are not used, during 9.00 am to 12.00 pm 84 bikers were not indicator used while bike was turn at cross, during 12.00 pm to 3.00 pm 86 motorcycle riders were indicator not used at cross, during 3.00 pm to 6.00 pm 78 bikers were indicator not used when they turn at cross, during 6.00 pm to 9.00 pm 58 bikers were not operated indicator while his bike was turn the cross, during 9.00 pm to 12.00 pm 24 bikers were not used indicator while the turn in cross.

Bike riders were drive bike with anger, fear, frustration and hurry so they forget the side stand off while motorcycle is take off from parking and they operate motorcycle on road with side stand when the side stand touch to upper part of road may be motorcycle sleep on road and happen serious accident and injured to other also in rush traffic. During 6.00 am to 9.00 am motorcycles side stand on were not appeared, during this is morning period riders were cool mind and concentrate on fully motorcycle activity. During 9.00 am to 12.00 pm side stand on motorcycle are appeared 8 numbers, during 12.00 pm to 3.00 pm side stand on motorcycles appeared 12, during 3.00 pm to 6.00 pm side stand on motorcycles were appeared 10, during 6.00 pm to 9.00 pm side stand on motorcycle are 4, during 9.00 am to 9.00 pm motorcycles drivers were hurry to reach their location and they engage in their work so forget the side stand off while the start their motorcycle.

Sometime motorcycle drivers were use their bike with heavy luggage over load the capacity of motorcycle e.g. Milkman hang their heavy can on pillion sit and carry for supply of milk in city, another some gunny bag are tied to pillion sit with heavy goods and carry from one place to another place, it is dangerous to safe driving due to heavy luggage balance become uncontrolled and cause to accident. During 6.00 am to 9.00 am over weight luggage motorcycle appeared 32 in numbers during this period milk is required to all population so milkman carry the milk can by motorcycle and supply them, during 9.00 am to 12.00 pm over weight luggage motorcycles are observed 14 numbers, during 12.00 pm to 3.00 pm over weight luggage motorcycle observed 4 numbers, during 3.00 pm to 6.00 pm over weight luggage motorcycle were observed 2 numbers, during 6.00 pm to 9.00 pm over weight luggage motorcycle were appeared 6 in numbers, during 9.00 pm to 12.00 pm not observed the overweight luggage on motorcycle.

Mobile communication while motorcycle driving is appear, it has no banned by traffic rules in various cities so increase the number of mobile operators while motorcycle driving. During 6.00 am to 9.00 am Talking on Cell phone with head phone were 4 numbers, during 9.00 am to 12.00 pm Talking on Cell phone with head phone were 10 bikers, during 12.00 pm to 3.00 pm Talking on Cell phone with head phone were 12 bikers, during 3.00 pm to 6.00 pm Talking on Cell phone with head phone were 16 bikers, during 6.00 pm to 9.00 pm Talking on Cell phone with head phone were 13 bikers, during 9.00 pm to 12.00 pm Talking on Cell phone with head phone were 6 bikers. During 6.00 am to 9.00 am Talking on Cell phone without head phone were 8 motorcycle drivers, during 9.00 am to 12.00 pm Talking on Cell phone without head phone were 19 motorcycle drivers, during 12.00 pm to 3.00 pm Talking on Cell phone without head phone were 22 motorcycle drivers, during 3.00 pm to 6.00 pm Talking on Cell phone without head phone were 27 motorcycle drivers, during 6.00 pm to 9.00 pm Talking on Cell phone without head phone were 23 motorcycle drivers, during 9.00 pm to 12.00 pm Talking on Cell phone without head phone were 12 motorcycle drivers Women's are generally ride on motorcycle by sit a back side of driver and they give preference to hang the leg single side it is compulsory for sari wearing women, but it is unsafe any time they can skid. During 6.00 am to 9.00 am Single side leg hang pillion rider (Women) were observed 68 numbers, during 9.00 am to 12.00 pm Single side leg hang pillion rider (Women) were observed 132 numbers, during 12.00 pm to 3.00 pm Single side leg hang pillion rider (Women) were observed 112 numbers, during 3.00 pm to 6.00 pm Single side leg hang pillion rider (Women) were observed 128 numbers, during 6.00 pm to 9.00 pm Single side leg hang pillion rider (Women) were observed 184 numbers, during 9.00 pm to 12.00 pm Single side leg hang pillion rider (Women) were observed 78 numbers. Women's those are wear a Punjabi dress or pants can sit on motorcycle by sit a back side of driver with hang double side leg, it is safe any time they cannot easily skid. During 6.00 am to 9.00 am Double side leg hang pillion rider (Women) observed 38 numbers, during 9.00 am to 12.00 pm Double side leg hang pillion rider (Women) were observed 24 numbers, during 12.00 pm to 3.00 pm Double side leg hang pillion rider (Women) were observed 28 numbers, during 3.00 pm to 6.00 pm Double side leg hang pillion rider (Women) were observed 20 numbers, during 6.00 pm to 9.00 pm Double side leg hang pillion rider (Women) are observed 42 numbers, during 9.00 pm to 12.00 pm Double side leg hang pillion rider (Women) are observed 12 numbers.

Wearing a helmet is the single most effective measure for preventing head injuries in motorcycle users Imran et, al, (2008).

Helmet use is a major risk factor for road traffic injuries and fatalities J. Bao et, al, (2017). Helmet wear while drive motorcycle by driver is compulsory only appeared in Aurangabad city other cities of Marathwada are not compulsory so bike riders are use of helmet is very rare. Motorcycle helmet laws in the city of Marathwada vary from city to city Cody S. Olsen et, al, (2016). During 6.00 am to 9.00 am Helmet wear driver of motorcycle are not found in Nanded, Latur, and Parbhani, in Jalna were 2 bike riders and in Aurangabad 14 bike riders are appeared, during 9.00 am to 12.00 pm Helmet wear motorcycle drivers were found in Nanded 12, in Latur 2, In Janla 3, Parbhani4, and in Aurangabad 568. During 12.00 pm to 3.00 pm Helmet wear motorcycle riders are appeared in Nanded 4, Latur 2, Jalna 4, Parbhani 5, Aurangabad 472. During 3.00 pm to 6.00 pm Helmet wear bike riders were found in Nanded 6, Latur 3, Jalna 4, Parbhani 3 and In Aurangabad 486. During 9.00 pm to 12.00 pm Helmet wear motorcycle drivers were not found in Nanded, Latur, Jalna, and Parbhani, and in Aurangabad found 68.

#### IV. CONCLUSION

Motorcycle driving is need to safe drive on road for rider and other travellers but motorcycle riders are drive careless by use triple sits and cause imbalance, use speed over limit in rush traffic and create problem to others, Indicators not used it is trouble to back side vehicle drivers, side stand on it cause sleep the motorbike and cause accident, Some drives are use motorcycle like loading vehicle by carry milk heavy can and get motorbike imbalance, Some motorcycle drivers are taking on mobile with head phone it is disturb to concentration for driving, Some bikers take a risk by talking on mobile without head phone and pick up the mobile in left hand drive motorcycle by right hand it very dangerous to drives and other travellers travel by road, Womens are travel by pillion with hang single side leg it dangerous any time they can skid, some womens are travel by pillion with double side leg hang it safe for riding.

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