

Dangerous Driving in Adolescents: Problem Statistics, Causative Factors and Solution through Child & Adolescent Psychiatry

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Abstract: In the United States, motor vehicle crashes have become a prominent reason for teen deaths, and it is a growing concern for the Government, people and parents. America, with their liberal culture has given the privilege of driving to their youth. Even when you are as young as 15, you can take charge of the wheels with an adult who is a licensed driver, and at 17 and after, you are eligible for a driver's license. However, teenagers are often taken away by mood swings, adventure crave and intoxications, which make them irresponsible on the road, and accidents happen.

Drunken driving, marijuana, irrational speed and sleep disturbances in adolescents, have been found to be important factors of accidents on road.

The objective of the research is to understand the causative factors behind dangerous driving in adolescents and analyse the role of Child and Adolescent Psychiatry in dealing with the issues of drug abuse, alcohol abuse and sleep problems in children and teenagers, by training their parents, and prevent them from hazardous accidents.

Keywords: Adolescents, Drunken Driving, Road Accidents in America, Drug abuse, Sleep Problem, Marijuana, Adolescent psychiatry.

1. Introduction

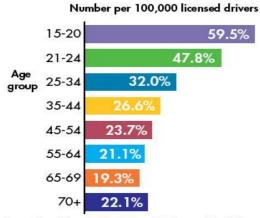
Teen death in car accidents is a major problem in United States. Also, adolescents getting into legal tiffs due to irresponsible driving is a common thing, however, the Government is extremely worried and concerned about the causes which affect this difficult state in the country.

In 2015, 2,333 teenagers, between the ages 16 and 19, died in car crashes and 2,21,313 were treated in hospitals with severe injuries, 2014.

The 2013 census records that only 7% of U.S. population comprises of children between 15 and 19 years of age, but they account for 11% of total costs for motor vehicle injuries.

The risk of motor vehicle crashes is higher in children between the age groups of 16 and 19. Teenagers, especially, male drivers are more accident prone because they have been found to take up high speed at inappropriate places. Also, young people who are newly licensed drivers often get into such accidents due to half confidence and self-knowledge.

Drivers involved in fatal crashes in 2006



Source: Teen Driver Crashes: A Report to Congress, July 2008, National Highway Traffic Safety Administration..

Thus, it became extremely important to understand the risk factors involved in motor vehicle crashes for young adolescents:

 Teenagers are more likely to underestimate or not recognize a hazardous situation on road, than an adult.

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- Teenagers are more prone to make critical decision errors that older drivers which cause accidents.
- Young children are more adventurous and hence drive at a higher speed limit, than prescribed, which causes accidents due to tail gaiting.
- Adolescents, especially males indulge in smoking and drinking habit with their friends, before the legal age, and this interferes with their driving techniques. They are often to late night parties, weekend parties, where they drink and drive back home, taking up risky driving behaviour. In 2014, 50% of teen deaths from motor vehicle crashes occurred between 3 p.m. and midnight and 53% occurred on Friday, Saturday, or Sunday.
- Marijuana intake in young children is also a growing problem in the U.S. Teenagers often take up marijuana and other hallucinating drugs for 'trying out'. Though you are not supposed to drive with any form of intoxication, teenagers barely follow these rules and fall into accidents.

• Adolescents often complain of irregular sleep habits. Sleep malfunction is also a major factor responsible for road accidents. If you are sleepy while driving, you are bound to be accidental, hence you should pull over and stop. If you are tired or restless you should not drive.

2. METHODOLOGY

The method of study is a sample survey on adolescents from America, who have received driving permit and drive regularly on the roads of America. We will quantify the probability of accidents in them, statistically based on factors responsible for each cause. A sample group of 50 high school students of the state of Idaho, USA, between age group 15-17 were selected as sample for the study, who are drivers. Some of them had at least one major or minor accidents, and some hadn't had any. We have recorded the number of accident cases in accordance to each of the factors, drinking, drugs/marijuana, night driving, sleep malfunction and distraction. After recording the data, a percentage calculation has been carried out on the numbers to understand the ratio of accident-prone adolescents to accident free adolescents in America.

Sample Size	No. of High-School Adolescents who had accidents					No. of Adolescents who are Accident Free
	Due to Drinking	Due to Marijuana/	Due to Sleep Malfunctions	Night Driving	Distraction like talking, laughing	
		Drugs			with friends etc.	
50	9	8	10	7	3	13
Percentage	18%	16%	20%	14%	6%	26 %

High- School students between age group 15-17 in Driving and Accidents.

3. RESULTS

We have found out that out of 50, only 13 adolescents (only 26% of the sample) reported, that they have not yet caused an accident, out of which 10 were females. This eventually meant that 74% of the sample have had an accident or a minor crash, out of which 4 were females, and 33 were male drivers. 18% of the total population have confessed that they were under drunken driving while the accident happened. 16 % had taken casual drugs or marijuana, 20% of them complained of sleeping disorders. They said that they were driving when they were either sleepy or had not slept for quite a while, usually did not sleep well or were extremely tired of night life. 14% of the adolescents said that they could not see the danger ahead as it was dark, and they were inexperienced to drive at night. 6% of them said that they were

distracted by their friends, engaged in a hilarious conversation when the mishap took place. Overall ratio of accident prone adolescents to accident free adolescents stand 37:13 which is something to be concerned about.

