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Psychosocial Functioning of Youth Receiving Mental Health Services in the Schools Versus Community Mental Health Centers

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ABSTRACT: Evaluated psychosocial differences between youth receiving mental health services in Community Mental Health Centers (CMHCs; n = 79) as compared to youth receiving services from a program operating in 10 Baltimore schools (n = 186). Racial and gender differences were shown, with more African American youth and females in the School than CMHC sample. Multivariate analyses that controlled for these racial and gender differences failed to reveal significant effects, indicating comparable functioning on measures of life stress, violence exposure, family support, self-concept, and emotional/behavioral problems for youth from the two samples. However, particularly for those with internalizing disturbances, youth in the School sample were less likely to have received prior mental health services than youth from the CMHCs. Findings support the conclusion that school-based mental health programs are reaching youth who need mental health services, who otherwise may not receive them.

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Increasingly, leaders in human service agencies around the United States (U.S.) are recognizing that youth in need of mental health services encounter problems in accessing services in traditional sites, such as community mental health centers (CMHCs), and there are mounting questions about the effectiveness of weekly outpatient sessions in a setting that is typically removed from children's natural environments (Weisz, Weiss, & Donenberg, 1992). In turn, leaders in education will readily acknowledge that existing models of school "support" services are not adequate (Tirozzi & Uro, 1997). In many communities, these "support" services are limited to assessment, administrative, and minimal consulting services for youth being referred for, or already in, special education.

Thus, youth have difficulty accessing mental health services in traditional community settings, and services where they are (i.e., school) may be quite limited (with increasing notable exceptions; Short & Talley, 1997). Growing recognition of these gaps has served to fuel a national movement that involves the development of comprehensive mental health services for youth in schools. These "expanded" school mental health (ESMH) services go beyond services traditionally offered to youth in schools to include assessment and treatment services for youth in special and regular education. Commonly, ESMH programs provide focused evaluation; individual, group, and family therapies; referral of youth into collaborating community organizations for more intensive services (e.g., medication, inpatient treatment); and a range of preventive services, such as support groups for well functioning youth, and mental health education (Weist, 1997).

ESMH programs are developing rapidly in the U.S., related to growing awareness of their benefits, and driven to a considerable extent by the progressive development of primary health care services in schools through school-based health centers (SBHCs), in which mental health concerns are usually the first or second most common reason for referral (Dryfoos, 1994; Lear, Gleicher, St. Germaine, & Porter, 1991). In some communities, ESMH programs are being developed as alternatives to services in CMHCs. In other communities, outpatient mental health services are being reapportioned out of CMHCs into the schools. In yet other communities (e.g., Dallas, TX; Ventura County, CA) almost all of child outpatient mental health services are being provided through the schools, in homes, and various mobile treatment programs. As communities develop an array of services in natural settings for youth, a rising challenge is to understand differences (if they exist) in psychosocial adjustment and presenting problems between

youth receiving services in different sites. While there have been anecdotal reports of such differences between youth who receive services in CMHCs versus the schools (see Flaherty, Weist, & Warner, 1996), this question has not yet been formally investigated.

Most studies evaluating characteristics of youth receiving mental health services have focused on basic demographic variables such as age and gender (see Polivko & Clark, 1994; Epstein, Cullinan, Quinn, & Campbell, 1995). For example, a common finding related to age is that older adolescents receive less outpatient mental health services than younger adolescents and children (Cohen & Hesselbart, 1993). Findings pertaining to gender of youth seen in CMHCs are mixed, with some studies indicating more males than females receive services (e.g., Epstein et al., 1995; Polivko & Clark, 1994; Zeigler-Dendy, 1989), while other studies have not found this difference (e.g., Burns, 1991; Cohen & Hesselbart, 1993; Pottick, Lehman, & Micchelli, 1992). A few studies have documented age by gender interactions in children's use of outpatient mental health services. For example, Barber, Rosenblatt, Harris, and Atkinson (1992) found that while CMHCs serve predominantly male clients among preadolescents (81% male), the male to female ratio was more evenly distributed among older adolescents (60% male vs. 40% female).

In terms of race, findings generally indicate that racial composition of youth receiving mental health services is similar to that of the surrounding population (Epstein et al., 1995; Zeigler-Dendy, 1989). However, when evaluating treatment sites, Burns (1991) found that minority youth were less likely to be served in both the most restrictive (e.g., psychiatric hospitals) and the least restrictive (CMHCs) settings, while they were more likely to receive services in moderately restrictive settings (e.g., partial hospitalization, residential treatment centers).

