Domestic Violence and Mental Health: Results from a Statewide Survey of Domestic Violence Programs in North Carolina

By

Carrie L. Brown

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Second Reader

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Members of the IPRC Violence Working Group Include:

Sandra L. Martin, PhD- **Chair**  Beth Posner, JD
Ingrid Bou-Saada, MA, MPH  Marcia Roth, MPH
Judy C. Chang, MD, MPH  Donna Scandlin, MEd
Carol Popkin Council, MSPH  Leslie Starstoneck, MSW
Michele Decker, MPH  Tracy Turner, BA
Pam Dickens, BA  Deborah M. Weissman, JD
Patty Neal Dorian, MA, LPC
Lisa Dulli, MHS, PA-C
Jeanne Givens, MSSW
Alison Hilton, MPH
Jenny Koening, MPH
Mary Beth Loucks-Sorrell, BA
Lauren McDevitt, BS, MS
Kathryn E. Moracco, PhD
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>1</td>
</tr>
<tr>
<td>Introduction</td>
<td>2-12</td>
</tr>
<tr>
<td>Methods</td>
<td>13-15</td>
</tr>
<tr>
<td>Results</td>
<td>16-19</td>
</tr>
<tr>
<td>Discussion</td>
<td>20-25</td>
</tr>
<tr>
<td>Table 1: Percentage of Clients with Mental Health Problems Compared with Staff/Volunteers Formally Trained in Mental Health</td>
<td>26</td>
</tr>
<tr>
<td>Appendix: Mental Health Instrument from the North Carolina Domestic Violence Programs Survey</td>
<td>27</td>
</tr>
<tr>
<td>References</td>
<td>28-30</td>
</tr>
</tbody>
</table>
ABSTRACT

Objectives: To estimate the proportion of domestic violence clients with mental health problems seeking help from domestic violence programs in the state of North Carolina. To describe the types of mental health services provided by these programs.

Methods: A subset of data from a statewide survey of domestic violence programs was used for descriptive analysis of mental health services and client needs. "The North Carolina Domestic Violence Programs Survey: A Study of Populations, Services and Needs," was conducted by the UNC Injury Prevention Center (IPRC), the North Carolina Coalition Against Domestic Violence (NCCADV), and the North Carolina Violence Commission in 2001.

Results: Information was collected from 71 of 84 known domestic violence programs (85% response rate). The majority (61.3%) of N.C. domestic violence programs estimated that at least 25% of their clients suffer from mental health problems. Consistent with this high prevalence, nearly three-quarters (72.9%) of N.C. domestic violence programs routinely screen their clients for mental health problems. However, only a minority (39.7%) of these programs has at least 25% of their staff and volunteers formally trained in mental health; and an even smaller percentage of programs (23.2%) reported having a memorandum of agreement with the local mental health center.

Conclusions: The significant percentage of domestic violence clients with mental health needs and the limited services currently available have important consequences for public health policy in North Carolina. Future research in the area of domestic violence and mental health is warranted.
INTRODUCTION

Overview of Domestic Violence and Public Health

Domestic violence is increasingly being recognized as an important public health problem in the United States. The manifestations of this recognition have evolved from grassroots organizations for battered women in the 1970’s to federal legislation in the 1990’s. The extent of the problem posed by domestic violence is of epidemic proportions. Female lifetime prevalence estimates for domestic violence range from 20-40%, depending on the sample population (e.g. primary care clinics, emergency department, general population etc.), and definitions used. Equally impressive are the documented health consequences of domestic violence. These effects are far-reaching, including not only short-term effects, such as injury, but also long-term sequelae, such as chronic physical conditions, mental illness, addiction, and pregnancy complications.

Public health prevention efforts have included strategies from all three levels of prevention, although the overwhelming focus has been on tertiary prevention, such as advocacy counseling and shelter stays for victims of domestic violence, and batterer intervention programs for perpetrators. A recent systematic review (2003) reported that while fair evidence for the effectiveness of advocacy counseling exists, the benefits of other interventions (batterer/couples

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1 The use of the term “domestic violence” has begun to be replaced by “intimate partner violence,” when child abuse and elder abuse are meant to be excluded. However, for the purposes of this discussion, “domestic violence” will be used interchangeably with “IPV,” which is defined by the CDC as: “actual or threatened physical or sexual, or psychological or emotional abuse by a spouse, ex-spouse, boyfriend or girlfriend, ex-boyfriend or ex-girlfriend, or date.” Furthermore, because of the scarcity of literature addressing violence against men by women and/or same-sex violence, these topics will not be reviewed in this paper. Data presented will solely refer to abuse of women by men, unless explicitly stated otherwise.
counseling and shelter stays) are unclear, due to the lack of rigorously designed research.¹¹

