

A comparative analysis of homicides committed with knives and firearms after introducing legal restrictions

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Abstract: Montenegro was one of those countries with liberal approach to the firearm ownership, which had high rates of firearms-related deaths. In the last 10 years alone, the number of homicides in Montenegro has increased from year to year, reaching its peak in 2007. A new Montenegrin law on the restriction of carrying firearms was introduced at the beginning of this same year, stipulating that firearms are only permitted to be held in homes and can only be brought off from homes with police permission. After the introduction of the new law, a significantly decreased rate of firearm homicides was noted ($Z_i=3.007$, $p<0.000$), but the number of knife-related homicides increased significantly ($Z_i=1.994$, $p<0.05$). While rapidly successful in its aims, this new law has generated a new problem: an increase in the number of homicides committed with a knife.

Key Words: legal intervention, firearm, violence, homicide.

The availability of firearms at aggregate levels is a risk factor for suicide and homicide. Countries with liberal approach to the firearm ownership, have high rates of firearms-related deaths and viceversa. [1,2] An Austrian and an Australian study showed evidences that the introduction of restrictive firearm legislation effectively reduced the rates of firearm deaths. [3,4]

Lying on the Adriatic coast, the small state of Montenegro (600.000 citizens) is historically and culturally recognized as a country that worships firearms. This perhaps arised as a consequence of its centuries-long war against the Ottoman Empire; indeed, even though now it is more of a touristic oddity, Montenegro's traditional national costume comes supplied with two pistols. The country's cult of firearms has been preserved even to this day and has often proved itself to be a contributing factor to its high percentage of homicides and suicides involving firearms.

In the last 10 years alone, the number of homicides in Montenegro has increased from year to year, reaching its peak in 2007 (Figure 1). A new Montenegrin law on the restriction of carrying firearms was introduced at the beginning of this same year, stipulating that

firearms are only permitted to be held in homes and can only be brought off from homes with expressed written permission from the police. As knives are also subject to legal restriction in Montenegro (where the law restricts the carrying of knives with blades longer than 8 cm), the effects of this new law on firearm restriction have herein been studied by comparing firearm and knife homicides in Montenegro before and after the law change.

This analysis was performed by using autopsy data from the Department of Forensic Medicine, Clinical Centre of Montenegro, from 2002 to 2011. Firearm and knife-related homicides were divided into two groups: those committed 5 years prior to the firearm restriction (2002-2006) and those 5 years after (2007-2011). Distribution as well as the length of the knife blade used were also reviewed and the data obtained was analysed by an non-parametric Z test of proportion.

Prior to the new law, 108 homicides occurred from 2002-2006, 76% of which were committed by use of a firearm, and 21 % by use of a knife (Figure 2). For this time period, the average length of the knife blade used was recorded as 9.5 cm (SD 3.6).

After the introduction of the new law, 98 homicides occurred, 56% of which were committed by

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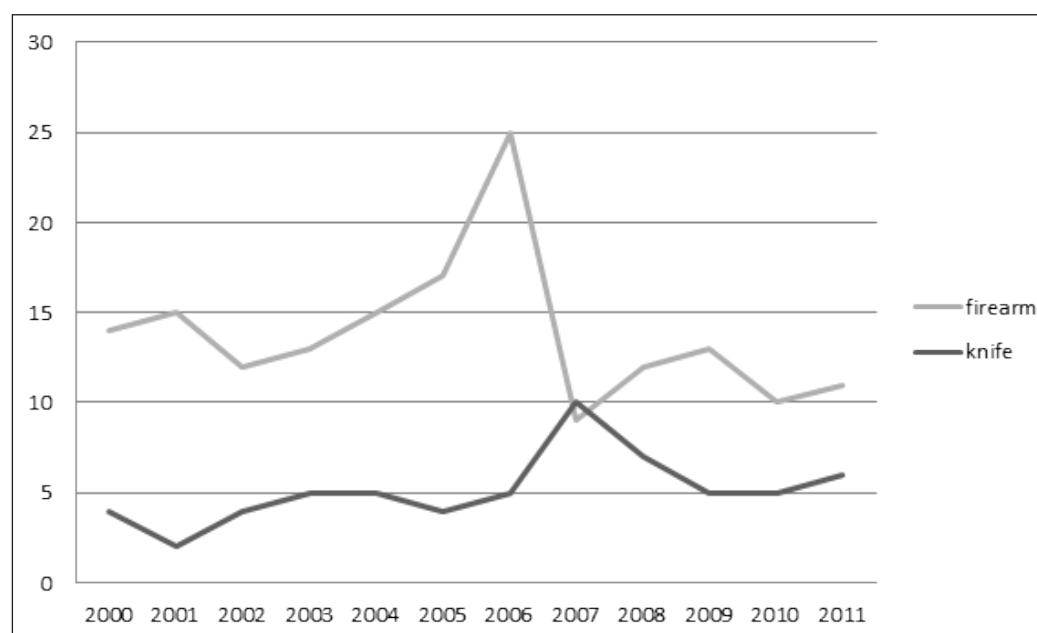


Figure 1: The Number of Homicides in the Last 12 Years.

use of a firearm, a significantly decreased rate ($Z_i=3.007$, $p<0.000$). There was also an obvious decrease in the number of firearm homicides (from 82 to 55). The number of knife-related homicides was 33% of the total number of homicides, representing a significant increase in the overall rate of knife homicides ($Z_i=1.994$, $p<0.05$), (Figure 1). In addition to this fact, the average length of the blade for a knife in this group was 7.4 cm (SD 2.5).

Montenegro's problems related to its high percentage of firearm homicides were recognized and remedied by further restriction on carrying firearms. This seems to be better approach in reducing firearm homicides rate than firearm background checks in purchasing, since we noticed a decrease of homicides for 33%, while Sumner et al. reported a decrease for 22%[5].

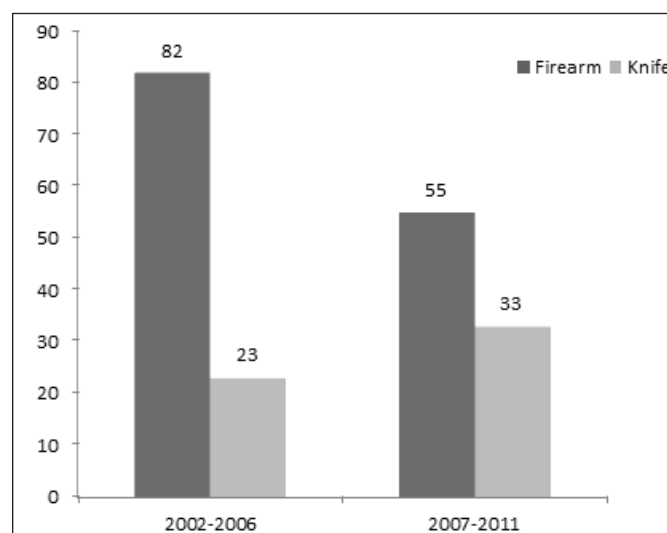


Figure 2: The Number of Homicides in Respective 5-year Periods.

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