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The role of child protection in cannabis grow-operations

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ABSTRACT

Background: This unique social work research examined the rationale for child protection interventions with families found living in illegal cannabis grow operations, based on the assumption of risk in the presence of probable medical harm.

Methods: The study examined the household, family and individual characteristics of 181 children found living in cannabis grow operations in two regions in British Columbia, Canada. Data was collected on-site on the physical characteristics of the homes, the health characteristics of the children, and their prescription drug history. Comparison of prescription drug use was also made with a group of children from the same geographic areas.

Results: This study found that there was no significant difference between the health of the children living in cannabis grow operations and the comparison group of children, based on their prescription history and their reported health at the time.

Conclusion: The findings of this study challenge contemporary child welfare approaches and have implications for both child protection social workers and the policymakers who develop frameworks for practice.

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Introduction

Illegal indoor cannabis grow operations have become an increasing problem in Canada, receiving significant attention from the media, policing agencies, and government (CTV News, 2011; Plecas, Malm, & Kinney, 2005; RCMP, 2002; Stop the Violence, 2012). Aside from the criminal justice perspective, police and child protection social workers are concerned about the presence of children living in homes where cannabis is being grown. For over a decade, child protection social workers have been faced with the task of assessing the risk to children found living in cannabis grow operations (Douglas, 2010). The physical hazards that exist in these homes, as well as the environmental conditions potentially pose a threat to the health of the children living there (Canadian Institute of Child Health, 2003; Dales, Zwanenburg, Burnett, & Franklin, 1991; Gustin, 2010). Illegal wiring, hydro bypasses, chemicals and pesticides, mold, and compromised air quality are all factors that contribute to these concerns. However, these home safety concerns that bring grow ops to the attention of police, fire departments, hydroelectric providers, landlords and insurance companies are arguably a consequence of the prohibition against cannabis production that has driven it underground.

This research examined the rationale for child protection interventions with families found living in cannabis grow operations, based on the assumption of risk in the presence of probable medical harm.

Background

The current response to child maltreatment has involved the creation of regulatory agencies: child protective services that exercise the power of the state to intervene with families where children have been abused or neglected, or are at risk of being abused or neglected (Dingwall & Eekelaar, 1988). It is the allegation or evidence of maltreatment that allows for the government's intrusion into the affairs of the family (Larner, Stevenson, & Behrman, 1998). However, the role of child protection in the cannabis grow operation phenomenon has become entangled with political debate and prevailing attitudes over the use and/or legalization of cannabis. Moral contagion, public safety and the social construction of cannabis grow operators as dangerous persons all contribute to this confusion (Carter, 2009). Although moralization was an important motive in the early days of social work (Donzelot, 1979), most Western child welfare policies have moved away from making decisions about children's alleged needs on the basis of social or moral judgements. During the 1970s and 1980s, interventions became grounded in the notion of "tangible risk of significant harms to children" (Carney, 1999, p. 58), and with this movement came the

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gradual end of the inclusion of explicit morality considerations in child maltreatment practice.

Social work ideology no longer considers parental morality in child welfare assessments, and those involving cannabis grow operations are no exception. However, it is not the crime of growing cannabis that is the child welfare problem; it is the associated dangers that this activity presents for children. The former can be seen as a moral problem; the latter should not. It is this disconnect that partly contributes to the ambivalence that child protection practitioners face when dealing with cannabis grow operation families. The question that confronts the practitioner is whether parents' exposing their children to potentially harmful toxic environments constitutes a form of neglect, specifically the neglect of the children's need for a safe, healthy environment.

Neglect

By most definitions, child neglect involves an omission on the part of a parent, a failure to provide or protect, that leads to a child's harm or endangerment. Parental responsibility and blame are at least implicit in most legislation. In British Columbia, the Child, Family and Community Service Act speaks directly to the problem of neglect, but child protection action requires that there be physical harm or likelihood due to the neglectful acts of the parents (Child, Family and Community Service Act, 1996). It is the introduction of potential harm as criteria for intervention that raises controversy (Dubowitz, Black, Starr, & Zuravin, 1993). In the absence of confirmed medical evidence with grow operation children, it is the 'likelihood of harm' clause that provides the justification for social work involvement and investigation, and not a determination of intent to harm.

Chronic neglect is unlikely to be mono-causal, however the experience of grow operation children may mark an exception. Although there is a trigger event that brings these children to the attention of child protection services (and law enforcement), except in rare circumstances the physical state of the grow operation as the site of parenting is the only contributing factor to the neglect of the children.