In the area of secondary prevention, the emphasis has been placed on screening women for domestic violence. A diverse and large group of medical organizations has advocated routine screening in primary care.¹² However, some feel that these recommendations are premature, given the lack of research evaluating potential harms, and the limited number of studies that evaluate screening protocols with appropriate outcome measures or comparison groups.¹³ This belief was supported by the United States Preventive Service Task Force in 1996 when it concluded that there was “insufficient evidence to recommend for or against specific screening instruments for the detection of family violence.”¹³

Primary prevention may be the ideal approach, in that it attempts to stop domestic violence before it starts. Because primary prevention strategies involve long-term and widespread behavioral change, such as promoting nonviolent problem solving and redefining cultural role models, they are difficult to implement and evaluate. A few studies have attempted to evaluate educational campaigns directed at young people, but they lack rigorous designs and long-term follow-up.¹¹ In the end, prevention of domestic violence is dependent upon effective collaboration among numerous and disparate sectors of society, including public education systems, the media, legislative bodies, health care providers and others.
Summary of Domestic Violence and Mental Health Literature

Over the past 30 years, research has indicated that strong ties exist between violent victimization and mental illness among women. There have been reports associating domestic violence with many different mental health problems, including depression, panic disorder, post-traumatic stress disorder, dissociative disorders, somatoform disorders, eating disorders, borderline personality disorder, suicidal ideation and attempts, alcohol abuse and drug addiction. A detailed discussion of all potential associations between mental health and domestic violence is beyond the scope of this paper. However, the salient topics within this literature will be reviewed.

One of the best designed studies attempting to characterize the psychiatric morbidity associated with domestic violence was a cross-sectional study of 335 women recruited from the Royal Brisbane Hospital Emergency Department in Queensland, Australia. The primary outcome measures were psychiatric diagnoses according to the widely validated Composite International Diagnostic Interview (CIDI). Women reporting lifetime adult intimate abuse on the Composite Abuse Scale (CAS) received significantly more diagnoses of generalized anxiety (p<0.0001), depression (p<0.0001), alcohol abuse (p<0.0001), and drug dependence (p<0.0001) than those who reported no abuse. While causation could not be definitively determined because of the cross-sectional study design, causation was inferred by the calculation of population attributable risk, which found that one-third of the psychiatric diagnoses were attributable to domestic violence.
Many of the studies addressing elevated rates of psychiatric illness among victims of domestic violence have relied on samples from shelters, medical settings, treatment programs, and correctional facilities, instead of the general population. Such samples are subject to selection bias due to factors associated with treatment seeking or adjudication. Therefore, a study conducted by Danielson and Moffit is particularly important to mention. This epidemiological study, based on a birth cohort, identified rates and patterns of psychiatric comorbidity in young adults—the age segment of the general population at greatest risk for intimate partner violence. Data were obtained from 92% of a 1,037 member birth cohort from Dunedin, New Zealand at age 21, using the Conflicts Tactics Scales and the Composite International Diagnostic Interview (both of well established validity). Analysis of the data found that over half of women victimized by violence suffered from a psychiatric disorder; and they had significantly elevated rates of mood and eating disorders. Furthermore, nearly two-thirds of the women victimized by severe partner violence had one or more psychiatric disorders. This group also had significantly elevated rates of mood, eating, and substance abuse disorders.

However, these results must be interpreted with caution due to a potentially serious flaw in the data analysis. The authors failed to demonstrate that the exposure group (those experiencing intimate partner violence) and the unexposed group were truly comparable. Factors that could potentially confound the relationship between abuse exposure and the development of mental illness, such as socio-economic status or family history of mental illness, were not
controlled for in the analysis. Nonetheless, this research represents an important step in characterizing the association between domestic violence and mental disorders.

A significant proportion of the domestic violence and mental health literature has been dedicated to studying depression. Depressive symptoms have been reported as a strong predictor of domestic violence among women in primary care settings, leading to proposals that depression is a primary mental health response to domestic violence. Some researchers have even hypothesized that much of the gender difference in the global prevalence of depression could be attributable to the sex difference in intimate partner violence. Furthermore, research has demonstrated a particularly high prevalence of domestic violence among samples of depressed women. Scholle et al. (1998) conducted a retrospective assessment of abuse and health services use over one year in a cohort of depressed women identified through random-digit-dial sampling. Over half (55%) of the study participants reported experiencing physical abuse as adults. Also, women abused as adults had significantly more severe depressive symptoms than non-abused depressed women in the cohort. Once again, the study design did not allow the authors to ascertain the direction of the relationship between domestic violence and depression.