Other studies have evaluated family characteristics of youth receiving mental health services. In many of these studies youth are characterized as coming from disrupted family backgrounds which include high rates of divorce, single-parent homes, evidence of psychosocial dysfunction in family members, and child abuse and neglect (Barber et al., 1992; Goodwin, Goodwin & Cantrill, 1988; Zeigler-Dendy, 1989). Epstein et al. (1995) documented that for over 50% of youth receiving services in CMHCs, parental guardianship had been qualified by a juvenile justice or child welfare agency. These investigators also documented that almost 90% of those youth seen for the first time in a CMHC had at least one prior out-of-home placement. For youth who

had longer histories of receiving mental health services in the community, the average was four out-of-home placements.

Studies examining diagnostic categories of youth suggest that CMHCs often serve youth who present with full blown or multiple diagnoses by the time their families initiate treatment (Zahner, Pawelkiewicz, DiFrancesco, & Andnopoz, 1992). Further, a number of investigators have found that youth served in CMHCs tend to display "externalizing" behavioral problems including attentional disturbance and hyperactivity, impulsivity, oppositional and conduct disorders (Silver, 1989). These findings support the notion held in many communities that youth need to "act out" in order to gain entree into the mental health system. In contrast, there is suggestive evidence that ESMH programs are reaching proportionally more youth with "internalizing" disturbances (e.g., depression, anxiety), related to enhanced accessibility and early identification of youth in need in these programs (see Flaherty et al., 1996; Weist, 1998). However, this evidence is quite limited and for the most part, anecdotal. In our literature review, we were unable to find a formal investigation of psychosocial differences in youth receiving mental health services in the schools as compared to youth receiving services in CMHCs. In the present study we explored demographic, family, life stress, and emotional/behavioral adjustment variables for youth seen in schools as compared to CMHCs in an attempt to fill this gap.

METHOD

Subjects

The study was conducted in three community mental health centers (CMHCs), and 10 schools (four elementary, three middle, three high schools) in the School Mental Health Program (SMHP) of the Department of Psychiatry, University of Maryland School of Medicine (UMSM). The CMHCs and SMHP offer outpatient mental health services to youth and families from South and Southwest Baltimore. A total of 265 youth, aged 10 through 19 participated in the study, with 79 coming from the three CMHCs, and 186 from the schools. Parental consent was obtained for youth to receive treatment services in the programs. We did not obtain explicit consent for the youth to complete project measures since they were clinically relevant and administered to all youth. The measures were reviewed with all youth and their verbal permission to complete them was obtained. No children or adolescents declined to complete project measures. Procedures for recruiting participants were approved by the Institutional Review Board of UMSM.

Measures

General Background. A general background questionnaire was administered to all youth to obtain information including prior mental health treatment, educational background, and family characteristics.

Violence Exposure. To assess past violence exposure among the participants, we used the Exposure to Violence Screening Measure (EVSM). The EVSM is an adaptation of the Exposure to Violence Questionnaire (EVQ), a self-report form developed by Gladstein and Slater (1988). The EVSM is designed for youth aged 10 and older, to be completed during interviewing with health and/or mental health providers. The measure contains 9 items reflecting past exposure to violence (e.g., robbery, assault, shooting, sexual abuse). Each item is rated by youth with assistance from an interviewer along three dimensions assessing: 1) Knowledge of victims of violence, 2) Witnessing violence, and 3) being a Victim of violence. Scores on these three subscales may be summed to yield a total score of violence exposure. The measure takes less than 3 minutes to complete, has been shown to have adequate internal consistency, and to be correlated in expected directions with measures of life stress and emotional/behavioral functioning, supporting its construct validity (Weist, Myers, Warner, Varghese, & Dorsey, in press).

Life Stress. To assess life stress experienced by youth in the study, we used a self-report version of the Life Events Checklist (LEC; Work, Cowen, Parker, & Wyman, 1990), which assesses stressful life events and ongoing circumstances for inner-city youth and their families. The LEC has been found to be reliable, and to be correlated with parent-, teacher-, and self-report measures of emotional/behavioral adjustment among a sample of 295 urban youth.

Family Supportive Behaviors. We used a measure of family supportiveness developed for use with inner-city teenagers by Wills, Vaccaro, and McNamara (1992). The measure assesses youth perceptions of emotional and practical support provided by the primary parental figure. The validity of this measure was supported in a large sample of urban youth aged 11 to 13.

