

Trends in traffic collisions and injuries in Kyrgyzstan, 2003–2007

Viola Artikova,^a Michael E Thompson,^b Elena Platonova,^b Gerald F Pyle^b & Samat Toimatov^c

Objective To assess the epidemiological data on motor vehicle collisions, injuries and deaths in Kyrgyzstan to inform evidence-based policy development.

Methods Data on motor vehicle collision and injury statistics covering 2003–2007 were obtained from official sources provided by the Department of Traffic Safety and the Ministry of Health's Republican Medical Information Centre. The data were analysed and compared with data derived from studies in other low- and middle-income countries.

Findings Large heterogeneity between data sources was noted. Motor vehicle collisions caused by drivers increased twofold between 2003 and 2007. Reported motor vehicle collisions, deaths and injuries increased by 34%, 33% and 47%, respectively, over that period. Such increases were proportionately greater than the growth in population or in the number of registered motor vehicles. The proportion of injury attributable to motor vehicle collisions increased by 14% and the collision-related mortality rate increased by 39% in 2003–2007.

Conclusion In Kyrgyzstan, the number of motor vehicle collisions is rising and so is the number of those who are injured or killed in them. Reversing this trend will call for closer collaboration among relevant agencies and for a comprehensive surveillance system, along with operational improvements in emergency medical care, new and strictly enforced passenger safety laws and improvements to the transportation infrastructure.

Abstracts in **عربي**, **中文**, **Français**, **Русский** and **Español** at the end of each article.

Introduction

Motor vehicle collisions are a neglected public health problem. Approximately 45% of all hospitalized trauma patients in the world have been injured in a motor vehicle collision¹ and an estimated 1.3 million people die in collisions annually.^{2–4} Traffic collisions are among the 10 leading causes of death worldwide and are projected to become the third leading cause of disability-adjusted life years (DALYs) lost by 2020.⁵ Adolescents and young adults (people aged 10–24 years) are at greater risk of being involved in motor vehicle collisions than older people^{4,6–8} and men are at greater risk than women.^{1,6,9} Motor vehicle collisions are also the leading cause of injury among children.⁹ In low-income countries, children are most often injured in collisions involving minibuses, buses, trucks and other commercial vehicles.^{9,10} The direct cost of motor vehicle collisions is roughly equivalent to 1% of the gross national product (GNP) in low-income countries and to 1.5% and 2% in middle- and high-income countries, respectively.^{5,11,12} Although not all factors contributing to motor vehicle collisions are modifiable, many of them are. These include environmental factors such as road planning and traffic infrastructure, speed limits and the state of repair of driven vehicles, as well as human factors such as driving style and skills, state of alertness on the road, and the use of alcohol or drugs while driving.^{3,12,13}

In many low-income countries, lack of money and human resources has impeded proper action to reduce motor vehicle collisions and injuries and mortality from traffic injuries has increased rapidly.^{3,14–16} However, the declines observed in most high-income countries in traffic collisions and in road traffic injuries and deaths suggest that these problems and the resulting

morbidity and mortality can be reduced in low- and middle-income countries as well.¹⁶

Nantulya & Reich¹⁷ identified four reasons that explain why developing countries face a higher burden of motor vehicle collisions and injuries than developed countries: a proportionately higher increase in the number of motor vehicles, poor enforcement of traffic safety regulations, inadequate public health infrastructure and human resource capacity, and poor health-care services. Developing countries also have inadequate systems for collecting data on motor vehicle collisions and injuries and more fragmented response mechanisms. Consequently, both collisions and casualties are underreported.¹² Several studies conducted in low- and lower-middle-income countries have shown an association between the number of vehicles per capita and the number of motor vehicle collisions and injuries.^{3,18,19} Furthermore, in low- and lower-middle-income countries, the reliability of the data aggregated by law enforcement and health agencies depends to some extent on the nature and severity of the injuries and their outcomes.⁷ For example, police records might more accurately record fatal traffic injuries, whereas hospital data might be more reliable in tracking non-fatal injuries. It is possible that neither captures collisions involving minor injuries.