An extensive meta-analysis by Golding (1999) of intimate partner violence and mental disorders reviewed the evidence for the association between partner abuse and depression. Using 18 studies of depression, she calculated a weighted mean prevalence (i.e. each study’s rate is weighted by the inverse of the
variance) of 47.6% (95% CI 45.0, 50.0). The weighted mean odds ratio was 3.80 (95% CI 3.16, 4.57). In other words, women experiencing intimate partner violence were 3.8 times more likely to suffer from depression than non-abused women. Also of importance, the author noted that severity or duration of violence was associated with prevalence or severity of depression, providing further evidence of dose-dependence. Such evidence, not only provides information about magnitude, but also suggests a causal relationship.

Another area of the domestic violence/mental health literature centers on substance abuse. Ties between domestic violence and abuse of both alcohol and illicit drugs have been demonstrated. This topic is extensively reviewed elsewhere, as part of the presentation of substance abuse results from the N.C. Domestic Violence Service Providers Survey. Nonetheless, there are a few key points warranting present mention.

Both studies based within substance abuse treatment programs and studies comparing patients in substance abuse treatment with non-treated comparison groups have found high rates of domestic violence (60-80%) and more severe partner violence among substance abusing women. In addition, two National Family Violence Surveys found that women experiencing assault by their partners reported being drunk more frequently in the past year than women not experiencing partner abuse. Such research supports the hypothesis that women may "self-medicate" to tolerate abusive relationships. There is also evidence of a dose-response relationship between severity of abuse and substance abuse. A cross-sectional study of women from battered women's shelters found that
women experiencing both sexual and physical abuse were more likely to report using marijuana and alcohol as a coping mechanism than women only experiencing physical violence.\textsuperscript{26}

In another approach to the topic, a cross-sectional study of homeless women was conducted. The authors used multivariate logistic regression to model victimization and to control for potential confounding factors, such as age, education level, and race. They concluded that women reporting a history of illicit substance use had twice the odds of adult victimization in comparison to women reporting that they had never used illicit drugs (adjusted odds ratio of 2.02).\textsuperscript{27} These results imply that substance abuse is a risk factor for victimization, rather than a consequence of the abuse. Unfortunately these authors did not distinguish between violence perpetrated by a partner vs. non-partner or stranger, so the findings are not specific for domestic violence per se. Moreover, selection bias may be introduced by exclusively sampling homeless women, and thereby, limit the generalizability of such results. Nonetheless, others have reported evidence of substance abuse as a risk factor for domestic violence.\textsuperscript{28}

Many mental health specialists and feminists consider post-traumatic stress disorder (PTSD) to be the most appropriate diagnostic category for the psychological effects of domestic violence.\textsuperscript{29} There are several reasons for this belief. First, by definition, the essential feature of post-traumatic stress disorder is the development of characteristic symptoms following exposure to a traumatic event.\textsuperscript{30} Trauma is defined (by the DSM-IV) as any experience that causes or embodies the threat of serious injury or harm.\textsuperscript{30} This definition purposely includes
the experiences of physically and sexually abused women who may fear death or permanent injury. Clearly, this diagnostic category would be applicable to the majority of victims of domestic violence. Secondly, the symptoms of PTSD overlap with those of many other diagnoses including depressive disorders, dissociative disorders, somatoform disorders, and borderline personality disorder.\(^3\) This fact suggests that PTSD may be the one diagnosis that encompasses the majority of reported psychiatry morbidity associated with domestic violence. Finally, conceptualizing abused women’s symptoms as a reflection of PTSD may destigmatize abused women and is consistent with a feminist perspective of the problem.\(^3\)

The literature examining PTSD and domestic violence is relatively recent. Nonetheless, evidence for the association does exist. Frank and Rodowski reported that the diagnostic criteria for PTSD fit up to 60% of women seeking services for battered women.\(^3\) Furthermore, authors of a recent review (2001) of this topic concluded that the symptoms of battered women are consistent with PTSD symptoms; and that the intensity, duration and perception of the abuse experience are significant factors in the severity of those symptoms.\(^3\) The most dramatic evidence for the association between PTSD and domestic violence is seen in Golding’s meta-analysis of 11 studies of PTSD.\(^2\) The weighted mean prevalence of PTSD among battered women was 63.8% (95% CI 60.5, 67.1). Moreover, the weighted mean odds ratio relating battering to PTSD was 3.74 (95% CI 2.05, 6.83). In other words, women experiencing domestic violence were 3.74 times more likely to develop PTSD than non-abused women. Despite the fact
that these odds ratios were determined to be homogeneous by the Mantel-Hanszel test for heterogeneity, and therefore, statistically appropriate to combine, a cautious interpretation of data gathered using different instruments and sampling methods is warranted.

