INTERSECTORAL CASE STUDY

REDUCING FATALITY AND SERIOUS INJURY FROM ROAD TRAFFIC ACCIDENTS THROUGH MULTISECTORAL COLLABORATION: THE NATIONAL HELMET LAW IN VIET NAM

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SUMMARY

This example outlines the formulation, implementation and monitoring of a national helmet law included as part of Resolution 32 and released by the Prime Minister of Viet Nam on 29 June 2007. It came into force as a decree on 15 December 2007. Resolution 32 is a government decree focusing on a range of road safety and traffic alleviation measures. Government employees were required to comply with the resolution from 15 September 2007. As well as requiring all riders and passengers on all types of roads to wear helmets, the new regulation substantially increased fines compared to previous regulation (Passmore et al, 2010a). The national helmet law was developed and implemented by the National Traffic Safety Committee (NTSC), established in 1897, and is duplicated in each of Viet Nam’s 63 provinces (Passmore et al, 2010a). Implementation of the law has been monitored on a number of fronts: behaviour change in terms of compliance with helmet wearing and correct helmet wearing, reduction in prevalence of head injuries among road traffic accident patients admitted to hospitals, and helmet wearing among children (Passmore et al, 2010a and 2010b; Nguyen et al, 2012; Pervin et al, 2008). Implementation of the law comprises an example of multisectoral collaboration across government agencies and was facilitated by collaboration with a key nongovernmental organization and the private sector. One partnership has resulted in three national mass-media campaigns as well as distribution of free helmets to school-aged children sponsored and funded by private companies (Passmore et al, 2010a).
1 Why the case study is of interest to policy-makers

This example is of interest in terms of intersectoral action and HiAP because the lead government agency responsible is the Ministry of Transport, and the formulation, implementation and monitoring of the legislation is the result of the work of a multisectoral committee National Traffic Safety Committee (NTSC) in place since 1997. In terms of Health in All Policies (HiAP), the incentive for action does not appear to have been to primarily or solely tackle a “health” issue per se. Instead, the focus of the overall decree is to improve road safety and provide traffic alleviation – both of which have positive health benefits if implemented effectively. In addition, “… injury prevention provides a powerful way of illustrating the health impacts of intervening on the social determinants. Intervening in this way can and frequently does yield cross-cutting benefits for a range of health and other outcomes” (Roberts & Meddings, 2010:244). Furthermore, this example is taken from a lower middle-income country setting and makes an important contribution to improving the evidence base on reducing injury through action on the social determinants, much of the evidence on which is drawn from high-income settings (Roberts & Meddings, 2010).

Of the 33.2 million registered vehicles in Viet Nam in December 2010, 95% were motorized two-wheelers, and an estimated 59% of all road traffic fatalities are motorcycle riders (Nguyen et al, 2012). A Cochrane review has demonstrated that helmet use is effective in reducing head injuries and fatalities (Liu et al, 2008; Passmore et al, 2010a and 2010b; Nguyen et al, 2012; Pervin et al, 2009). However, compliance with helmet use in low- and middle income countries, where use of motorized two-wheelers is a cheap and accessible form of transport, is low. This case is of interest to policy-makers as an example of evidence-informed policy development and implementation. Throughout the process of development and implementation in Viet Nam, attention was given to the main barriers for effective implementation of helmet use including: availability and quality of helmets suitable to the climate; removing loopholes in the legislation; and raising public awareness and changing beliefs (based on anecdotal knowledge) about the impact of helmet use, particularly among young children (0–7 years) (Passmore et al, 2010a). The example also potentially reflects an important lesson learnt in action on the social determinants of health – that of managing policy change which includes workaround approaches, ensuring strong political and sound legislative work, research and media, and having operational or strategic alliances (Blas, 2011). Finally, the example is of interest because information from three surveys/follow-up processes as part of ongoing monitoring is provided. To some extent, this has been used to adjust the programme, e.g. removing loopholes concerning wearing the helmets correctly fastened and also to inform future policy changes, e.g. increasing the financial sanctions.