There is ample evidence in the literature to support concerns about child health in cannabis grow-operations, in addition to the observations of the lead author and other professionals who frequent grow-operations in the course of their work. The presence of chemicals and pesticides, mold, and compromised air quality all contribute to concerns of risk, and the children living in these homes often present with respiratory problems and dermatological disorders. The warm, moist environment created to produce optimal growing conditions for cannabis also creates optimal growing conditions for mold. The relationship between indoor air quality, including the presence of mold and fungal spores, and respiratory problems in children has been well documented in research (Freeman, Schneider, & McGarvey, 2003; Garrett, Rayment, Hooper, Abramson, & Hooper, 1998; Pettigrew et al., 2004). In addition, fertilizers, chemicals and pesticides are applied to the cannabis plants to encourage growth and to eliminate the spider mites that are a threat to the crop. Carbon dioxide emitted from gas furnaces and hot water tanks is often vented back into the grow rooms to enhance plant growth, and can make its way throughout the house.

Based on research about environments with conditions similar to cannabis grow operations (Canadian Institute of Child Health, 2003; Fassa, 2003; Kim et al., 2002; Peterman, Jalongo, & Qiuyun Lin, 2002; United States Environmental Protection Agency, 2009), it was anticipated that children living in cannabis grow operations would have higher rates of respiratory and dermatological disorders than children who did not live in a grow operation.

Methods

This research involved the collection of data through the use of a survey instrument and direct observation by the child protection workers who attended the grow operation homes as part of their investigation. Child protection workers were assisted in the data collection by other first responders, notably police, fire officials, and hydro employees.

The data set consists of only the children and families found living in cannabis grow operations in two regions within the Greater Vancouver Regional District, British Columbia and who were reported to the Ministry of Children and Family Development (MCFD), the government authority delegated to conduct child welfare investigations in British Columbia. Data was collected over a 26-month period between 2004 and 2006. Ninety-five grow operations, involving 181 children, were reported to the study (Douglas, 2010). PharmaNet (the provincial prescription database) provided prescription information on these children, as well as prescription information for a randomly sampled comparison group of 500 children in the same age groupings and geographic areas.

Data analysis

The quantitative data was analysed using frequencies and logistic regression. The variable categories reported below were included in the analysis, and are part of the larger data set. All data management and analysis was conducted using SPSS version 16.0. Frequencies were calculated on all variables to provide a descriptive representation of the families and children included in the study, as well as the conditions of the cannabis grow operations where they were living. Only the data related to child health is reported in this article.

Limitations of dataset

Children and families living in cannabis grow operations in Greater Vancouver Regional District, British Columbia who did not come to the attention of police or child welfare authorities are not included in this study. In addition, information gathered was at the 'moment in time' when there was intervention by police and child protection workers. Children lived in these homes for varying degrees of time that were difficult to ascertain, or they may have lived in multiple dwellings. Some of these homes were not their primary residences. For some of these families this was their first grow operation; other families had lived in them for years.

Results

Sample characteristics

There were 95 families included in the study. The number of children per family ranged from one to five, with a little over half (52.6%) of the families having two children. The children ranged in age from newborn to 18 years old, with 68 of the 181 children (37.6%) being under five years of age.

English was spoken by 54 (57%) of the families, although 68 (72%) of the families reported that Vietnamese was their primary language.

One hundred and thirty-one (76%) of the children had lived in grow operations for twelve months or less; however, this was often an estimate provided to child protection workers by hydro employees.

Table 1
Drug frequency by drug type.

	None	1	2	3 or more
Number of respiratory/asthma prescriptions				
Grow operation	45%	28%	12%	15%
Comparison	44%	33%	12%	13%
<i>P</i> value	.84	.28	1.0	.56
Number of antibiotic prescriptions (not cream)				
Grow operation	30%	28%	22%	20%
Comparison	18%	22%	23%	37%
<i>P</i> value	.004*	.15	.81	.0004*
Number of topical corticosteroid/antibiotic prescriptions				
Grow operation	47%	33%	9%	11%
Comparison	46%	26%	15%	13%
<i>P</i> value	.92	.119	.08	.65
Number of Topical antihistamine/allergy prescriptions				
Grow operation	60%	27%	9%	4%
Comparison	70%	21%	6%	3%
<i>P</i> value	.04*	.094	.023	.38

* *P* < .05.

Household characteristics

Pesticides and chemicals were present in 96% (81/84) of the grow operation homes, indicating little variance. Re-venting of the gases from the furnace and/or hot water tank was present in 59% (46/78) of the homes, and mold was located in 77% (56/73) of the homes. The number of cannabis plants located in the homes ranged from 0 to 1900, with the mean number of plants calculated at 362.

Child health characteristics

Based on the child's initial presentation, parents' or child protection worker's reporting, and/or the presence of prescription medication in the home, 21% (32/152) of the children were reportedly unwell. As not all children were seen by the child protection worker, reporting of symptoms varied case by case. Respiratory concerns (coughing/breathing difficulties, nasal congestion) were noted in 17.7% (27/152) of the children; 11.2% (17/152) had dermatological symptoms (rashes, itchy skin); and 1.2% (2/162) had ear infections. Some of the children had multiple symptoms.

In 81% (123/152) of the homes, workers were unable to locate any prescription medication for the children. In the remaining homes, 10% (16/152) of the medications were for cortisone creams; 11% (17/152) were for respiratory ailments; and 7% (12/152) were antibiotics.

