



The Role of Nurse Practitioners in Meeting the Need for Child and Adolescent Psychiatric Services

A STATEWIDE SURVEY

Lara Kaye, PhD, MSW; Lynn Alice Warner, PhD, MSW, MPP; Cathleen A. Lewandowski, PhD;
Rose Greene, MA; Janet K. Acker, LCSW-R; and Nancy Chiarella, MSW



ABSTRACT

The high prevalence of child and adolescent mental health disorders coupled with shortages in age-appropriate mental health services pose a significant problem likely to be exacerbated over time. A survey was designed to identify the current status of and need for child and adolescent psychiatrists (CAPs) and mental health services, as well as strategies and recommendations to address identified needs in the state of New York. Key informants from each county and New York City were surveyed by telephone ($N = 58$). Most respondents identified a shortage of child and adolescent psychiatry services and reported that when CAPs are unavailable, nurse practitioners (NPs) are currently among the top four professional groups who prescribe and/or monitor psychotropic medication. Almost half of the respondents (48%) identified employing NPs with advanced certification in child and adolescent psychiatry as a promising strategy to improve access to care. Addressing the shortage of CAPs can provide an opportunity for the nursing profession to advance its role in the provision of mental health services to youth.

The psychiatric services landscape for children and adolescents is broadly acknowledged as insufficient to meet the need for services. While an ideal treatment team for most youth would include a child and adolescent psychiatrist (CAP), there are relatively few CAPs in practice. Each of the other mental health professions has a unique contribution to make to states and communities as they plan for and provide quality care to this underserved population. In this article, we present data from a statewide survey of key informants from all counties in New York State to highlight the current and potential role of nurse practitioners (NPs) in mental health services for youth. Results are interpreted within the context of current training for NPs, and recommendations are made for enhancing the current capacity of the profession.

BACKGROUND

Child and Adolescent Mental Health Service Needs

Over the course of a year, one in five youth will develop a mental disorder (U.S. Department of Health and Human Services, 1999). It is estimated that 12% to 20% of children and adolescents experience mental health problems and that the prevalence of serious emotional disturbances, a mental health classification of substantial functional impairment in family, school, and community relations and activities, ranges from 9% to 13% for youth ages 9 to 17 (Kim & American Academy of Child and Adolescent Psychiatry Task Force on Workforce Needs, 2003).

For children who are in need of mental health services, unaddressed mental disorders can result in serious long-term outcomes, such as poor academic prog-

ress, higher risk for substance use, greater involvement with the correctional system, vocational problems, health problems, and increased risk of suicide (Substance Abuse and Mental Health Services Administration, 2003). On the other hand, timely and appropriate interventions could limit the persistence, chronicity, and comorbidity that may develop when childhood mental health disorders are left untreated.

Child and Adolescent Mental Health Service Availability

Since 1980, several studies have documented significant gaps between the need for child and adolescent mental health services and the availability of CAPs. It is estimated that there are approximately 6,300 CAPs to treat the millions of children with mental health conditions in the United States; if a CAP were to treat just

the most severely impaired children, each one would have to carry a caseload of 750 severely disturbed children at any given time (Kim & American Academy of Child and Adolescent Psychiatry Task Force on Workforce Needs, 2003).

Currently, a key component of the care of children and adolescents with mental disorders is the prescription of psychotropic medications. During the 1990s, the development of new medications such as selective serotonin reuptake inhibitors for the treatment of mental illness triggered significant growth in the rate of psychotropic prescriptions for children and adolescents, with prescription rates tripling between 1987 and 1996 (Koppelman, 2004).

A Special Role for Nurse Practitioners

Overall, NPs can serve as primary health care providers, be specialists or generalists, provide physical examinations, diagnose and treat illness, prescribe medications, order laboratory tests and interpret the results, educate on healthy lifestyle choices, and coordinate health care services (The Nurse Practitioner Association New York State, n.d.). Research indicates that NPs provide services that result in good patient outcomes and often receive higher consumer satisfaction ratings than physicians (Elsom, Happell, & Manias, 2005). Core to mental health nursing is the relationship built with clients through using a continuum of intimacy ranging from friend to professional (Jackson & Stevenson, 2000; Perraud et al., 2006).