2 Addressing road safety through intersectoral action and Health in All Policies

The overall approach is about improving road safety and traffic alleviation. Wearing helmets (appropriately) is considered an important contributor to reducing fatality and serious head injury, including disability from traffic accidents. Traffic accidents are the sixth leading cause of mortality in Viet Nam (WHO Regional Office for the Western Pacific, 2011). Implementation of a demonstrated effective policy measure, such as appropriate helmet use, is therefore an important preventive measure, which could potentially reduce costs – to those injured, their families and the health system itself. Furthermore, a review of the global evidence on road traffic deaths identified that about 90% of deaths are in low- and middle income countries, the poor get hurt more often than the rich, and the differentials in progress in reducing road traffic fatality rates between high-income countries and low- and middle income countries reflect a steep inequity between countries (Roberts & Meddings, 2010). After the country enacted a motorcycle helmet law in 2007, the helmet-wearing rate jumped from below 30% to over 95%. This change alone was estimated to have saved more than 1500 lives and prevented almost 2500 serious injuries (WHO and Global Road Safety Partnership, 2012). In terms of early child development, the risk of serious head injury and its impact on life chances can be reduced by improved wearing of helmets from the beginning,
i.e. from birth or whatever age the child passenger is. The Deputy Prime Minister Nguyen Xuan Phuc declared 2012 as National Traffic Safety Year. The year focused on raising traffic awareness in people, reducing traffic congestion and preventing illegal motor racing. As part of this the NTSC proposed a programme to mobilize the entire population to participate collectively to improve safety on the roads (Xuan & Nguyen, 2011). In Viet Nam the motorcycle is the primary mode of transportation, and children are the most vulnerable passengers while riding with their parents because of the widespread lack of helmet use. Annually, traffic crashes kill 4200 children in Viet Nam alone (AIPF, 2013b). The issue of the cost of purchasing a helmet for school children has therefore been addressed as part of the programme. From an economic and development perspective, motorized two-wheelers provide the main form of motorized transport in Viet Nam, enabling people to get to work easily. Men are at increased risk of traffic injuries as are those who travel outside motorized vehicles (Roberts & Meddings, 2010). Increased protection through appropriate helmet use in going to and from work, especially where the main income earner is the primary user of the motorcycle, is important. This can potentially reduce the costs to the state and families from the socioeconomic consequences of serious injury, and particularly head injury from road traffic injuries, including loss of income and ongoing social and health-care costs.

3 Key activities and processes

Viet Nam has had a history of helmet legislation since 1995, followed by amendments in 2000, 2001 and 2003. However, enforcement of the legislation was challenging, and the law only required helmet use for drivers and passengers on specific national or provincial roads (Nguyen et al, 2012). The 2007 law signed by the Prime Minister required all riders and passengers to wear helmets on all roads without exception and increased the penalties for non-compliance to 10 times higher than previously (US$ 6.25– US$ 12.50). In the lead up to implementation of the legislation on 15 December, 50,000 helmets were distributed to low-income families nationwide (Passmore et al, 2010a). However, several loopholes were identified not long after introduction of the legislation, including: the law made no reference to the correct/safe use of wearing the helmet, i.e. it had to be correctly and securely fastened; and existing legislation prevented children under 16 years of age from being fined; and adults carrying the children as passengers were not financially responsible. These legislative loopholes have subsequently been or are being progressively addressed (Passmore et al, 2010a):