4. DISCUSSION

Based on the sample responses, it becomes imperative for us to deal with each of the individual factors that cause car accidents for adolescents and try to find a solution together.

Drinking: According to U.S. driving laws (in most states) an adolescent who is found driving with 0.02% BAC (Blood Alcohol Concentration) is considered to be driving under influence. Generally, teenagers tend to have a beer or two when they are in parties or with friends, though it is illegal for their age.

However, it is better to know that about four beers can take your BAC to 0.08% which is the maximum limit for an adult, let aside a teenager in U.S. Driving with a further concentration is prohibited. This amount of alcohol in your blood can lower muscle co-ordinations, i.e. balance, speech, vision, reaction time and hearing. It is harder to detect danger, and judgement, self-control and reasoning abilities are also impaired. One who has drunk this much, can lose concentration in driving, can have short term memory loss (hence cannot recollect the route), cannot control the speed and may face reduced information processing like signal detection, visual search etc. while perception is also impaired. Alcohol addiction can come to adolescents when they are young and adventurous. Often peer group influences drinking in individuals. It is advisable, that if symptoms of illegal drinking are visible in an adolescent, they should be guided to a counsellor for improvement. It given the proper treatment at the right time, the habit of drinking can be eradicated from teenagers. Child and Adolescent Psychiatry deals with issues of temptation and helps a child overcome his/her tendency with a definite goal, conviction and self-promise.

Marijuana: Driving under the influence of marijuana or any kind of drug is prohibited in U.S. In fact, below the age of 21, tobacco and any other form of intoxication is also illegal. However, young people tend to get carried away and want to experiment with marijuana and other drugs. This can also happen because they are dealing with teenage problems which cause depression. General symptoms of drug abuse can be dizziness, more hunger than usual, grumpiness, irritation, poor memory, reduced motivation, having pipes or rolling papers, stealing habit etc. should trigger in you the awareness that your child is taking marijuana. There is no better way to solve this than talk openly.

- 1. Listen to your children without interrupting them. Know why they are doing drugs.
- 2. Talk to them about the harmful effects of taking up marijuana.
- 3. Do not use a negative or angry remark about them.
- 4. Ask them pointwise about the ill effects of drug abuse to see if they have understood what you are saying.

- 5. Be patient and kind with them.
- 6. Spend some more time with them to monitor their behaviour and also to motivate them.

If nothing works, a professional counselling session may be required to treat his problems.

Sleep Problems: Teenagers often complain about sleep disorders; that they do not have proper sleep; that they are often sleepy during classroom discussions, that they feel sleepy during the day time etc. Having proper sleep and rest is extremely important for driving. If your body is under some disorder, you cannot concentrate enough on driving. Sleep patterns and sleep disorders in young people are influenced by psychological, biologic, cultural, and social factors. Epidemiologic studies have proven the relationship between sleep habits and daytime behaviour or cognitive functioning in adolescents, with a detrimental impact of poor sleep hygiene on performance. Moreover, adolescents are physically predisposed of have delayed sleep due to the maturation changes of the circadian and homeostatic regulation of the sleep-wake cycle. Hence, it is advisable that parents, friends and relatives keep a watch that their children are not behind the steering when they have not had proper rest. A regular body check-up is also necessary for growing adolescents, so see that their physiology is functioning right.

Night Driving: Night driving can be dangerous, even for adults, because it is difficult to see in the dark. It is better, that an adult licensed driver accompanies if an adolescent is driving at night to see if the headlight rules are being complied to. More caution and steadiness is required while driving at night, and children can often panic if they have made a small mistake once. If an adolescent is a driver, it is the responsibility of his family to have his vision checked occasionally; also, it is better that the person is trained with a special course and counselled well, on night driving before he goes on the roads.

Distraction: Friends can be fun; we often indulge in conversations while doing important tasks, but while driving, chatting or conversing or laughing with friends is not advisable as because it can take your attention off the road. Parents and family should take care that their children have read and understood the driving rules and instructions properly before driving.

They should also habituate them to focus on their task of driving and on the road, during the training period, rather than other things around, inside or outside the car.

5. CONCLUSION

Adolescents are prone to motor vehicle crashes and it is a big problem in America. Young teenagers often fail in the right judgement of the road while they are driving, due to lack of experience, maturity, patience and attention. However, drunken driving and marijuana mishaps are more than common for adolescents when they are on the road. In order to prevent road accidents, it is important to prevent children from taking up intoxications. Child and Adolescent Psychiatry can help deal with many of these issues related to body and mind of an adolescent, which can eventually be factors for safe driving. If a teenager is counselled properly on safe driving and healthy habits of lifestyle, before he or she takes up driving, accidents can be prevented. Counselling can also detect depression, anxiety or insecurity within a young teenager, and provide solution to those. This also ensures a good mental health of the person, which is very important for growing up.

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Citation: Oyindrila Basu, Shiva Raman Pandey. Dangerous Driving in Adolescents: Problem Statistics, Causative Factors and Solution through Child & Adolescent Psychiatr. ARC Journal of Psychiatry. 2017; 2(3): 22-25.

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