Many steps have been taken in an effort to support NPs, as well as pediatricians and psychologists, to provide children's psychiatric care. There has been a shift in pediatric training in which residency programs are increasing behavioral and developmental

requirements and a subspecialty in developmental and behavioral pediatrics has been created (Koppelman, 2004). Another shift is a recent increase in the number of advanced practice nursing programs available and the creation of psychiatric specialties in advanced practice nursing (Delaney, 2008). Nurses need to be trained to address a broad scope of practice including individual, group, and family therapy, as well as medication management (Campbell, Musil, & Zauszniewski, 1998). Prescribing rights have been granted to nonphysicians such as psychologists who complete specialized training in certain states, and NPs and other advanced practice nurses also have prescribing rights, including for psychotropic medications, in 50 states and the District of Columbia (National Alliance on Mental Illness, 2002). However, it is estimated that pediatricians and family physicians prescribe 85% of all psychotropic medications taken by children (Koppelman, 2004), and fewer than two thirds of advanced practice psychiatric nurses with prescribing authority were using that authority to prescribe (Campbell et al., 1998).

METHOD

Survey Sample

The study used a purposive sampling strategy to identify one person with extensive knowledge about mental health services in each county. An organization of county mental health directors and the individual directors themselves familiar with county personnel assisted in this process. Respondents were community mental health directors, commissioners, or a party of comparable status representing each of the 58 counties in New York State. For the purposes of this study, New York City was treated as one county and defined as the popula-

tion and area made up of all five boroughs (Queens, Kings, Bronx, Richmond, and Manhattan).

To provide more comprehensive information, participants could invite additional staff to participate in the interview, and 13 counties did so, for a total of 76 individuals. All 58 counties participated in the survey for a 100% response rate. More than 40% of the participants were directors of community, child and family, mental health, and clinical services. The rest were a mix of assistant or deputy directors, supervisors, coordinators, and clinicians (e.g., supervisory social worker, single point of access coordinator, psychiatrist). On average, participants had been in their current job for 7 years and had been living in the community for 16 years.

Survey Instrument

Survey questions were based on a review of the literature, similar surveys, and consultations with experts in the field, as well as an advisory committee composed of county mental health directors and a family advocate for child and adolescent mental health services. The instrument was designed to be administered over the telephone and contained open-ended and closed-ended questions within five sections:

- Current status of CAPs in each county.
- The need for CAPs and additional psychiatric services.
- Alternative strategies to CAPs.
- Influences on child psychiatric services.
- Respondent priorities.

Once developed, the survey was pretested, and feedback from the reviewers was incorporated into the final survey design.

Data Collection

Prior to administering the survey, efforts were made to in-

crease participation and data quality. The study was promoted by a statewide mental health directors' membership organization through its newsletter, as well as a presentation by the researchers to mental health directors. Project staff sent advance e-mails to each identified participant announcing the upcoming survey and scheduled a time to complete the survey by telephone. An electronic copy of the instrument and informed consent were e-mailed to the participants. The University at Albany's Institutional Review Board approved this project. Data quality was further enhanced by providing respondents with survey results for their verification.

Interviews were conducted using a computer-assisted telephone interviewing program—software that is able to customize the flow of the questionnaire on the basis of the answers provided and information known about the participant. Interview time was affected by county size and nuances, as well as the number of individuals who participated from the county on the telephone call. On average, the interviews took approximately 60 minutes to complete, with the longest interview lasting more than 2 hours. All interviews were conducted between October and December 2007.