One major limitation common to all the research being reviewed is critical to note. As mentioned previously, the study designs represented in the published literature to date do not allow for causal inferences. Therefore, the high rates of mental disorders found among victims of domestic violence could be the direct consequences of exposure to that violence, or mental disorders found among abused women may be pre-existing and represent risk factors for victimization. Indeed, in order to determine the relative timing of exposure and outcome, a prospective, randomized, controlled trial that sampled the general population would be the most appropriate study design. However, there are obvious ethical prohibitions to randomizing women to the experience of violence. Unfortunately, the next best option, prospective cohort designs, is hampered by many practical prohibitions (e.g. expense, time, and loss to follow-up), even though both domestic violence and mental illness are sufficiently prevalent to be able to assess risk with a reasonable sample size. This explains the predominance of cross-sectional and retrospective study designs in the literature. To complicate matters even further, it is likely that mental disorders are both risk factors and direct consequences of intimate partner violence.33

The relationship between domestic violence and mental health is clearly complex. Based on currently available data, the strongest associations are in the
areas of depression, PTSD, and substance abuse. Future research should further elucidate these relationships.

**Rationale for the North Carolina Domestic Violence Programs Survey**

Domestic violence victims seek help from a variety of sources including health care providers, police departments, and community-based domestic violence organizations. Since the emergence of battered women's shelters in the 1970's, domestic violence programs have steadily expanded their services and grown in number, such that there are now, nationally, more than 2,000 domestic violence agencies. Despite this knowledge and the growth of service providers, little information exists in the published literature about mental health services offered by domestic violence agencies, as well as, the mental health needs of their clients. This author conducted a search of several databases, including Medline, PsychInfo, and Social Work Abstracts, using the search terms "domestic violence or intimate partner violence" and "mental health or psychological health." Subsequent review of research articles thus identified revealed no studies with evaluations or descriptions of mental health services or treatments as a primary objective. Therefore, the present paper extends our knowledge by describing mental health services in a statewide population of domestic violence programs.

The research objectives included the following:

1) To estimate how common mental health problems are among clients of domestic violence programs in the state of North Carolina
2) To determine to what extent N.C. domestic violence programs screen clients for mental health problems
3) To determine what percentage of N.C. domestic violence programs have a memorandum of agreement with the local mental health center.
4) To estimate what proportion of N.C. domestic violence program staff and volunteers have received formal training in mental health

5) To determine whether the proportion of clients with mental health problems or the proportion of mental health trained staff/volunteers is different between programs located in rural counties and those in urban counties

We hypothesized that mental health problems would be common among domestic violence program clients in North Carolina. Consistent with this hypothesis, we thought that the majority of domestic violence programs would routinely screen at least some groups of clients for mental health problems. We also thought that the majority of programs would have memoranda of agreement with local mental health centers to aid in providing mental health treatment to their clients.

However, we hypothesized that for the majority of programs, only a minority of staff and volunteers would have formal training in mental health. We also wanted to see if this expected gap between service and demand was consistent across all counties in North Carolina. One might expect that urban programs might be different from rural programs, since urban counties presumably have a greater population diversity from which to recruit staff/volunteers and potentially, greater financial resources to draw upon (given that many types of public health funding is population based).
METHODS

The data presented in this paper are a subset of the data gathered from “A Survey of Domestic Violence Programs in North Carolina: A Study of Populations, Services and Needs.” This research was conducted by Sandra Martin, Ph.D., Kathryn E. Moracco, Ph.D., and Judy Chang, MD, MPH in conjunction with the Violence Working Group of the Injury Prevention Research Center (IPRC) at the University of North Carolina at Chapel Hill (UNC-CH) from August 2000 to August 2001.