Self-Concept. To assess self-concept, participating children and adolescents completed the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965). The RSES is very brief, containing only 10 items (with each rated on a 1 to 4 Likert Scale). In spite of its brevity and age, it possesses sound psychometric properties and continues to be used in research with adolescents (Reynolds, 1993).

Behavioral/Emotional Problems. To assess self-reported behavioral and emotional problems in participants, the Youth Self-Report (YSR; Achenbach, 1991) was used. The YSR is a broad band measure (containing 120 items) of emotional and behavioral adjustment in youth that has outstanding psychometric qualities (including reliability, internal consistency, and validity). The YSR provides separate scores for internalizing, externalizing, and total behavior problems.

Procedure

The study was conducted over a two-year period from November, 1993 through November, 1995. All youth who presented for mental health services (based on referral by themselves, parents or others such as teachers) in the three CMHCs and in the SMHP completed project measures by the third intake session. Clinicians (clinical social workers and psychologists) collected the measures individually with children. A focused interview was used in collecting the EVSM, while the other measures were collected using a "guided" self-report process (i.e., clinicians monitored the children for reading difficulties, and read items to them when necessary). When youth had difficulty answering questions, their parents or guardians were asked to provide assistance. Research assistants for the project were in frequent contact with clinical supervisors to ensure that all clinicians were obtaining the measures from youth in a consistent and standardized fashion.

RESULTS

Please note that numbers of participants varied somewhat for each measure related to missing data. We first explored racial and gender differences between youth seen in the schools versus CMHCs. In terms of race, all youth in both samples were either African-American or Caucasian. In the School sample, there were 143 African-American youth, and 31 Caucasian youth (12 were unclassified on forms). There were 21 African-American youth, and 55 Caucasian youth (with 3 unclassified) in the CMHC sample. A Chi Square indicated that racial differences between the two samples were significant (χ^2 [1] = 67.36, p < .001). In the School sample the majority of the youth were African-American (66%), while in the CMHC sample, the majority of the youth were Caucasian (72%).

In terms of gender, there were 102 females (55%) and 84 males (45%) in the School sample, while there were 33 females (42%) and 46 males (58%) in the CMHC sample. A Chi Square indicated that these gender differences approached significance (χ^2 [1] = 3.86, p = .05), with more females in the School as compared to Community Clinic sample.

Given these significant racial and gender differences across the two samples, we conducted a two-way (Gender by Site) Multivariate Analysis of Variance using race as a covariate (MANCOVA) including summary scores for all measures (life stress, violence exposure, family support, self-concept, and emotional/behavioral problems). Please note that our use of race as a covariate was related to the fact that our goal was not to explore racial differences in findings but to explore differences related to site of mental health services. The MANCOVA indi-

cated nonsignificant effects for Gender, Site, and for the Gender x Site interaction effect. Table 1 presents means on psychosocial measures for males and females in the school program as compared to the CMHCs.

We evaluated sociodemographic differences between youth in the

TABLE 1

Means on Psychosocial Measures for Females and
Males from School Programs and Community Clinics

Measure	Schools			Community Clinics		
	Females	Males	All	Females	Males	All
Life Stress	6.13 (3.33)	5.41 (3.03)	5.80 (3.20)	6.78 (3.91)	6.33 (3.12)	6.61 (3.53)
Vio. Knowl- edge	4.25 (2.44)	3.94 (2.17)	4.10 (2.32)	3.40 (2.44)	3.45 (2.40)	3.42 (2.38)
Vio. Witness	2.06 (2.06)	2.96 (1.96)	2.47 (2.06)	1.48 (1.50)	1.82 (1.97)	1.69 (1.79)
Vio. Victim	.74	.83	.78	.83	.64	.73
	(1.03)	(1.00)	(1.02)	(.97)	(.92)	(.94)
Vio. Total	6.96	7.68	7.28	5.85	5.64	5.74
	(4.72)	(4.20)	(4.50)	(4.20)	(4.44)	(4.29)
Int. Beh.	55.81	52.09	54.13	54.97	52.54	53.72
Prob.	(12.26)	(12.22)	(12.35)	(10.52)	(16.21)	(14.08
Ext. Beh.	56.81	52.50	54.87	59.15	54.35	56.42
Prob.	(11.29)	(13.24)	(12.36)	(12.69)	(15.25)	(14.28
Tot. Beh.	58.06	50.97	54.86	58.36	52.69	55.22
Prob.	(13.02)	(15.18)	(14.44)	(11.06)	(16.92)	(14.92
Family Support	40.31	42.13	41.13	40.72	37.41	38.90
	(11.08)	(8.09)	(9.86)	(9.80)	(10.53)	(10.28
Self-Concept	29.50	31.62	30.46	29.03	30.96	30.04
	(5.09)	(4.89)	(5.10)	(4.97)	(4.76)	(4.99

