MEDICAL CARE COSTS OF INTRAFAMILY ASSAULT AND HOMICIDE*

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In one sense, my contribution to this panel can be fulfilled by a minute or two of simple arithmetic.

In 1976 the Joint Economic Committee of Congress published a report on the cost of crime. They estimated the total cost at $44 billion dollars per year. They also provided cost estimates for specific crimes, including homicide. The Joint Economic Committee arrived at an estimated annual cost of homicide of $3.6 billion dollars. These figures can be used to provide a current estimate of the cost of intrafamily homicide.

First, the 1976 figures need to be doubled to allow for inflation. That would make the current cost estimate for all homicides 7.2 billion dollars. Second, since the most recent statistics—those for 1984—indicate that 24% of all homicides involved victims and offenders who were members of the same family, a rough estimate of the 1984 cost of intrafamily homicide is 24% of the total cost, of $1,730,000,000. The estimate of $1,730,000,000, however, can be highly misleading. First, all such cost estimates are necessarily based on a series of highly questionable assumptions. An even more important problem comes from taking the death and the incidents immediately surrounding the death as the starting point for the cost-analysis. More specifically, although the focus of this panel is on the cost of homicide, it is misleading to begin the cost accounting with the death or with the immediately preceding hospitalization. That would be similar to beginning to

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calculate the cost of cancer deaths with the terminal hospitalization and excluding all expenses before that.

Following this line of reasoning, the most appropriate method to calculate the cost of homicide is to regard homicide deaths as the final outcome of a "disease" called violence because, in almost every case, there is a prior history of injuries from this "disease." Therefore, the contribution I want to make to our understanding of the cost of homicide is to estimate the number of people injured seriously enough at the hands of a spouse or parent to require medical care. I leave the translation of the injury and medical care dollar costs to those more familiar with medical economics.

INJURIES FROM SPOUSE ABUSE

The only data on injuries inflicted as a result of an assault by another family member come from research on abused wives. A study of emergency room patients is summarized in my paper elsewhere in this volume, as are two epidemiologic community surveys. I shall describe the two surveys in slightly greater detail because they are the main basis for the estimates which will be presented later. Since these studies use different methods and were done in different parts of the country, it is not surprising that rates differ. However, all three result in injury estimates that are likely to seem outrageously high. Despite this impression, to the extent that these estimates are incorrect, they are probably underestimates.

Kentucky survey. A study of a representative sample of 1,793 women in Kentucky found that one out of 10 women had been physically assaulted by their partners during the year. These 179 women reported 882 assaults (which ranged from "minor violence" such as pushing, slapping and throwing things, to severe violence such as punching, kicking and attacks with a knife or gun), including 79 assaults serious enough to require medical attention.

There are various ways of generalizing these figures to estimate the de-

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*Two qualifications of this statement are necessary. Although most homicides are the culmination of a long-standing pattern of violence, the opposite is not the case. Most instances of intrafamily violence, even those involving assaults which result in an injury that requires medical treatment, do not end in homicide. I use "disease" only as a metaphor, and even then only because these remarks are addressed to a medical audience. A more accurate description would be to say that, with relatively few exceptions, homicide reflects a long-standing pattern of behavior. The public health significance of intrafamily violence and homicide does not arise because of biological causes (which is rarely the case) but because these phenomena increase morbidity and mortality rates.

**For convenience I shall use wife and wives, and husband and husbands to refer to a cohabiting partner, including both those who are legally married and those who are not. Available evidence indicates that violence occurs with cohabiting relationships in a pattern similar to that in married couples.
mand for medical resources deriving from spouse abuse. Since each method depends on a series of assumptions, and since there is no way of determining which is the more valid method, I present the simplest of the methods. This method divides the 79 instances which required medical attention by the 1,793 women, and results in an annual incidence rate of 4.4 injuries requiring medical attention per 100 married women. Fifty-nine percent of these were emergency room visits, and 7% were hospital admissions.

Texas survey. A study of 1,210 women in Texas found an abuse rate of 8.5%, or 103 women, of whom 12 (10.7%) were injured seriously enough to require medical treatment. This results in an injury rate of 12/1210, or approximately one percent of married or cohabiting women.

INJURIES FROM CHILD ABUSE

As far as I have been able to determine, there are no studies of child abuse comparable to the study of women emergency room patients or comparable to the two surveys described above. Consequently, the following estimates are extrapolations based on the child abuse rate found in study of a nationally representative sample of 2,143 families. That study found that 14% of American children are seriously assaulted each year by a parent.* Applying this rate to the approximately 63 million children in the United States in 1982 results in an estimate of approximately 8.8 million children who are seriously assaulted each year.