Survey Development

The survey was developed through collaboration over several months among the members of the IPRC Violence Working Group. This group is an interdisciplinary collaboration among researchers, representatives of state government agencies, and advocacy groups. The survey was created with five main objectives:

1) To describe the existing services offered by North Carolina domestic violence programs
2) To examine the extent to which the domestic violence programs served women with particular types of needs: women with disabilities, women with substance abuse problems, women with mental health problems, and women from different cultures/countries
3) To identify gaps in service delivery for women with special needs
4) To illustrate the types of collaborative and referral relationships that the domestic violence programs have formed within their communities
5) To provide evidence for the funding needs of domestic violence programs in North Carolina so that they may meet the many and diverse needs of their clients.
The final survey consisted of seven sections, one for each of the following topics: types of client services offered; serving clients with disabilities; serving clients with substance abuse; serving clients with mental health problems; serving clients from diverse cultures/countries; the types of legal services offered; and collaborating with other agencies and organizations within the local community. Each topic was addressed by a series of multiple choice and “yes or no” questions. In addition, for all sections addressing clients with special needs, these structured questions were followed by two open-ended questions. The first asks about the challenges posed by the needs of a particular client group (i.e. disability, substance abuse, etc.) and the second open-ended question asks what strategies have worked well in trying to meet those needs. Finally, the survey closed by asking for any additional comments not addressed elsewhere in the survey.

Survey Implementation

The survey was mailed to the executive directors of all 84 known domestic violence programs in the state of North Carolina. These programs were identified in various ways: through their membership in the North Carolina Coalition Against Domestic Violence; as funding recipients of the North Carolina Domestic Violence Commission; and/or as other programs that were known by members of the Violence Working Group. The surveys were mailed to the domestic violence programs in December 2000. This initial mailing was followed with a postcard reminder. In January 2001, a second survey was mailed to those programs that had not yet returned their surveys. Finally, at the end of March 2001, the programs that had still not responded were contacted by telephone, and the survey
was administered via telephone by trained interviewers from the UNC Injury Prevention Research Center. In most cases, the executive director of the domestic violence program completed the survey with input from the program staff and volunteers.

**Data Analysis**

All quantitative data from the Mental Health section of the survey were analyzed using the Stata 7.0 statistical package. Descriptive statistics and chi squared analysis techniques were employed. In addition, information from the N.C. State Data Center about county population was used to code an additional variable to signify whether the domestic violence program came from a county classified either as rural/intermediate or urban. This information was used to examine whether the responses for several questions varied by rural/urban status of the county in which the domestic violence program operated. Qualitative information from the open-ended questions was analyzed by reading the participants’ responses and then abstracting over-arching themes that emerged in response to those questions.

**Institutional Review Board (IRB) Approval**

All project methods were approved prior to implementation by the UNC School of Medicine's Committee on the Protection of the Rights of Human Subjects (IRB). Subsequently, before the current data analysis was conducted, the survey was also approved by Duke University Medical Center’s IRB. Both institutions granted “exempt” status for the research.
RESULTS

Of the 84 surveys mailed to known domestic violence programs in North Carolina, 71 were completed (64 were completed by mail and 7 were completed by telephone interview). Thirteen were not completed (1 was returned without being opened and 12 were never returned). Thus, the survey response rate was 85%.

General Services Provided by N.C. Domestic Violence Programs

Most of the 71 domestic violence programs surveyed provided a variety of services to their clients. The most common types of services provided included court advocacy services (99% of the programs), crisis intervention and domestic violence counseling (94%), telephone violence hotlines (93%), battered women’s shelters (87%), transportation (81%), and counseling for children who have witnesses domestic violence (76%). In addition, 46% of the programs provided a variety of other types of services, such as support groups, parenting groups, job and/or life skills classes, professional training and education classes, batterer treatment, case management, medical care, child care, and emergency financial assistance.

Mental Health Needs of Clients and Mental Health Services-Quantitative Data

†A substantial proportion of women seeking help from domestic violence programs in North Carolina are thought to have mental health problems (Table 1). The majority of programs (61.3%) estimated that at least 25% of their clients have

†A copy of the instrument used to assess mental health issues in the N.C. Survey of Domestic Violence Programs is included in the appendix for reference.
concurrent mental health problems, and a substantial minority (17.1%) reported that greater than 50% of their clients have mental health problems. There was no significant difference in the reported percentages of programs based on whether they were located in rural or urban counties (p = 0.182).

Consistent with the high prevalence of domestic violence clients estimated to have co-morbid mental health problems, the majority of programs employ some type of routine screening for mental health problems (72.9%). However, programs do not universally apply such screening protocols. Clients using shelter services was the most common group reported by programs to be routinely screened (60.6%), followed by clients receiving in-person group counseling (49.3%), and clients receiving information over the telephone call-in line (23.9%). Interestingly, the presence of routine screening was not statistically related to the prevalence of clients with mental health problems (p = 0.397).