Note: Standard deviations are in parentheses; Vio. = violence scale; Int. = internalizing; Ext. = externalizing; Beh. Prob. = behavior problems; Tot. = total.

two samples based on their responses to the General Background Questionnaire. Looking at prior mental health history, in the School sample, 104 youth reported no prior counseling (67%), while 51 did report prior counseling (33%). In the CMHC sample, 30 youth (54%) reported no prior counseling, while 26 reported prior counseling (46%). Differences between the two samples on prior mental health services approached significance (X [1] = 3.25, p = .07).

We hypothesized that differences in prior mental health history between youth in the School and CMHC samples would be stronger for youth with high levels of internalizing problems. That is, the school programs were reaching proportionally more youth with less noticeable, and previously undetected emotional problems than the CMHCs. To explore this hypothesis, we evaluated prior mental health services for youth who scored higher than the sample median for Internalizing Behavior Problems as measured by the YSR (Achenbach, 1991). In the School sample, there were 98 youth who exceeded this cutoff, with 64% having no history of prior mental health services, and 36% who had received services. In the CMHC sample, there were 37 youth who surpassed this cutoff, with 42% who had received no prior services, and 64% who had. This difference between the two samples was significant (X = 3.97, p < .05). Thus, "internalizing" youth from the schools were less likely to have past mental health services than internalizing youth from the CMHCs, confirming our hypothesis.

The number of children from families on public assistance was compared for the two samples as a gross measure of socioeconomic differences. Of the School sample, 55 youth were reported to be on public assistance (33%), while 109 were not (67%). Of the Community Clinic sample, 34 youth were reported to receive public assistance (49%), while 35 were not (51%). A Chi Square indicated that significantly more youth from the Community Clinic as compared to the School sample received public assistance (X [1] = 5.09, p < .05).

Other sociodemographic analyses (e.g., special education involvement, family size, substance abuse by a family member, number of previous placements, arrest history) failed to reveal significant differences between youth in the School and CMHC samples.

DISCUSSION

In this study, we explored demographic and psychosocial differences between youth receiving school-based as compared to community cen-

ter-based mental health services. Multivariate analyses failed to reveal differences between youth in the schools versus CMHCs on measures tapping life stress, violence exposure, family support, selfconcept, and emotional/behavioral disturbance. These variables can be viewed as reflecting need for mental health services, suggesting comparable need for youth from the two samples. These findings are somewhat surprising, given past studies indicating that youth seen in CMHCs are relatively more likely to present full blown or multiple diagnoses and high levels of externalizing problems (e.g., Cullinan, Epstein, & Sabornie, 1992; Silver, 1989; Zahner et al., 1992). In addition, while the research literature on comprehensive mental health programs in schools is in its infancy, a prevailing view is that schoolbased programs are more preventive than programs offered through CMHCs, which implies working with more youth who present early and less serious problems. However, this conceptual view emphasizing preventive aspects of ESMH programs at times breaks down in practice, as school-based programs uncover tremendous mental health needs in students, with options to address these needs often quite limited. Data from this study support the conclusion that youth seen in the schools reported levels of emotional and behavioral problems comparable to youth in the CMHCs.

While youth from school and community center samples were not found to differ on psychosocial measures, a trend in findings was shown suggesting that youth in the school programs were less likely to have past histories of mental health services than youth from the CMHCs. When looking only at youth scoring high on a measure of internalizing behavioral disturbance (e.g., depression, anxiety), this trend reached significance. That is, internalizing youth from the school programs were significantly less likely to have any past contact with the mental health system than internalizing youth from the CMHCs. Recent reports (e.g., Flaherty et al., 1996) expressed the view that school-based mental health programs were reaching youth in need who may otherwise not be reached, such as youth with less observable forms of disturbance such as depression and anxiety. Findings from the present study provide empirical support for this view, highlighting advantages of school-based mental health programs for reaching youth with internalizing disturbances.