Kyrgyzstan

Located in central Asia, Kyrgyzstan is a former Soviet republic. Approximately 90% of its territory is mountainous.^{20,21} Its population of over 5.3 million²² is predominantly rural (65%) and over 30% is composed of children and adolescents. With a human development index of 0.604 (122nd among 179 countries) 2006, Kyrgyzstan is classified as a low-income developing country.^{23,24}

^a The Resource and Policy Exchange, Tashkent, Uzbekistan.

^b Department of Public Health Sciences, University of North Carolina at Charlotte, 9201 University City Boulevard, Charlotte, NC, 28223-001, United States of America.

^c Division of Health Care Services, Ministry of Health of Kyrgyzstan, Bishkek, Kyrgyzstan.

Correspondence to Michael E Thompson (e-mail: methomp1@uncc.edu).

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Table 1. Traffic collisions, deaths, injuries and cars, by year, Kyrgyzstan, 2003–2007

Year	Traffic collisions			Deaths		Traffic injuries		Cars	
	Total	Rate ^a	Fatal	No.	Rate ^a	No.	Rate ^a	No.	Per 1 000
2003	3380	67	756	897	18	4091	82	253 856	50
2004	3275	65	739	892	18	3969	78	262 428	52
2005	3717	73	725	893	17	4568	89	266 653	52
2006	3911	76	863	1051	20	4948	96	283 892	55
2007	4692	90	995	1252	24	6223	120	318 581	61

^a Per 100 000 mid-year population.

Source: Secretariat of Traffic Safety under the Commission on Ensuring Traffic Safety, 2008 (source materials available from corresponding author).

The standardized rate of death from motor vehicle collisions in Kyrgyzstan remains higher than for the region of central Asia as a whole. It increased by more than 60% between 2000 and 2005 and reached 17.43 per 100 000 people in 2006.²⁵ Kyrgyzstan's traffic fatality rates are 30 times higher than those of western Europe and three times higher than eastern Europe and Asia.¹² The increasing number of traffic collision injuries and the relatively high rate of fatalities in Kyrgyzstan have raised concern.

In 2002, unintentional injuries were the second leading cause of disability in Kyrgyzstan among males and the sixth among females.²⁶ In a 2008 interview, the head of the Department of Traffic Safety (DTS) stated that about 88% of motor vehicle collisions in the country occurred because of traffic rule violations.²⁷ Besides lack of knowledge of traffic rules, alcohol intoxication among pedestrians and drivers' impunity from prosecution were cited as contributing factors.²⁸

The Kyrgyz National Statistical Committee²⁹ reported over 208 000 privately-owned cars in 2007, equivalent to 40 per 1000 persons. Another source reported that in 2008 the number of registered cars had reached almost 425 000 after a 33% increase during the first 10 months of the year.³⁰ These more recent data, if correct, bring up to 80 the number of vehicles per 1000 persons. In the light of rising collision and injury rates and the increasing numbers of automobiles in Kyrgyzstan, public health advocates need to raise public awareness of this important issue and inform policy-makers.

This study assessed the epidemiologic data on motor vehicle collisions and injuries in Kyrgyzstan to facilitate the development of evidence-based policy for the country.

Methods

This descriptive epidemiological study of secondary data analysed motor vehicle collision and injury trends in Kyrgyzstan between 2003 and 2007 by reconciling law enforcement and medical system data. A literature review has shown that relying solely on data from law enforcement agencies may be misleading because minor collisions often go unreported. Furthermore, in remote areas lacking ambulance services, victims often seek private transport to a medical facility before a traffic officer arrives on the scene.³¹ We supplemented the official statistics with information and insights obtained through personal interviews with health and law enforcement professionals.