› Decision 4 (the responsible authority is the Ministry of Transport) strengthened the provisions for quality assurance inspection of helmets to ensure they meet national standards (28 April 2008).
› Circular 23 (the responsible authority is the Ministry of Public Security) confirmed that an unfastened helmet was considered non-wearing from an enforcement perspective (14 October 2008).
› Law 23 (the responsible authority is the National People’s Assembly) mandated that all riders and passengers must wear and fasten helmets, i.e. “appropriate” helmet use (2008 with effect from 1 July 2009) (Passmore et al, 2010a).
In terms of sectoral responsibilities and tasks, the NTSC had overall responsibility for getting all details of the helmet law cleared including collaborating and consulting with provincial networks to ensure nationwide implementation and reporting both progress and any barriers to the Prime Minister. There is an NTSC in all 63 provinces in Viet Nam. The Committee also established partnerships with bilateral and multilateral agencies, nongovernmental organizations (e.g. Asia Pacific Injury Foundation or AIPF) and private companies (e.g. FedEx, UPS) to facilitate international assistance in achieving the national road safety objectives. In terms of specific sectoral roles or contributions by government agencies, the following ministries were responsible for the indicated tasks:

- drafting the legislation – Ministry of Transport
- enforcement of the legislation – Ministry of Public Security
- hospital surveillance – Ministry of Health
- school based safety programmes – Ministry of Education and Training
- social marketing – Ministry of Culture and Information (Passmore et al, 2010a).

Passmore et al (2010a) note that implementation of previous helmet laws had been less effective because the helmets that met quality standards were not suitable to the tropical conditions of Viet Nam – heavy, full-face helmets called “rice cookers”. The standards were amended in 2001 to allow for a lighter helmet more suitable to a tropical climate but still providing a high degree of impact protection. Despite this, there are ongoing issues with the quality of helmets on the market, with a 2008 finding that up to 80% of helmets did not meet national standards (Pervin et al, 2009). As part of an ongoing effort to improve quality of helmets on the market, the Vice Chairman of the NTSC announced that stricter penalties would be imposed on both sellers and drivers for sale and use of helmets that do not meet national safety standards. The increased penalties take effect from mid-2013 and are preceded by a month-long media programme to raise people’s awareness of the need to purchase and use helmets that meet the national safety standards. This awareness programme is piloted in the major cities before being rolled out nationwide (Dtinews, 2012).

The AIPF has had the “Helmet for kids” (HFK) programme in place since 2000 and currently implements the programme at 32 schools nationwide. As well as providing free helmets for kids, the programme incorporates helmets into the school curricula – effectively making helmets part of school uniforms. It also involves teacher and student training, public/media and corporate awareness and partnerships, and monitoring and surveillance (AIPF, 2013a and 2013b). In January 2013, AIPF in launched a HFK programme in four high-risk schools in Ho Chi Minh City sponsored by the UPS Foundation. The four schools are in close proximity to high-risk roads, and of the children wearing helmets, most are of substandard quality (AIPF, 2013a). Furthermore, WHO, AIPF and the United Nations Children’s Fund have used the media and provided training workshops for senior officials and national legislators as part of this sustained advocacy effort to improve the wearing of helmets among children and to counter the myths about the dangers of helmet wearing (Pervin et al, 2009). As part of their advocacy and legislative work, AIPF has contributed to the development of the Region’s first motorbike helmet standard for children: TCVN:6979–2001 with Viet Nam as only one of only three countries in the world to have a child helmet standard (AIPF, 2013a and 2013b).

4 Monitoring and evaluation

There was increased policing as part of implementation of the law, and in 2008 this resulted in 680 000 infringements being issued for non-helmet wearing (Passmore et al, 2010a). While this is not an ideal measure of positive impact, because it reflects infringements, it does indicate a change in practice and behaviour in the longer term.

In addition, three studies have been undertaken looking at the impact of the legislation including: (1) compliance/behaviour change with the legislation by both driver and any passenger; (2) head injuries
among road traffic injury patients admitted to hospital; and (3) children (0–14 years). The first was an observational cross-sectional study on a random sample of 38 roads in three provinces in Viet Nam. It provides pre- and post-intervention data with a total of 665 228 motorcycle riders and passengers observed between November 2007 and February 2011. Before the law was introduced correct helmet wearing averaged 40.1% and 92.5% although there were significant differences between the time points and locations. Despite the limitations of the study (e.g. the observation sites may not be representative of the road network, and observations were only done in good weather), a significant positive impact was measured by correct helmet wearing of drivers and passengers six months after the introduction of the legislation in December 2007. This improvement was largely sustained in subsequent observations over the next 2.5 years (Nguyen et al, 2012).