RESULTS

Provider Availability and Role of NPs

Approximately 20% of counties have no CAPs providing services within their county. Another 9 county representatives reported only one CAP providing services. Of the 58 counties, nearly all ($n = 53$) reported the need for additional CAPs. Of the county representatives who expressed a need for more CAPs, almost all reported that this need significantly affects the county ($n = 50$) and that there is a strain on other professionals

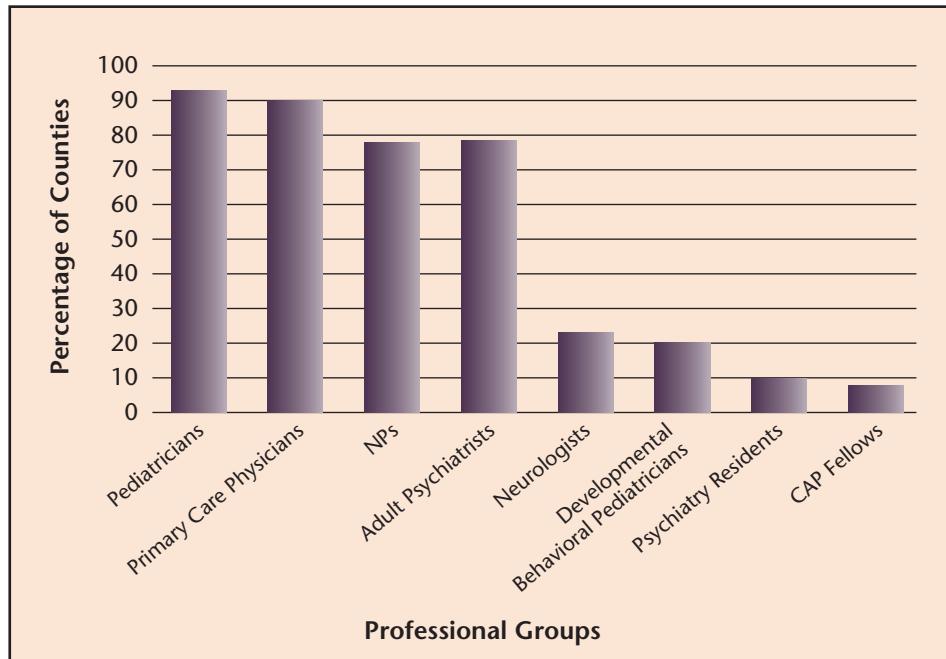


Figure 1. Percentage of counties with professional group prescribing and/or monitoring psychotropic medications.

Note. CAPs = child and adolescent psychiatrists; NPs = nurse practitioners.

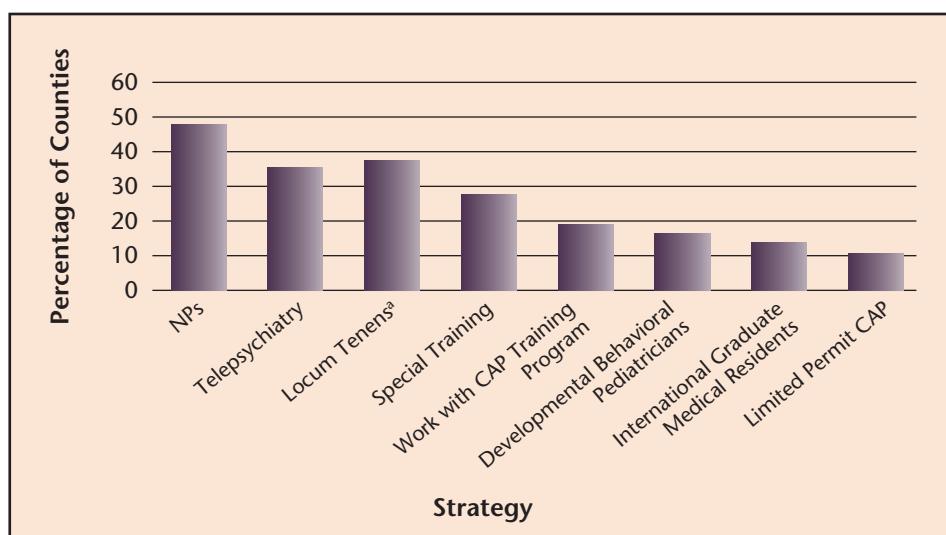


Figure 2. Percentage of counties using strategies to supplement the child and adolescent psychiatrist workforce.

Note. CAPs = child and adolescent psychiatrists; NPs = nurse practitioners.

^a Locum tenens is temporary employment for physicians.

providing mental health services as a direct result of the shortage of CAPs ($n = 51$).