Two distinct national reporting systems were our sources of data for the national, regional and (where available) facility level. Law enforcement agencies report vehicle registrations, motor vehicle collisions, deaths, injuries and related demographic information by region. This information is aggregated and reported by the Department of Traffic Safety, which is housed within the Ministry of the Interior and oversees the traffic police force. The Ambulance Services Department, a unit of the Ministry of Health, reports data on the number and types of casualties (the dead and the injured) and related demographic information and on the disposition of the casualties. Hospitals and outpatients clinics, also units within the Ministry of Health, report detailed statistics on trauma victims treated at those facilities. These health services data were aggregated and reported by the Ministry of Health's Republican Medical Information Centre (RMIC). Our requests for information from private ambulance services went unanswered.

We organized and tabulated the data into a single Excel spreadsheet for descriptive and bivariate correlational analyses. In several cases, official agency data were internally inconsistent. When this occurred, we used the total supported by the more detailed categorical breakdown. Similarly, the totals for the same measure varied slightly by reporting agency, and in these cases we used the number reported by the agency with primary reporting responsibility for that statistic.

Results

Law enforcement data

According to the Secretariat of Traffic Safety (source materials available from corresponding author), under the Commission on Ensuring Traffic Safety of the Government of Kyrgyzstan, the number of vehicles in Kyrgyzstan increased by 25% between 2003 and 2007 and had reached nearly 320 000 by 2008. The number of collisions, deaths and injuries outpaced the growth in population and the number of vehicles on the road. In 2007, 4692 motor vehicle collisions were registered in Kyrgyzstan. Among them were 995 fatal collisions (21% of all collisions) that resulted in more than 1250 deaths and 6223 injured people (Table 1). These data reflect a 39% increase in the number of reported traffic collisions since 2003, a 40% increase in the number of road traffic deaths and a greater than 50% increase in the number of road traffic injuries.

According to the Department of Traffic Safety, pedestrians comprised the largest portion of those killed in motor vehicle collisions (approximately 45%), followed by passengers (approximately 30%), drivers (approximately 20%) and cyclists (2%). Passengers constituted the largest proportion of those injured

Table 2. **Traffic collisions that triggered calls to the Ambulance Service Department,^a casualties^b attended and deaths, by year, Kyrgyzstan, 2004–2007**

Year	Calls (No.)	Casualties attended (No.)	Deaths (No.)
2004	3246	3997	206
2005	3141	3944	193
2006	3000	3766	270
2007	3587	6596	328

^a Data not available from three of four private ambulance services.

^b Includes the injured and the dead.

Source: Ambulance Service Department, Kyrgyzstan, as reported by the Republican Medical Information Centre, 2008 (source materials available from corresponding author).

(approximately 45%), followed by pedestrians (approximately 35%), drivers (approximately 20%) and cyclists (approximately 1%). Adults aged 25–40 years had the highest rates of injuries and deaths. The number of traffic collisions, injuries and deaths among children (16 years old or younger) increased by roughly 35% between 2003 and 2007. Drivers were at fault in over 70% of all motor vehicle collisions and pedestrians were responsible in 20%. Motor vehicle collisions caused by drivers increased by 42% between 2003 and 2007, whereas collisions caused by pedestrians increased by 21%. The data from the Department of Traffic Safety did not demonstrate a statistical association between the number of vehicles per capita and the number or severity of traffic collisions and injuries (data not shown).

Ambulance service data

State health-care institutions typically provide ambulance services in Kyrgyzstan. Four privately-owned ambulance services operate in Bishkek and Osh, the country's two largest cities.³¹ As no reporting system exists for private sector ambulance services, only one of the private services reports data to the RMIC for inclusion in the official statistics reported here.³¹ The number of calls for service due to traffic collisions increased by approximately 10% between 2004 and 2007, whereas the number of casualties served increased by over 65% and the number of deaths recorded, by nearly 60% (Table 2). The total number of calls received annually by the ambulance service remained relatively uniform during this period and averaged approximately 480 000 calls. The number of collision-related calls and of casualties served remained relatively uniform from 2004–2006, with most of the observed increases occurring from 2006 to 2007. However, collision-

related deaths rose sharply from 2005 to 2006 and from 2006 to 2007. When we compared the number of motor vehicle collisions reported by the Department of Traffic Safety (Table 1) with the number of calls for ambulance services (Table 2), a widening gap between the two systems was noted.