In terms of health impacts, the Office of the WHO representative in Viet Nam, the Ministry of Health Viet Nam and the Department of Planning in Viet Duc Hospital undertook a before-and-after study of all road traffic injury patients with head injuries admitted to 20 provincial and central hospitals – three months before and three months after the law came into effect in December 2007. They found a 16% reduction in risk of road traffic head injuries and an 18% reduction in the risk of road traffic deaths (Passmore et al, 2011b).

The third study assessed the impact of the helmet law on children (0–14 years), given that they are less likely to wear helmets than adults and given the knowledge on erroneous public perceptions about the harm to children from wearing helmets. For this study, roadside and random population surveys were undertaken in Hanoi, Ho Chi Minh City, Can Tho and Da Nang cities during April 2008. A total of 4189 respondents were surveyed with equal distribution between sexes and three age groups. Approximately 44% of respondents had children. A total of 18 734 roadside observations were made with observers estimating the age of children and noting the use of helmets among children aged ≤ 7 years, 8–14 years, and ≥15 years. There were significant variations in helmet use between adults and children – that for adults ranged from 90%–99% across the four cities and that for children ranged from 15%–53%. With children there was variation across the groups, with 15%–53% of children aged ≤ 7 years wearing a helmet and from 38%–53% for children aged 8–14 years. In the population surveys, an average of 82% of the parents surveyed agreed that helmets were safe for children 2–14 years and 61% that children should wear them when travelling on a motorcycle. Yet the observations do not support this belief, suggesting that the population surveys may reflect a socially desirable response and not actual behaviour.

Parents were surveyed about reasons for not making their child wear a motorcycle helmet – including perceived risk of neck injury from the weight of the helmet, that an accident was unlikely, the helmet’s cost and other reasons. For all three age groups (child < 6 months, child 6 to < 24 months, child 2–14 years), the most consistent reason was the risk of neck injury with this decreasing with increasing age of the child (67.1% for child < 6 months, 60.3%, then 46%). Cost was not a significant reason across the three age groups. This highlights the need for ongoing advocacy and awareness-raising campaigns on road safety and using a helmet for children to counter the myth about neck injury (Pervin et al, 2009). A concerted and sustained effort has been made to counter this myth, including increased use of the media and providing training workshops for senior officials and national legislators. A key challenge in measuring the impact for children is that age disaggregated data on fatalities and head injuries has only been available since May 2008 (Pervin et al, 2009).

5 Country context – socioeconomic, health and social protection system

In 2009 Viet Nam had an estimated population of just over 86 million and a declining fertility rate. Life expectancy at birth was 70.2 years for men and 75.6 years for women. There are 54 different ethnic groups in Viet Nam, with the Kinh representing 87% of the total population. Rural-to-urban migration is ongoing (WHO Regional Office for the Western Pacific, 2011).
Viet Nam is a socialist republic and a one-party state governed by the Communist Party. The National Assembly is the highest representative body of the people and the only organ with constitutional and legislative powers. There was strong economic growth in the first nine years of this century with the gross domestic product per capita increasing from US$ 400 in 2000 to US$ 1064 in 2009. In addition, the poverty rate has been in decline, down from 58.1% in 1993 to 14.5% in 2008. Spending in the environment sector has improved, however in addition to natural disasters, human-made and technological hazards are an increasing threat to population health, including road traffic accidents (WHO Regional Office for the Western Pacific, 2011).

