

Is There a Link Between Health and Later Criminality?

Several physical and psychiatric characteristics are thought to be related to later criminal activity. The preliminary findings of a recent study found a relationship between criminal involvement and contact with health agencies for behavioural and emotional problems. Contrary to past research, the findings do not support an association between physical illness and juvenile involvement in crime.

The study by the Regional Psychiatric Centre (Prairies) of the Correctional Service of Canada and the Department of Psychiatry of the University of Saskatchewan examined physical and psychiatric childhood characteristics that may lead to future delinquency. Specifically, the study looked at the type and number of contacts children had with health service agencies and their link with subsequent delinquent involvement.

A review of the few studies that have focused exclusively on health factors and their link to future criminality suggests that five major factors are related to subsequent criminal behaviour: perinatal difficulties (problems at about the time of birth), epilepsy, head injuries, child abuse and psychiatric diagnoses.

The findings of past research have been inconsistent. For example, some studies link aggressive, assaultive behaviour in delinquents with a history of abuse during childhood. However, other research contradicts this finding, reporting that emotionally and physically abused children will be withdrawn, placid and docile, rather than aggressive.

Overall, the literature suggests that criminal behaviour is not the result of one particular medical problem but of a combination of interrelated factors.

For example, the series of studies by Dorothy Lewis and associates suggests that the interaction of medical problems throughout childhood (particularly head injuries), a history of abuse and a record of psychiatric diagnoses are associated with delinquency.

The present study compared the health histories of a group of young offenders and a control group of non-offenders. The two groups were matched on age, gender, ethnicity and area of residence.

The group of 2,280 young offenders was selected from records supplied by the provincial (Saskatchewan) department of social services. This group consisted of young offenders processed through the Young Offenders Program Division who were 17 years of age in 1987 or 1988. The control group of non-offenders was obtained through the provincial Health Insurance Registration File computer program.

There were more males than females in the total sample. Each group (delinquent and non-delinquent) consisted of 1,828 (80.2%) males and 452 (19.8%) females. Ethnicity was indicated simply as "Registered Indian" or "other." Approximately one quarter of each group was Registered Indian and three quarters was "other."

Extensive health histories of the subjects were reconstructed by "linking" data on hospital discharges (in-patient data), physician billings (out-patient data) and mental health services (mental health contacts)

from a number of the Department of Health agencies. Various coding systems, but primarily the International Classification of Diseases (Eighth and Ninth Revisions), were used to record these histories.

The study focused on five health categories: trauma to the central nervous system, perinatal problems, psychiatric contacts, indicators of child abuse and a general history of illness. Each instance of health service use was referred to as one "contact." Hospital Contacts (In-patient Data) Between 1969 and 1987, there was little difference in hospital contacts by the offender and non-offender groups. Each group accounted for approximately half of the total number of hospital contacts.

It is interesting to note that while Registered Indians accounted for 45.5% (n=6,941) of hospital contacts, this group represented only 6.8% of the province's total population.

Following Lewis's suggestion that accidents and injuries, as possible indicators of abuse, are more prevalent in young offenders, health contacts for injuries and poisonings were investigated. Contrary to Lewis's findings, little difference was found between the two groups in the number of these types of contacts. It should be noted, however, that abuse is generally extremely difficult to measure.

Mental disorders was the only health category that showed any significant difference between the two groups. Here, between two thirds and three quarters (depending upon which instrument was used to code the information) of all hospital contacts for mental disorders were made by the offender group. Upon closer examination of the data, however, we see that the most apparent differences in the number of contacts between the two groups were found in contacts for behavioural and emotional problems, such as adjustment reaction (coping poorly with a stressor), conduct disturbance and emotional disturbance.