Medical system data

The RMIC reported nearly 12 000 new collision-related injuries in 2007, an 18% increase over 2003 (source materials for data in this and the following paragraph available from corresponding author). Depending on the severity of their injuries, people involved in collisions are either sent to hospital or to an outpatient health-care institution known as a centre of family medicine. In 2007, nearly 62% of collision trauma patients were treated in hospitals and 38% were treated in centres of family medicine. Between 2003 and 2007, traffic-related injuries ranked fourth among causes of trauma in children 14 years of age or younger and third among those aged 15 and older. Traffic collisions were the leading cause of death from injuries among adolescents and adults and the second leading cause among children.

Between 2003 and 2007, the rate of mortality attributable to motor vehicle collisions increased by 39% and the overall case fatality rate increased by approximately 40% (from 5% to 7%). Case fatality rates at hospitals and centres of family medicine were similar but changes varied by age group. Among children the number of injuries decreased by 5% but deaths increased by 36%. The proportion of deaths attributed to motor vehicle collisions reported by the centres of family medicine increased by 36%, hospital-reported injuries by 35% and deaths by 17%. Among children 15 years of age and

younger, the number of collision-related injuries and deaths reported by the centres of family medicine increased by 59% and 96%, respectively, whereas hospital data showed 2% and 26% increases, respectively. These medical system data suggest that traumatic injuries from motor vehicle collisions have increased by nearly one third in both relative and absolute terms.

Discussion

Official data from law enforcement, ambulance and medical system sources point to a significant increase in the number of motor vehicle collisions and resulting casualties in Kyrgyzstan between 2003 and 2007. All increases outpaced the growth in population (approximately 4%) for the same period²⁹ but were in closer proportion with the reported increase in vehicle registrations. Ambulance calls did not increase in proportion with the reported increases in vehicle collisions, perhaps because of reliance on private ambulance services. Still, the number of casualties among patients transported by ambulance increased considerably, as did the number of collision-related deaths overall.

In our study, the highest casualty rates were observed among pedestrians and passengers. This finding is consistent with those of a study conducted by Razzak et al.,⁹ who analysed injuries among children under 15 years of age in Pakistan. In their study, young adults (aged 25–40 years) had the highest rates of collision-related injuries and deaths; those killed were more likely to be pedestrians and those injured were more likely to be passengers. Drivers ranked third among the casualties and the injured.

The relatively larger increase in collision-related deaths and injuries in comparison with the increase in the number of collisions could be explained in several ways. More people may have been injured per collision; collision-related injuries may have been more severe; collisions not involving injuries may have been underreported; the effectiveness of the reporting system may have changed or the quality of the trauma care provided by ambulance services may have decreased. The role of seatbelt use and of the enforcement of this and other safety measures cannot be assessed based on the data.

The increase in the number of calls for ambulance services was proportionately lower than the increase in traffic

collisions and injuries. This finding suggests that ambulance services were not accessible or were intentionally bypassed. The data do not provide insight into the underlying reasons for this discrepancy, but experience suggests that enhancing first-responder training could be beneficial.³² Although the analyses revealed no meaningful difference in fatality rates across regions or between centres of family medicine and hospitals, the data do not address the rate of preventable deaths, the degree to which patients were appropriately triaged (or self-triaged) to outpatient or inpatient facilities or the effects of access to and use of ambulance services. Correlation analyses did not suggest any relationship between rates of injury and death and population growth or the number of vehicles, either nationally or regionally. These findings are consistent with those of Garg & Hyder¹⁸ in India.

Our results should be interpreted in the light of several limitations. Official law enforcement data enumerated only reported incidents, which may not have included minor traffic collisions and injuries.¹⁰ Systematic under- or over-reporting of certain types of cases, casualties, risk factors or outcomes may have biased the results. Inconsistencies in data were identified within and across agencies. Clarifying inaccurate, missing or ambiguous data was not possible.