Despite identifying a high prevalence of clients with mental health problems and high rates of mental health screening, programs provided less extensive mental health services to clients. Only 18.6% of responding programs have a written policy regarding the procedures that staff and volunteers follow when working with clients with mental health needs. Similarly, only 23.2% of agencies stated they had memoranda of agreement (MOA’s) with local mental health agencies to provide mental health treatment to their clients. Of these 16 programs reporting such MOA’s, only 5 (31.3%) reported that clients had the option of receiving those services “on site” at the domestic violence agency.
Furthermore, the majority (56.0%) of domestic violence programs report that less than 25% of their staff and volunteers have formal training in mental health issues (Table 1). Interestingly, the percentage of clients with mental health problems seen by a program was not significantly related to the percentage of formally trained staff/volunteers (p=0.275). In addition, a program’s urban or rural status did not appear to be statistically related to the percentage of clients with mental health problems seen by a program (p=0.306). Finally, 97.1% of domestic violence programs stated that they would like mental health training routinely available to their staff and volunteers.

In addition to the above areas of prevalence, screening, services and training, the survey also addressed how programs handle clients with severe mental health problems (e.g. suicidal or psychotic clients). Only 8.5% of responding domestic violence programs reported that they would refuse to complete the intake of a client thought to have severe mental health problems. Most programs (77.1%) also reported that they would refer such a client to the local mental health center.

**Mental Health Services, Strategies and Challenges—Qualitative Data**

The final two questions in the mental health section were open-ended questions that asked about challenges posed by clients with mental health problems, and strategies that programs felt were helpful in addressing the needs of those clients. From the collected responses, several themes emerged.

Programs frequently mentioned the complications surrounding clients with mental health disorders requiring medication. These included non-
compliance, helping clients to obtain appropriate prescriptions, and the time-consuming nature of assisting clients with the Medicaid application process. Several programs expressed concern over patients being inappropriately referred to their shelters because inpatient mental health facilities were not available locally or because clients were homeless. The safety of women coming to programs in a state of mental health crisis and their impact on the safety of other clients in the shelters was a major concern of programs. One such program reported: “complications have occurred with clients who were not what we term medically clear, because these clients can decompensate at the safe house.” Also frequently cited by programs were the difficulties arising from the lack of staff trained in mental health.

In response to these problems, programs have developed a number of useful techniques. Some programs mentioned that they make seeking mental health treatment a requirement for clients suffering from mental illness who want to stay in their shelters. Such a requirement helps address the complications posed by client non-compliance with medications or other forms of treatment. A second strategy that several programs reported to be effective in facilitating the treatment of clients with mental health issues was the establishment of either formal or informal agreements with local mental health agencies. Such collaboration has also helped programs deal with their training needs. Programs also indicated their willingness to improve services and that they would be willing to accept help in the form of training, funds or other resources.
DISCUSSION

Summary of Key Findings and Interpretations

This descriptive study lends support to three of our five initial hypotheses. Mental health problems do appear to be common among clients presenting to domestic violence programs throughout the state. Consequently and as we expected, most programs routinely screen for mental illness—at least among women seeking shelter and/or in-person counseling. However, in the majority of programs less than 25% of staff and volunteers are formally trained in mental health issues. The reasons for these gaps in services, given the high prevalence of domestic violence victims with co-morbid mental illness, are unclear, and could not be directly assessed by this study.

One unexpected finding was the small number of domestic violence programs that have memoranda of agreement with their local mental health centers to provide mental health services to their clients (23.2%). Possible explanations for this result are that the majority of programs have informal relationships with local mental health centers or do not have any routine referral practices. Unfortunately, since only those programs responding that they had memoranda were asked where clients received mental health treatment (e.g. on-site or at the offices of the local mental health agency), we have limited data on where the majority of domestic violence clients with mental health problems receive treatment.

Also, we did not find any significant differences in either the percentage of clients with concurrent mental health issues or in the percentage of
staff/volunteers with mental health training between rural programs and urban programs. Consequently, our initial assumption that urban counties have more resources could be incorrect, or this finding may simply reflect the small sample size of urban programs, as North Carolina is mostly a rural state. Nonetheless, it would appear that the needs of domestic violence programs are consistent throughout the state, in terms of mental health training.