Among the key challenges identified for health systems strengthening in Viet Nam and relevant to this example are: achieving better coordination among ministries and across departments in the Ministry of Health and among partners; strengthening the public health agenda to address the incomplete agenda of infectious diseases and the problems brought about by urbanization, changing lifestyles and an ageing population; and improving the enforcement of regulations and speeding up the implementation of public administrative reform. The health system is a mixed system of public-private providers, where the private sector mainly provides outpatient care. The public sector is key in health care, namely inpatient care and policy, prevention, research and training. In the public sector there are 783 general hospitals, 144 specialized hospitals and 11 636 primary health centres. There are five levels in the health-care network – central, provincial, district, commune and village levels. At the district and commune levels a grass-roots health-care network has been established (WHO Regional Office for the Western Pacific, 2011). At the national/central level of government, the protection and promotion of health are addressed through national health programmes, such as those on road safety or injury prevention. Key health policy and strategic documents for Viet Nam are: the Ten-Year Socioeconomic Development Strategy, the Comprehensive Poverty Reduction and Growth Strategy, and the National Strategy for People’s Health Care 2001–2010 (WHO Regional Office for the Western Pacific, 2011).

6 Interesting themes and emerging issues

Passmore et al (2010) identify political leadership, intensive advanced public education and stringent enforcement as contributing to the successful implementation of the law in Viet Nam (Passmore et al, 2010a). The NTSC had been established for over a decade by the time the 2007 legislation was introduced. The structure of the committee – it is led by the Ministry of Transport, reports to the Prime Minister and is truly multisectoral, i.e., having 15 other government agencies – is an important feature in relation to HiAP and the political processes required. The importance of such a high-level committee is echoed in a more recent paper about building capacity for implementation of the WHO Framework Convention on Tobacco Control in Viet Nam. The framework focuses on multisectoral action to reduce tobacco use. One of the findings was that while the lead committee, the Viet Nam Steering Committee on Smoking and Health, VINACOSH, was located within the Ministry of Health, it was seen as a subordinate entity with limited capacity to engage other ministries at a sufficiently high level to influence other ministries likelihood to adopt tobacco-related policies. This changed when the Ministry of Health officially designated VINACOSH as a separate office for tobacco control with its own stamp/government seal and budget (Stillman et al, 2013).

One of the processes that is briefly covered in the available literature on the helmet law is that, as part of the 2007 legislation, the Government required all government employees/civil servants to wear helmets three months before the law came into effect nationally (15 September 2007). This amounted to approximately 4 million people (Passmore et al, 2010a), and was therefore a significant opportunity to change attitudes and beliefs about helmet use by “leading by example”.

WHO notes, “Road traffic injuries cause considerable economic losses to victims, their families, and to nations as a whole. These losses arise from the cost of treatment (including rehabilitation and incident
investigation) as well as reduced/lost productivity (e.g. in wages) for those killed or disabled by their injuries, and for family members who need to take time off work (or school) to care for the injured...

National estimates have illustrated that road traffic crashes cost countries between 1%–3% of their gross national product, while the financial impact on individual families has been shown to result in increased financial borrowing and debt, and even a decline in food consumption” (WHO, 2012). Introduction of the road safety and traffic alleviation initiative, including the helmet law in Viet Nam, is therefore an important example of maximizing the linkages between economics, health and well-being, and potentially averting or reducing the negative economic costs and consequences from increasing use of motorcycles as the major form of transport for daily activities.

Linked to the first theme and the findings by Passmore et al (2010), this multisectoral initiative has built capacity for HiAP within Viet Nam and across ministries. As well as setting up a high-level multisectoral committee lead by the Ministry of Transport, a deliberative effort has been made to learn from previous experience and consider the potential barriers to introducing what is an evidence-informed intervention. This was reflected in the studies of different impacts following the introduction of the legislation, which observed behaviour in relation to helmet use, as well as seeking public opinion about helmet use. As such the policy has been continually adjusted and fine-tuned to improve the potential benefits to be realized through effective implementation of the law. This has required strong collaboration among all participating agencies, including the multilateral and bilateral agencies and nongovernmental organizations. A specific example is the provision of training workshops for senior officials and national legislators about the importance of child passengers wearing a helmet and the evidence in support of this (Pervin et al, 2009).
References


VINACOSH (2013). *The Viet Nam Steering Committee on Smoking and Health, VINACOSH*. Hanoi: Viet Nam Steering Committee on Smoking and Health.