Of the eight options offered to county representatives as ways their counties currently supplement the child psychiatry workforce, reliance on nurse practitioners with advanced certification

(NPACs) in child psychiatry was endorsed most often; nearly half of the counties (48%) use NPACs in this capacity. NPs were also among the top four professional groups responsible for prescribing and/or monitoring psychotropic medication for children and adolescents in addition

KEY POINTS

1. The current shortage of child and adolescent psychiatrists (CAPs) along with the high prevalence of child and adolescent mental health disorders need attention and action.
2. In New York State, nurse practitioners play a significant role in addressing some of these needs by prescribing and monitoring psychotropic medication. Mental health administrators identified nurse practitioners with advanced certification (NPAC) in child psychiatry as a promising alternative strategy.
3. Findings indicate that the quality of care is high and that NPACs are successfully providing services to children and families.
4. Addressing the shortage of CAPs can provide an opportunity for the nursing profession to advance its role in the provision of mental health services to youth.

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to or instead of CAPs. Pediatricians most commonly prescribe and monitor medications (93% of the counties), followed by primary care physicians (89%) and NPs and adult psychiatrists (both with 78%) (**Figure 1**).

Regarding the use of other strategies, approximately one third of the counties used locum tenens (temporary employment for physicians) and telepsychiatry, and nearly another third provided training for other professionals, including pediatricians, primary care physicians, and adult psychiatrists (**Figure 2**).

Benefits and Drawbacks Regarding the Role of NPs

Counties who used NPACs were asked in an open-ended question about the benefits and drawbacks of employing them. The benefit most frequently mentioned by county representatives ($n = 10$) regarding the use of NPACs was cost effectiveness; NPAC services are less costly than CAP services. Other benefits included increased capacity, reduction or elimination of wait times, and ability to prescribe medications when CAPs were

not available. County representatives commented on the high quality of their work and reported that NPACs were well liked by families and children and have experience with and enjoy working with youth, particularly younger children. County representatives also reported that NPACs are more accessible and spend more time with clients than CAPs. Overall, county representatives reported that NPACs are easier to recruit than CAPs, are a stable workforce, and have extensive knowledge of medications and medication management. In addition, in response to questions about the impact of the significant need for additional CAPs, a few county representatives ($n = 4$) mentioned the critical role that NPs and psychiatric nurses are beginning to play.

Respondents noted drawbacks associated with NPACs that stemmed from their lower level of training and expertise compared with CAPs. The most frequently noted drawback was the required supervision by a CAP ($n = 8$), which creates additional paperwork for CAPs and in at least one case precluded using

an NPAC given CAP unavailability. The challenge of finding required supervision was also mentioned in a related question about the significant impact of the shortage on counties. One county representative reported that some physicians are not willing to supervise NPACs, possibly due to liability concerns, and another reported that they have to contract for supervision at a cost. In addition, NPACs cannot conduct court-ordered evaluations. According to a few respondents ($n = 5$), some CAPs and families believe NPACs provide a lower standard of care than CAPs. In some counties, the availability of NPACs as well as CAPs was limited. Five respondents noted difficulties in recruiting NPACs, and another 2 reported that NPACs have high salary expectations.

Overall, county representatives reported that while relying on other professionals to prescribe and monitor psychotropic medication in addition to or in place of CAPs has been helpful, these strategies do not adequately meet the mental health needs of children and adolescents. Mental health treatment is time consuming because of the requirements for prescribing, monitoring, follow up, and collateral contacts. In particular, physicians with busy practices in their primary fields do not have adequate time or capacity to sufficiently bridge the gap. Some county representatives noted that this has negatively affected the quality of assessments, follow up, and monitoring.

The lack of availability of CAPs to act in consultation with all health professionals was noted. County representatives reported that professionals thought they required additional expertise regarding medication side effects, differences in dosages for children, how to make medication adjustments, and multiple

medications management. It was suggested that consultation with CAPs could support other providers in their decision making, but this kind of CAP time is largely unavailable.