Limitations of this Research

There are several limitations of this research. Most importantly, our results are mainly descriptive, with a limited ability to assess for associations. The main purpose of the survey was to gather data to have a population-based estimate of program needs and services. This information provides an important foundation for future research, since such information has not been previously gathered in North Carolina or many other states. Secondly, the survey is only able to approximate the prevalence of special populations, such as domestic violence victims suffering from mental health problems. Because programs do not routinely keep records of such clients, having agency directors provide categorical estimates was felt to be the best option for assessing prevalence. A third significant limitation is that we do not know how generalizable these data are to other populations in different areas of the country. Nonetheless, our estimates of prevalence of domestic violence victims are consistent with the published rates discussed in the introduction. A final potential limitation of this study, is the possibility of selection bias. An acceptable representation of North Carolina
domestic violence agencies (84%) was achieved, but these programs may be
different from those that did not participate.

Implications for Health Policy

The results of this study reveal several areas of need and have four major
implications for public health policy. First, data from both the quantitative and
qualitative sections point out the importance of developing a statewide training
program for all domestic violence programs in the area of mental health.
Secondly, the fact that only 23% of programs have current memoranda of
agreement with local mental health centers, coupled with the program reports of
their usefulness, suggests that statewide organizations, such as the North Carolina
Coalition Against Domestic Violence (NCCADV), should recommend and
provide examples of such written agreements. These protocols should facilitate
obtaining appropriate medications when necessary, inpatient care in the case of
mental health crisis, and the necessary follow-up required for therapy extending
beyond shelter stays. Ideally, domestic violence programs would set up “on-site”
services for mental health treatment to efficiently meet both safety and treatment
needs of clients.

Thirdly, the high prevalence of mental illness among domestic violence
victims seeking help in North Carolina strongly suggests that programs should
routinely screen all clients for mental health problems. Again, statewide
organizations such as the NCCADV could be useful in implementing universal
screening protocols. Finally, the findings presented here point to the need for
additional resources for programs to comply with the above recommendations and
maximize the state’s ability to help victims of domestic violence. These additional funds could be used to train additional staff and volunteers in mental health issues, to help programs provide “on-site” mental health services, and to implement universal screening protocols for mental health.

**Future Research**

There are several opportunities for future research illuminated by the results of this survey of domestic violence programs in North Carolina. The need for basic epidemiological research to further characterize the association between exposure to intimate partner violence and the development of psychiatric illness was noted in the introduction. Also, the particular need for large prospective cohort studies with long-term follow-up and specific outcome measures has been noted.

In addition, our results indicate that information from domestic violence agencies in North Carolina could be informative. All domestic violence programs in N.C. should be asked directly what percentage of their clients receive at least some kind of mental health treatment on-site, and what percentage of clients with mental health needs are simply referred outside the domestic violence agency for all mental health treatment. Also, the types of mental health treatments available on-site and types of providers should be specifically identified. For example, do programs offer in-person or group counseling for mental health problems, such as PTSD and/or depression? Do programs provide or arrange medication evaluations by a physician or nurse practitioner? Furthermore, additional information could be gathered about the types of mental health problems among clients. Specific
diagnoses would be inappropriate, but programs could be asked about groups of disorders such as anxiety disorders or psychotic disorders.

Another major area for research is that of program development and evaluation. A mental health education program for staff and volunteers of domestic violence agencies needs to be developed and evaluated, as well as, domestic violence training for mental health professionals. If screening for mental health problems among domestic violence clients is to be widely recommended, specific instruments need to be identified. Such tools have to be practical to use in domestic violence agencies, and have demonstrable reliability and validity. Other surveys should be conducted in different states to determine variations in program services, and identify other effective strategies for meeting client mental health needs. Also, treatment protocols for domestic violence victims with mental health problems need to be developed and subsequently studied, with appropriate comparison groups and quality of life or morbidity outcome measures. These treatments might depend upon the specific mental disorder, but how to combine traditional therapies for different mental illnesses with counseling for domestic violence is unknown, especially in the short-term setting of a shelter.