In addition, in Kyrgyzstan the system for documenting motor vehicle collisions and traffic injuries lacks consistency and data may be missing or ambiguous. The agencies involved in monitoring and reporting motor vehicle collisions and injuries use different reporting formats. Such factors make it difficult to compare operational data across institutions and agencies. In addition, anecdotal evidence shows that informal payments are commonly given to police officers and/or the injured party at the collision scene in exchange for not reporting minor offences.^{29,33} Such a practice, if widespread, can lead to an underestimation of less serious collisions.

Despite these limitations, our study is the first documented attempt to comprehensively analyse trends in motor vehicle collisions and injury patterns in Kyrgyzstan. By combining data from several agencies, it provides a more comprehensive assessment of the burden of traffic injuries than has so far been presented in the literature. More complete and accurate traffic injury data can better serve to raise public awareness and inform policy-makers of this increasingly important public health issue.

Conclusion and recommendations

Several general recommendations emerge from our findings and from the literature in connection with surveillance and research capacity and systems operation. First, data quality and consistency must be improved and data sharing across law enforcement, ambulance and medical service systems must be implemented and properly coordinated, as presently no single agency in Kyrgyzstan captures all traffic injuries and fatalities. Furthermore, differences in how injuries are defined, how surveillance is conducted and how motorists behave after a collision generate discrepancies in outcome estimates.

Second, more socioecological research is needed to fully understand the complex dynamics of motor vehicle collisions in Kyrgyzstan. The more expansive socioecological model, which emphasizes behavioural interventions and highlights the host as an advocate for cultural and policy change, is now being favoured over the Haddon matrix, often used in injury control.^{34–36} Differences in rates of collision and injury among regions should be examined in the light of differences in environmental factors such as topography and road infrastructure, the degree of enforcement of traffic regulations, and socioeconomic status and sociocultural patterns, including driver behaviours and attitudes. A study of perceived driving skills

and other individual-level factors may provide insight into how risky driving behaviours relate to driver education and licensure practices.

Good ambulance services are critical for reducing preventable deaths and improving the triage of trauma victims,¹⁵ and access to emergency medical services helps ensure appropriate trauma care for all. Law enforcement officers, who are the first to respond to traffic collisions, should be provided with comprehensive first aid training and emergency trauma kits. The Kyrgyz Red Crescent Society's recent efforts to train police in basic first aid should be strengthened and expanded.³⁷

In 2009 the Kyrgyz government began aggressively enforcing the use of seat belts by front-seat passengers,³⁸ but the seat belt law does not apply to children under 12 or to rear seat passengers. Safety laws targeting children need strengthening, as children are at increased risk of injury or death in collisions.

Finally, poor road design and signage, compounded by an increase in traffic volume, contribute increasingly to vehicle collisions.^{3,12} The transportation network must be periodically evaluated and adapted in the light of changes in traffic mix and volume.

In conclusion, this study adds to the knowledge base by describing the pattern of motor vehicle collisions and injuries in Kyrgyzstan and documenting the growing need to address traffic safety in the country. It also highlights the need for a comprehensive, systematic and transparent traffic surveillance and monitoring system. Further research drawing on a socioecological framework is needed to provide a scientific base for policy discussions on how best to improve road safety. ■

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ملخص

اتجاهات حوادث الاصطدام والإصابات المرورية في كيرغيزستان، 2003-2007

2007. وزادت حوادث الاصطدام، والوفيات، والإصابات بمقدار 34%، و33%، و47% بالترتيب خلال نفس الفترة. هذه الزيادة كانت أكبر من معدلات الزيادة في عدد السكان والسيارات المسجلة. وقد زادت نسبة الإصابات الناجمة عن اصطدام السيارات بمقدار 14% وزاد معدل الوفيات المتعلق بحوادث الاصطدام بمقدار 39% خلال الفترة 2003-2007. الاستنتاج ترتفع في كيرغيزستان حوادث اصطدام السيارات وكذلك عدد الإصابات والوفيات الناجمة عنها. ويتطلب عكس هذا الاتجاه المتصاعد إلى تسويق وثيق الصلة بين الوكالات المعنية وإلى نظام ترصد شامل، بجانب تحسينات ميدانية في الرعاية الطبية الطارئة، وقوانين سلامة جديدة صارمة التنفيذ، وتحسينات في البنية الأساسية للنقل.