PharmaNet

Aggregate data (by age groupings) of the history of prescription medication for each child was gathered from PharmaNet. Of the 181 children located in cannabis grow operations, 176 were registered on the PharmaNet database, and prescriptions were located for 133 of these children (during the two-year period leading up to them being found in the grow operation). In addition, PharmaNet provided aggregate drug information for a comparison group of 500 children, from the same geographic areas. Of those 500 children, prescriptions were found for 412 over a similar two-year period. A total of 5435 prescription details were received: 1027 for the grow operation children, and 4408 for the comparison group.

Prescriptions for respiratory illnesses and skin disorders were taken as key dependent variables. Each child was logged for the number of different prescriptions they received within and across variables, and the number of repeat prescriptions they received. The grow operation and comparison group children were examined separately and in combination. As the PharmaNet data was aggregate only, we could only compare the children living in grow

operations with those believed to be not similarly housed in relation to their overall prescription patterns.

Contrary to expectations, results indicated no significant difference in the number and frequency of the identified prescriptions between children in cannabis grow operations and the comparison group (see Table 1).

Discussion

The presence of mold, re-venting of gases, and the chemicals often found in grow operation homes suggested that the children living there might well suffer from the ill effects of these environments, and could be expected to exhibit respiratory and/or dermatological ailments (Freeman et al., 2003; Garrett et al., 1998; Kim et al., 2002; Pettigrew et al., 2004). Indeed, 21% of the children were found to be unwell at the time of child welfare intervention. The examination of prescriptions focused on the medications linked to the ailments expected to be more prevalent in children living in a grow operation environment (Repchinsky, 2008). The results showed no significant difference between the grow operation children and the comparison children, with 65% of grow operation children having three or more prescriptions, as compared to 72% of the comparison children who had three or more of the same categories of prescriptions. An examination of each of the medications separately and by frequency revealed similar non-significant findings.

It was perplexing that these findings were contrary both to the professionals' beliefs about these environments, and the significant body of literature presented earlier in this paper that documents the consequences that mold and toxic environments can have on health.

These findings give rise to a number of possible explanations, all of which deserve consideration:

1. *The overwhelming majority of the grow operation families are immigrants of Vietnamese and other Asian descents who may in fact choose alternate methods of health care rather than traditional Western medicine to treat their children.* However, this argument is not supported by the data. The PharmaNet data indicates that 73% (133/181) of the grow operation children had received traditional medications in the two-year period leading up to them being found in a grow operation. This number is not significantly different from the comparison group, where 82% (412/500) of those children had received prescriptions during the same time period. The grow operation families may indeed choose

alternate health care methods, but it does not appear to be in lieu of Western medicine.

2. *The findings are limited due to the size of sample and length of time that health was measured, resulting in exposure misclassification.* As exposure to mold and toxins are considered low-to-moderate risk for health outcomes, a larger sample followed for a longer period of time may provide a more accurate representation of the health of these children. Indeed, previous studies involving much greater scientific rigour had findings more consistent with the literature regarding exposure to environmental toxins (Antova et al., 2008; Bornehag et al., 2005; Dales et al., 1991; Fisk, Lei-Gomez, & Mendell, 2007; Iossifova et al., 2009; Jaakkola, Bing-Fang, & Jaakkola, 2005).
3. *The children are indeed resilient and not suffering the ill effects of these toxic environments.* Children may have better recuperative capacities than adults for many toxic agents (Brent, Tanski, & Weitzman, 2004) and the restricted location of the mold within specific areas of the child's home may reduce risk to their overall health (Karvonen et al., 2009).

Finally, a recent study in Ontario conducted toxicology hair testing on 75 children found living in cannabis grow-operations (Moller, Koren, Karaskov, & Garcia-Bournissen, 2011). They found that although 30% of the children tested positive for illicit drugs (in their hair), the majority of these children had no clinical symptoms related to these drugs.

Conclusion

Child protection and the related legislation have become tools for addressing the illegal cannabis grow operation problem, as to date no system has been successful in bringing it under control. Although there is little argument that the physical hazards found in cannabis grow-operations pose a risk to children and adults living in the homes, the associated health risks are not as clear. Policymakers involved in establishing frameworks and protocols for responding to these unique child welfare cases must consider the absence of clinical evidence to indicate these children are unwell and whether there are grounds for child welfare intervention. As provincial authorities, law enforcement agencies and other stakeholders continue discussions to create new laws and increase enforcement, care must be taken to be explicit about which risks are forming the foundation for these actions, and whether in fact they actually exist.

With recent legislative changes in neighbouring Washington state, regulatory authorities in British Columbia may be able to observe the process of bringing this industry under regulation. In the interim, police, child welfare and health care professionals are left in a quandary about to proceed with families whose children appear to be well cared for apart from their exposition to the risks associated with indoor cannabis production.

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