Finally, the authors of the present study are in the process of conducting a similar survey of all sexual violence agencies in North Carolina. There is considerable overlap between sexual violence and domestic violence, and physical abuse and sexual abuse often occur in the same intimate relationship. Many joint domestic violence and sexual violence agencies exist, due to the overlap between these two types of violence. As was the case for domestic
violence agencies, the available services, gaps, and needs of sexual violence agencies in North Carolina are currently unknown. The combined data from both surveys will provide the necessary groundwork for an evidence-based approach to the prevention of violence.
TABLE 1

Percentage of Clients with Mental Health Problems Compared with
Staff/Volunteers Formally Trained in Mental Health

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Percentage of DV Programs (N=71)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Estimated Percentage of Clients with Mental Health Problems:</strong></td>
<td></td>
</tr>
<tr>
<td>Do not know</td>
<td>4.3</td>
</tr>
<tr>
<td>Less than 25%</td>
<td>34.3</td>
</tr>
<tr>
<td>Between 25% and 50%</td>
<td>44.3</td>
</tr>
<tr>
<td>Greater than 50%</td>
<td>17.1</td>
</tr>
<tr>
<td><strong>Estimated Percentage of Staff and Volunteers with Formal Training in Mental Health Issues:</strong></td>
<td></td>
</tr>
<tr>
<td>Do not know</td>
<td>4.4</td>
</tr>
<tr>
<td>Less than 25%</td>
<td>56.0</td>
</tr>
<tr>
<td>Between 25% and 50%</td>
<td>20.6</td>
</tr>
<tr>
<td>Greater than 50%</td>
<td>19.1</td>
</tr>
</tbody>
</table>
# APPENDIX

## Mental Health Instrument from the N.C. DV Service Providers Survey

### MENTAL HEALTH PROBLEMS

These next questions focus on issues related to mental health problems such as depression, anxiety, schizophrenia, and bipolar disorder.

<table>
<thead>
<tr>
<th>D1.</th>
<th>In your best estimation, what percentage of your clients has mental health problems?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1) None of our clients</td>
</tr>
<tr>
<td></td>
<td>2) Less than 25% of our clients</td>
</tr>
<tr>
<td></td>
<td>3) Between 25 and 50% of our clients</td>
</tr>
<tr>
<td></td>
<td>4) More than 50% of our clients</td>
</tr>
<tr>
<td></td>
<td>5) Do not know</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D2.</th>
<th>Does your domestic violence program have a written policy regarding the procedures that your staff and volunteers follow concerning clients who have mental health problems?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Yes (If yes, please attach a copy of the written policy)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D3.</th>
<th>Do your staff/volunteers routinely ask the incoming clients of your domestic violence program about their mental health?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D4.</th>
<th>If yes, which group(s) of clients are routinely asked about mental health problems? (Check all that apply)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a) Clients using our shelter</td>
</tr>
<tr>
<td></td>
<td>b) Clients receiving in-person group counseling</td>
</tr>
<tr>
<td></td>
<td>c) Clients receiving information over the telephone call-in line</td>
</tr>
<tr>
<td></td>
<td>d) Clients receiving other services (Specify)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D5.</th>
<th>What do your staff/volunteers do if a woman who has severe mental health problems (i.e. client is suicidal or has schizophrenia) comes to your program needing shelter? (Check all that apply)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1) Refuse to complete intake</td>
</tr>
<tr>
<td></td>
<td>2) Refer the woman to the local Mental Health Center</td>
</tr>
<tr>
<td></td>
<td>3) Refer the woman to another mental health provider</td>
</tr>
<tr>
<td></td>
<td>4) Something else (please specify)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D6.</th>
<th>Does your domestic violence program have a memorandum of agreement with your local mental health agency to provide mental health services to your clients?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No -&gt; SKIP TO QUESTION D8</td>
</tr>
<tr>
<td></td>
<td>Yes (Please attach memorandum)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D7.</th>
<th>If yes, where do your clients receive these mental health services? (Check all that apply)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a) Mental health services are provided to our clients “on site” at our domestic violence program</td>
</tr>
<tr>
<td></td>
<td>b) Mental health services are provided to our clients at our local mental health center offices</td>
</tr>
<tr>
<td></td>
<td>c) Mental health services are provided to our clients at some other place (Specify where)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D8.</th>
<th>What percentage of the staff and volunteers of your domestic violence program have received some type of formal training concerning the special needs of clients with mental health problems?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1) None of us</td>
</tr>
<tr>
<td></td>
<td>2) Less than 25% of us</td>
</tr>
<tr>
<td></td>
<td>3) Between 25 to 50% of us</td>
</tr>
<tr>
<td></td>
<td>4) More than 50% of us</td>
</tr>
<tr>
<td></td>
<td>5) Do not know</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D9.</th>
<th>Do you want mental health training routinely made available to your domestic violence program staff and volunteers?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>

| D10. | What challenges have you encountered in trying to meet the needs of clients with mental illness?                        |

| D11. | If you have found strategies that worked well to provide services to women with mental illness, please share these with us: |

27
REFERENCES