الغرض تقييم المعطيات الوبائية حول حوادث الاصطدام والإصابات والوفيات الناجمة عن السيارات في كيرغيزستان للاستفادة منها في إعداد السياسات المرتكزة على البيانات. الطريقة جُمعت المعطيات حول إحصائيات حوادث اصطدام السيارات التي وقعت خلال الأعوام 2003-2007 من المصادر الرسمية المقدمة من قسم السلامة المرورية ومركز المعلومات الطبية الجمهوري في وزارة الصحة. وجرى تحليل المعطيات ومقارنتها مع المعطيات المستمدة من الدراسات في البلدان الأخرى المنخفضة والمتوسطة الدخل. النتائج لوحظت تغييرية كبيرة بين مصادر المعطيات. وقد تضاعفت مرتين حوادث اصطدام السيارات بسبب السائقين خلال الفترة من 2003 حتى

摘要

2003至2007年间吉尔吉斯斯坦交通事故和损伤的趋势

目的 旨在评估吉尔吉斯斯坦机动车辆碰撞、损伤和死亡的流行病学数据，从而形成以证据为基础的政策制定。

方法 从交通安全部门和卫生部共和医疗信息中心提供的官方来源处获得2003到2007年间机动车辆碰撞和损伤的统计学数据。对数据进行分析并与来自其他中低收入国家研究得出的数据进行比较。

结果 发现数据源之间存在很大的异质性。2003至2007年间由于司机造成的机动车辆碰撞增加了两倍。此间，报告的机动车辆碰撞、死亡和损伤分别增加了34%，33%

和47%。按比例看，该等增长大于人口或登记机动车辆的增长。2003至2007年间由机动车辆碰撞所引起的损伤的比例增加了14%，而与碰撞相关的死亡率则增加了39%。

结论 吉尔吉斯斯坦的机动车辆碰撞正在上升，那些在机动车辆碰撞中受伤或死亡的人数也在上升。扭转这一趋势在要求完善紧急医疗运作、出台新的和严格执行的客运安全法以及改善交通基础设施的同时，还要求相关机构间的更密切协作以及综合的监测系统。

Résumé

Tendances des accidents et des blessures de la route au Kirghizistan sur la période 2003–2007

Objectif Évaluer les données épidémiologiques sur les collisions de véhicules motorisés, les blessures et les décès au Kirghizistan afin de contribuer au développement d'une politique factuelle.

Méthodes Les données sur les statistiques des collisions de véhicules motorisés et des blessures sur la période 2003–2007 ont été obtenues de sources officielles fournies par le département de la Sécurité routière et le Centre d'informations médicales républicain du ministère de la Santé. Ces données ont été analysées et comparées aux données provenant d'études menées dans d'autres pays à faibles et moyens revenus.

Résultats Une grande hétérogénéité a été observée entre les sources de données. Les collisions de véhicules motorisés, causées par des conducteurs, ont doublé entre 2003 et 2007. Les collisions de véhicules motorisés, les décès et les blessures déclarés ont respectivement augmenté de 34%, 33% et 47% sur cette même période. Ces

augmentations étaient proportionnellement supérieures à la croissance de la population ou des véhicules motorisés immatriculés. La proportion des blessés imputable aux collisions de véhicules motorisés a augmenté de 14% et le taux de mortalité lié aux collisions a augmenté de 39% entre 2003 et 2007.

