

Death on the Highways for Adolescent Drivers: A Critical Time for Better Role Models

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Data collected by the U.S. Fatality Analysis Reporting System (FARS) reveal that 1,717 drivers aged 15 to 20 years of age were killed in 2014 in motor vehicle crashes (MVCs) that was a 1 percent increase from 2013 when 1,697 died in MVCs [1]. In addition to these tragic deaths, approximately 170,000 of these young drivers were injured in MVCs in 2014 versus 177,000 in 2013 [1]. These grim statistics place numbing numbers on the overall reality that these crashes are the number one cause of death in adolescents in the United States [2].

We have known for many decades about the high price of mortality and morbidity paid by our teenagers in motor vehicles and unless we address this issue more than we are doing, untold numbers of youth more will die and/or be seriously be injured [3]. Unless society (including all those in health care) aggressively act to improve this situation, current data suggest that half a million adolescents will die in the 21st century in the United States as motor vehicle drivers or passengers and 35 million will be injured as drivers [3]. As the second decade of the 21st century is rapidly progressing, many of our youth have already died and/or been injured. Some of the factors behind such damage are now considered with a goal of improving this often unnecessary situation.

Adolescent development

A number of factors are driving these accidents for our youth and they include adolescent development, inexperience with driving, distracted driving, road rage, speeding, driving while intoxicated, and others. One of the factors seen with unsafe teen driving certainly is the nature of adolescence itself, a critical period of human development that allows the transition from childhood to adulthood [3]. The developmental period called “adolescence” is complex and a medical specialty has evolved to seek more understanding of this critically important period in human development [4].

During this time, teenagers may have difficulties in controlling their behavior that includes limited cognition of safety principles involved in accident-free driving, and a potentially tragic need for adventure that may result in dangerous driving [5-7]. Since it takes several years for teenagers to learn to safely drive a car, the 21st century Graduated Driver Licensing System (GDLS) has been helpful in giving young drivers increased time to develop safe driving skills and slowing the process down if unsafe driving occurs early [8-10].

Inexperience

Part of the issue with young drivers, of course, is that their attempts at safe driving can be complicated by the inevitable factor of inexperience with driving skills. The inexperience can be found in any person first learning to drive but when combined with risky behavior seen in adolescent development, dangerous, even deadly, driving may result. Such a combination can lead to a young driver making bad choices in driving behavior leading to an increased rate of accidents when compared to more mature drivers [11,12].

The risk of crashes for drivers of motor vehicles is highest during the initial period of independent driving and this is propelled by critical factors of adolescent development and inexperience that leads to high risk driving behaviors [3,13]. The Graduated Driver Licensing System (GDLS) has been helpful in this regard but more progress is need to have all states adopt a universal and comprehensive program

that recognizes the potential dangers of young drivers with a need for high risk behaviors and limited experience in safe driving [14]. A number of other factors must be considered in assessing causes of high mortality and morbidity in young teen drivers.

Speeding

For example, an important aspect of dangerous driving behavior is speeding or operating a motor vehicle greater than legal limits but more importantly at a speed that is not safe for local driving conditions. In various studies, such as that of a report from Colorado of deadly motor vehicle crashes of 16-year old drivers from 1995 to 2001, speeding was a major issue leading to the deaths of 158 persons [15]. In addition to adolescent development and inexperience, factors encouraging speeding include peer pressure, the often irresistible aura of movies with racing cars that produce accidents without killing the movie's hero, and the influence of automobile manufacturer's advertisements of their products emphasizing the "joy" of speed [3,16,17]. Though parents can be a good role model for their children, sadly, some are negative role models and teach their offspring to drive in dangerous manners that include speeding [18]. One concept we need to emphasize more to parents in promoting safe driving by young teenagers is the negative influence parents can have by modeling the practice of speeding with lethal consequences for our children.