Hospital contacts for alcohol- and drug-related problems were also more prevalent among offenders. This group accounted for all hospital contacts for alcohol dependence and three quarters of contacts for drug abuse. Physician Billings (Out-patient Data) As with hospital treatments, there was an almost even split among offenders and non-offenders in the total number of out-patient contacts with physicians. (Registered Indians accounted for 27.8% of these contacts, an amount not as disproportionate as the number of hospital contacts found among Registered Indians.)

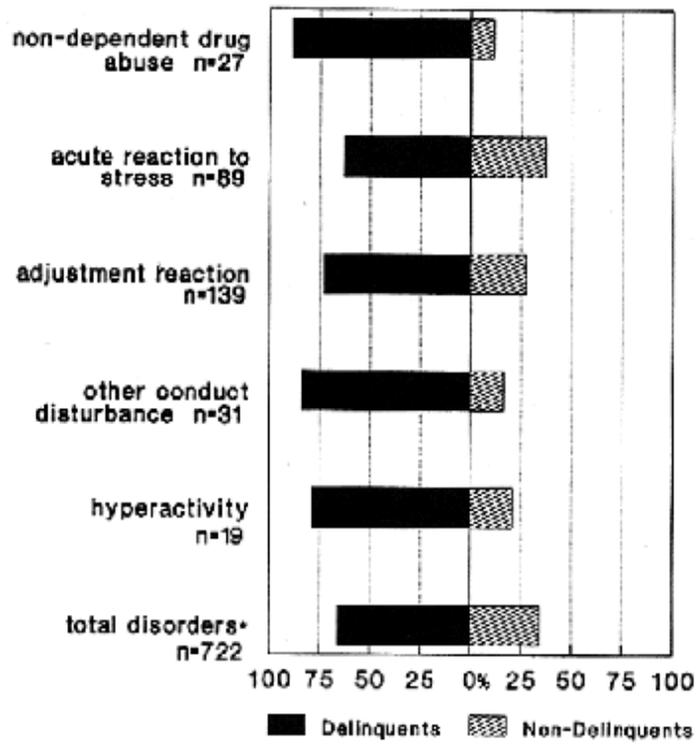
As with the in-patient data, there was virtually no difference in the types of contacts between the offender and non-offender groups. But again, the single category with the greatest difference between the two groups was mental disorders. Of the 4,924 out-patient contacts for mental disorders, 63% were by offenders and 37% by non-offenders. The data presented in the study do not allow a closer examination of these "mental disorders." It may well be that, as with the hospital contacts, the differences between offenders and non-offenders were mainly in the area of behavioural and emotional problems, and not in the more traditional categories of mental disorders. Mental Health Contacts As the previous in-patient and outpatient data indicate, offenders and non-offenders showed distinct differences with respect to mental disorders. Information was also taken from the Saskatchewan Mental Health Services Branch, an agency dedicated specifically to the treatment of mental disorders. These data also indicated that offenders had significantly more contacts than non-offenders for behavioural and emotional problems.

As seen in the figure, some of the greatest differences were found in such specific categories as non-dependent abuse of drugs, adjustment reaction (coping poorly with a stressor), conduct disturbance,

hyperkinetic syndrome (hyperactivity) and acute reaction to stress.

Figure 1

**Contacts with Mental Health Services
by Select Behavioural/Emotional Problem**



*Only select diagnoses are listed here. However, the figures for "total disorders" include all diagnoses presented in the original research.

Furthermore, of the total number of contacts for drug and alcohol abuse (n=78), approximately 81% were by offenders and 19% by non-offenders. This is consistent with the literature, which finds that young offenders are more likely to be regular users of drugs and alcohol. Conclusion This study found little evidence of an association between physical ill health and juvenile delinquency. However, a correlation was found between criminal involvement and contacts with health service agencies for emotional and behavioural problems.

It was also found that young offenders were diagnosed much more often than non-offenders for disorders related to drug and alcohol abuse.

This project is still collecting criminal offence information to examine the causal relationships between health and criminality. Follow-up reports are expected.

Sanctions in Saskatchewan, Canada." Unpublished report, 1991.