Fortunately, children can withstand a great deal without being physically injured. So most of these children who were kicked, punched, bitten, etc. were not injured seriously enough to require medical attention. Richard Gelles and I are now studying a nationally representative sample of 5,000 families, with one objective being to estimate the proportion who require medical attention as a result of these assaults by parents. In the meantime, for purposes of this paper, a crude estimate of the injury rate can be calculated by assuming that since the percentage of children who are seriously assaulted (14%) is somewhat similar to the percentage of wives who are assaulted (estimates range from 8% in the Texas study, to 10% in the Ken-

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*These data were obtained using the Conflict Tactics Scales. This instrument is designed to obtain information on how frequently the parent used each of a list of violent acts, starting with minor violence such as pushing, slapping, shoving and throwing things at the child. The acts of "minor violence" are not included when determining the child abuse rate. The rate of 14 per 100 children is based on the occurrence of kicking, punching, hitting with an object, biting and stabbing or shooting. If hitting the child with an object is excluded because many parents consider the use of a belt or hair brush to be normal physical punishment, the rate is much lower, but still extremely large—3.5% or 2.2 million children per year. See Straus, Gelles and Steinmetz for details.
THE KENTUCKY STUDY, TO 12% IN THE STRAUS, GELLES AND STEINMETZ STUDY), THE INJURY RATE FOR CHILDREN WILL ALSO BE SIMILAR. SINCE THE INJURY RATE FOR THE KENTUCKY AND TEXAS STUDIES ARE 4.4% AND 1%, WE SHALL USE THE MEAN OF THE TWO, WHICH IS 2.7%.


eSTIMATED NEED FOR MEDICAL CARE

Continuing with the assumption that the best available estimate of the rate of injuries requiring medical attention is 2.7 per 100 women and 2.7 per 100 children, we can estimate the number of people involved.

Number of wives needing medical care. There were 53,831,000 married women in the United States. Multiplying this number by the rate of 0.027 produces an estimate of 1,453,437 medical visits per year to treat injuries resulting from an assault by a spouse.

Number of husbands needing medical care. Although the injury rate for husbands is almost certain to be lower than that for wives, it is by no means negligible. One indication is the fact that about one third of the spouses killed by a partner in 1984 were husbands. Another indication that a smaller but still sizable number of husbands are injured by their spouses are the results of epidemiological survey data on nonlethal marital violence. These studies have repeatedly shown that, in contrast to their nonviolence outside the family, wives engage in numerous violent acts against other family members. However, no study to date has attempted to gather data on the injuries that occur as a result of these attacks. Consequently, for purposes of these cost estimates, I assume that injuries to husbands that require medical treatment occur in the same one to three ratio as murders of husbands. Therefore, a crude estimate of the number of husbands needing medical care as a result of an assault by a spouse is: .33 1,453,437=479,634 husbands injured per year.

Number of children needing medical care. There were 62,811,000 people under age 18 in the United States in 1982. Multiplying this number by the rate of 0.027 produces an estimate of 1,695,897 medical visits per year to treat injuries resulting from an assault by a parent on a minor child.

Total number of family members needing medical care. Combining the 1,453,437 wives, 479,634 husbands and 1,695,897 children produces an estimate of 3,628,965 people each year who need medical attention as a result of an assault by a family member.

Amount of care needed. As I mentioned earlier, the Kentucky study found that 59% of the instances in which medical treatment was needed were emer-
Emergency room visits, and 7% were hospital admissions. Applying these figures to the estimated annual 3.6 million injuries suggests that intrafamily violence requires about 1,234,000 office visits, 2,141,000 emergency room visits and 254,000 hospital admissions lasting a day or more. This, of course, is in addition to the medical care needed by the 4,408 family members who were injured seriously enough to die.

Long-term health care needs. Another medical cost not included in these figures is the effect of physical abuse on the long-term health of children, not just the immediate injury. Moreover, these adverse effects begin before birth because there is evidence that the probability of a woman being assaulted by her husband increases during pregnancy.2

What Do The Numbers Mean?

It is hard to know how to evaluate these estimates of medical care needs and how to translate them into dollar cost estimates. I leave the latter to medical economists better equipped for that task. In addition, as other speakers have pointed out, many nonmedical costs have to be considered. These include police services (a large proportion of police calls are for “domestic disturbances”); social services, including the cost of child abuse investigations and remedial actions; legal costs, divorce, children who become trained in violence as a result of growing up in a violent home9,10 and the cost of the violence and other crimes committed by such children during their childhood and as adults, and finally the cost of imprisonment or other institutionalization that occurs at a much higher rate for victims of intrafamily violence than for the population at large.**

Acknowledgment

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*There are reasons to think that the true figures are greater than those presented. For example, since the starting data are from self-reports of violent acts within the family, there are sound reasons for believing that not all such acts were disclosed.11 Another reason is that the estimation method gives equal weight to the Texas and Kentucky incidence rate figures, but the technical quality of the Kentucky survey suggest that the higher Kentucky figure may be more accurate.

**Evidence strongly suggests that intrafamily violence has major adverse effects on mental health. Carmen, Rieker and Mill,1 for example, report that almost half of a sample of 188 psychiatric patients had histories of physical or sexual abuse at the hands of another member of their family. However, this study (and all other studies we have so far located of mental health consequences) lacks a case-control comparison group.5
REFERENCES


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