Distracted Driving

The 2015 Youth Risk Behavior Surveillance (YRBS) from the U.S. Centers for Disease Control and Prevention reported that 41.5% of the 61.3% who drive a car texted or e-mailed as drivers on at least one day during the 30 days before the survey [20]. Drivers become dangerous drivers when they are distracted by being on a phone, texting, dealing with other internet devices, smoking, and/or focusing on communication with passengers [21]. The issue of distracted driving can be worsened by being sleep deprived and/or under the influence of drugs (prescription or illicit) [22]. Certainly, the issue of distracted driving is worsened with teen issues of development and inexperience [23]. As noted with other factors of dangerous driving teen, drivers may have poor role models in their parents and other adults who may engage in distracted driving behaviors as well [24,25].

Road Rage

Another aspect of dangerous driving is road rage that is seen in drivers of any age who can have high powered cars on crowded roadways and drive while angry leading to high morbidity and mortality in drivers, passengers, and pedestrians [26,27]. Complicating this complex issue are many factors including drug use, psychiatric co-morbidities, and having anger in other aspects of their lives (i.e., at home, work, or others) [28-30]. One way to improve road rage in young drivers is to teach their parents and other adult drivers the deadly influence of such behavior on these young drivers [31].

Intoxicated Driving

Driving under the influence of drugs (i.e., alcohol, cannabis, cocaine, others) is an aspect of dangerous driving that occurs among drivers of all ages and greatly increases risks for death and injury [3,32,33]. Alcohol-related motor vehicle crashes are a major cause of death in teenage drivers and their passengers [34]. Methods to reduce such crashes include reducing nighttime as well as weekend driving when use of illicit drugs in drivers becomes a frequent phenomenon [35]. Also at risk are passengers as noted by a Fatality Analysis Reporting System (FARS) data that from 2001-2010, 2,344 children died in car accidents; 20% of these deaths were in motor vehicles with alcohol-impaired drivers [36].

Also of concern is the increasing use of cannabis by drivers who are influenced by changing societal attitudes and laws toward cannabis that encourages its use even when driving [37]. The U.S. Department of Transportation (DOT) reports a 48% rise in prevalence on weekend nights for drivers 16 years of age and older from 2007 to 2013-2014 who consumed cannabis and then drive; it was 8.6% in 2007 and 12.6% in the 2013-2014 survey [38]. The combination of alcohol and cannabis has proven to be a deadly duo for young and older drivers as well as their passengers [3,39].

Conclusions

The 21st century may witness over half a million teenage drivers or passengers killed on American roads along with 35 million teen drivers who will be injured to various degrees [2]. Data notes that 1,1717 drivers aged 15 to 20 year of age were killed in 2014 and this carnage continues year after year [1,3]. Various factors behind this tragic phenomenon have been considered such as contribution factors of adolescent development, inexperience of young drivers, speeding, distracted driving, road rage, and intoxicated driving. Many other factors are involved such as failure to use seat belts, driving unsafe cars, driving with medical disorders (i.e., unstable epilepsy or diabetes mellitus) or neurodevelopmental disorders (i.e., attention-deficit/hyperactivity disorder, autism spectrum disorders), and others [3].

Driver education programs that began in the United States in 1916 have been greatly improved with the 21st century Graduated Driver Licensing System (GDLS) that lengthens the time young drivers must spend training to drive, restricts nighttime driving for a period of time, prolongs training for those with unsafe driving habits, and provides direct supervision in driving skills [41,42]. Such programs need to be improved and the best components should be universalized to all states [9,43,44]. One problem that many of these contributing factor share in contribution to the tragic mortality and morbidity in these young drivers (and those who get in their way) is poor role modeling from parents and other adult drivers.

We must insist that all adult drivers provide optimal modeling of driving habits that teach the young, inexperienced driver to avoid the deadly habits of speeding, distracted driving, road rage, intoxicated driving, improper seat belt use and others [3,18,19,24,25,31,33,39,40]. Society can reduce the young teen carnage on the roads if we value all our children and seek to help them live their full lives in this century and beyond. Society itself must not be so distracted by various issues that these children are ignored. Imagine the good that will come from saving lives of our children by the simple act of kindness reflected in being good role models.

"One hundred years from now it will not matter what your bank account was, the sort of house you lived in, or the kind of car you drove..... but the world may be different because I was (you were) important in the life of a child".

Forest E. Witcraft (1894-1967)

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