Racial and gender differences in school and community samples, while interesting should be interpreted with caution. In this study, the school program served proportionally more females than males, and proportionally more African American than Caucasian youth, while

the CMHCs served more males than females and more Caucasian than African American youth. Findings indicating that youth seen in the school programs were more likely to be African American and female are consistent with demographic data maintained for the SMHP over the past six years; these data confirm that in middle schools and high schools in the program, more females than males are seen, and more African American than Caucasian youth are seen, consistent with enrollment data for the City Schools in which most children are African American. Similarly, findings indicating that relatively more children in the CMHCs were Caucasian and male are consistent with aggregated statistics for the three centers. Thus, findings pertaining to race and gender for youth who participated in the project are representative of youth seen in the schools and CMHCs, and not related to anomalous qualities of the sample.

One interpretation of gender differences between youth seen in the schools versus CMHCs relates to the notion that to gain entree into CMHCs, youth often need to act out, and boys are more likely to show acting out behaviors than girls (Cullinan et al., 1991; Office of Technology Assessment, 1991). Given their enhanced accessibility, children do not necessarily need to act out to gain entree into school-based mental health programs; hence, accounting for their inclusion of relatively more girls. Alternatively, the higher level of female participation in the school program may reflect differences in help seeking between males and females, with girls more willing to seek services with a "counselor" and viewing these services as less stigmatizing than boys (see Weist et al., 1995). However, both interpretations are admittedly speculative, pointing to the need for research on gender differences in site of mental health services for youth.

In terms of race, this study documented a clear difference based on site of services, with the majority (66%) of youth seen in the schools being African American, and the majority (72%) of youth seen in the CMHCs being Caucasian. Burns (1991) found that minority youth were relatively unlikely to receive mental health services in low restrictive settings such as CMHCs. This finding is consistent with experiences of staff from our program who work in school mental health, who frequently express concern about their inability to get inner-city African American youth from the school to CMHCs for needed services. Many of these youth and their families express strong stigma of receiving services in CMHCs, referring to them as "for crazy people." These same youth readily participate in school-based therapy, and report feeling less stigma about it. Moreover, beyond stigma, school-

based programs are able to more proactively encourage youth to keep appointments, as the clinician is in a setting where the children are and can prompt and remind appointment keeping. Discussion of the advantages of school mental health programs is beyond the scope of this paper (see Adelman & Taylor, 1993; Weist, 1997); the important point, worthy of more intensive study, is that minority youth may be more likely to receive needed mental health services in schools than in other traditional settings such as CMHCs and private offices.

Our finding that youth in the CMHCs were more likely to be on public assistance than youth in the school program needs to be interpreted with caution. This finding was based on students' self-report of public assistance status. The reliability of these reports is not known. In some cases, we were able to confirm public assistance status through confirmatory reports by parents/guardians; however, clinicians were not able to implement this procedure with all parents, related to general constraints on their time. With these cautions in mind, this finding is consistent with the public mental health function of the CMHCs (i.e., providing services to all regardless of ability to pay). While the program operating in the schools had no constraints on participation related to ability to pay, it is plausible that they had not yet become routinely used by families on public assistance, as had the CMHCs.

We need to acknowledge a number of limitations to this study. First, most of the measures were based on self-reports of children, which to some extent, constrains the validity of findings. Second, due to our relatively small sample size, we were unable to explore the potential influence of age on study findings. Age differences in findings are plausible given prior research (e.g., Barber et al., 1992), and related to the fact that the sample included youth aged 10 through 19. However, multivariate analyses already included two independent variables (gender and site of service) and one covariate (race). Controlling for gender and race with our relatively small sample size (265) may have decreased the likelihood of finding statistical differences between the samples; including age in these analyses would have compounded this problem. A final issue is that project measures were collected by a number of clinicians between the first and third intake, leading to some degree of method variance. Clinical supervisors were charged with the responsibility of ensuring that all youth referred for services completed project measures (to prevent a sampling bias), but we cannot be assured that all possible cases participated in the project. Based on these limitations, the present project must be viewed as a pilot study, with findings in need of replication in other urban, suburban

and rural communities (see Kelleher, Taylor, & Rickert, 1992), and for children and adolescents.

Notwithstanding the above limitations, this study provides preliminary support for the notion that at least for the school mental health programs in Baltimore, they were serving youth with comparable needs for mental health services as those seen in the CMHCs. Moreover, findings suggest that the school programs were reaching students who otherwise would not have received needed mental health services. Particularly for youth with disorders that are not that observable (such as depression and anxiety), providing services in schools may be the only viable mechanism of reaching youth in need in some communities. As efforts to improve the mental health service delivery system intensify as we approach and move into the next millenium, studies are needed that describe characteristics of youth seen in different service sites and modalities. Such analyses would serve as one major element in a framework for systematic planning in communities to create comprehensive, integrated and seamless systems of mental health care for youth.

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