Conclusion Au Kirghizistan, les collisions de véhicules motorisés sont en hausse, tout comme le nombre de personnes blessées ou tuées au cours de ces accidents. Renverser cette tendance exigera une collaboration plus étroite entre les agences concernées, un système de surveillance global, mais aussi des améliorations opérationnelles des soins médicaux d'urgence, de nouvelles lois en matière de sécurité des passagers, plus rigoureusement appliquées, ainsi que des améliorations des infrastructures des transports.

Резюме

Тенденции в области ДТП и дорожно-транспортного травматизма в Кыргызстане в 2003–2007 годах

Цель Оценить эпидемиологические данные о ДТП и дорожно-транспортном травматизме со смертельным и несмертельным исходом в Кыргызстане, чтобы создать базу для разработку политики, основанной на доказательствах.

Методы Данные о дорожно-транспортных происшествиях и статистика травматизма за 2003–2007 годы получены из официальных источников и предоставлены Главным управлением безопасности дорожного движения и Республиканским медико-информационным центром

Министерства здравоохранения. Проведены анализ данных и их сравнение с данными исследований по другим странам с низким и средним доходом.

Результаты Отмечена значительная гетерогенность статистических данных из различных источников. В период с 2003 по 2007 год количество дорожно-транспортных происшествий по вине водителей возросло вдвое. За этот же период число зарегистрированных дорожно-транспортных происшествий, случаев смертельного и несмертельного дорожно-транспортного травматизма выросло, соответственно, на 34, 33 и 47%. В процентном отношении этот прирост превышал прирост населения или количества зарегистрированных транспортных

средств. За 2003–2007 годы доля дорожно-транспортных травм возросла на 14%, а смертельный дорожно-транспортный травматизм – на 39%.

Вывод В Кыргызстане возрастают количество дорожно-транспортных происшествий и численность тех, кто, получает в них несмертельные или смертельные травмы. Чтобы обратить вспять эту тенденцию, потребуются более тесное сотрудничество соответствующих ведомств, создание всеохватывающей системы наблюдения, оперативное совершенствование неотложной медицинской помощи, принятие и строгое соблюдение законодательства о безопасности пассажиров, а также улучшение транспортной инфраструктуры.

Resumen

Tendencias en las colisiones y las lesiones de tráfico en Kirguistán, entre 2003 y 2007

Objetivo Evaluar los datos epidemiológicos sobre las colisiones de vehículos motorizados, las lesiones y las muertes resultantes en Kirguistán para servir de apoyo al desarrollo de una política basada en la evidencia.

Métodos Los datos sobre colisiones de vehículos motorizados y las estadísticas sobre lesiones entre 2003 y 2008 procedieron de fuentes oficiales suministradas por el Departamento de Seguridad Vial y el Centro de Información Médica de la República, perteneciente al Ministerio de Sanidad. Los datos fueron analizados y comparados con los datos procedentes de estudios realizados en otros países de ingresos medios y bajos.

Resultados Se observó una marcada heterogeneidad entre las diversas fuentes de datos. Las colisiones de vehículos motorizados provocadas por los conductores se duplicaron en el periodo comprendido entre 2003 y 2007. Durante dicho periodo, aumentó el parte de colisiones

de vehículos motorizados, las muertes y las lesiones resultantes en un 34%, 33% y 47%, respectivamente. Dichos aumentos fueron proporcionalmente mayores que el crecimiento de la población o de los vehículos motorizados registrados. La proporción de lesiones atribuibles a las colisiones de vehículos motorizados aumentó un 14% y la tasa de mortalidad relacionada con este tipo de colisiones aumentó un 39% entre 2003 y 2007.

Conclusión En Kirguistán están aumentando las colisiones de vehículos motorizados, al igual que el número de personas lesionadas o fallecidas por este motivo. Revertir esta tendencia implicará una colaboración más estrecha entre las agencias pertinentes y un sistema de vigilancia completo, además de mejoras operativas en la asistencia médica de urgencias, nuevas leyes de seguridad vial que se hagan cumplir de forma estricta y mejoras en la infraestructura de transportes.

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