DISCUSSION

This study validates the fact that the current system does not provide sufficient access to specialty care for children and adolescents with psychiatric problems and that, fundamentally, the access problem stems from limited availability of practitioners with advanced training or specialization in children's mental health. Increasing the number of CAPs and NPACs is a logical tactic and arguably should be a priority for the professions of medicine and nursing. In the short term, addressing the shortage of CAPs may be more difficult because there are several barriers to the recruitment of CAPs, starting with the length of training. After 4 years of medical school and at least 3 years of residency, the CAP specialty requires an additional 2 years of training. For NPACs, however, completing a program to receive a master of science in nursing degree typically takes 1.5 to 2 years. This degree is needed to apply to an NP program with advanced certification in child psychiatry, which usually takes 1 to 2 additional years to complete. Thus, within 4 years an NPAC would be ready to provide services in the community compared with 9 years for a CAP.

Currently, there are five closely related kinds of advanced nursing programs designed to address the needs of children with mental health issues. These programs generally include courses on child pathology and psychopharmacology and direct care or practicum hours for skill development. While some of these programs have operated for years, such as the Child and

Adolescent Clinical Nurse Specialists program, others are new, such as the Child and Adolescent Psychiatric Mental Health-Nurse Practitioner and Family Psychiatric Mental Health-Nurse Practitioner programs (Delaney, 2008). There are approximately 55 programs in the United States offering a post-master's degree in psychiatric nursing (Perraud et al., 2006) and at least four programs in New York State, one of which focuses solely on children and adolescents. Continued support of existing programs and strategic development of others, in areas with high need and/or minimal service availability, would be an important way to address the services gap. In addition, programs may consider developing incentives for graduates to locate to areas where need is high.

As psychiatrists and NPs develop a corps of children's mental health specialists, the professions will need to consider the licensing and regulatory implications of the differential training experiences of CAPs and NPACs. The additional years of CAP training provide in-depth knowledge and expertise in child psychiatry beyond what most NPACs will acquire in their programs. The intensity and implementation of supervisory relationships between physicians or CAPs and NPACs should be considered, along with liability concerns and associated supervisory costs, and will vary from state to state.

Because it is likely that the availability of CAPs for engagement in treatment teams and for supervision and consultation will continue to be limited, communities may need to support and facilitate creative links across providers. For example, telepsychiatry has been used to increase access to psychiatric care for children and adolescents (Pesämaa et al., 2004). In this arena, too,

regulations for supervision and funding of services would need to be established.

CONCLUSION AND IMPLICATIONS

Evidence from several sources points to a critical role for NPACs in the field of child and adolescent mental health. Research suggests that outcomes under the care of NPs are similar to those obtained when care is provided by a physician, and often satisfaction with NP services is higher than with physician services (Elsom et al., 2005). This study's results suggest that quality of care is high and NPACs are successfully providing services to children and families. To quote one county representative, "We'd be out of business" if it were not for psychiatric nurses.

To the extent that this study supports the development of NPs with advanced degrees in child psychiatry as a viable means to address shortages in care, it is important to recognize that this study is based on the perceptions of one set of key informants, albeit informants from an entire state with a large and diverse population living in densely populated and rural areas. Further investigation of these topics with groups representing other stakeholders, including families using mental health services, CAPs, and NPs themselves is needed to further inform this strategy. Data from these perspectives would add to the understanding of NP roles, the value placed on their contribution, and additional ideas for taking the steps needed to improve access to effective care for youth with mental health needs.

REFERENCES

- Campbell, C.D., Musil, C.M., & Zaszniewski, J.A. (1998). Practice patterns of advanced practice psychiatric nurses. *Journal of the American Psychiatric Nurses Association*, 4, 111-120.
Delaney, K.R. (2008). Addressing children's

- mental health needs: Educational preparation of advanced practice nurses. *Journal of Child and Adolescent Psychiatric Nursing*, 21, 57-59.
- Elsom, S., Happell, B. & Manias, E. (2005). Mental health nurse practitioner: Expanded or advanced? *International Journal of Mental Health Nursing*, 14, 181-186.
- Jackson, S., & Stevenson, C. (2000). What do people need psychiatric and mental health nurses for? *Journal of Advanced Nursing*, 31, 378-388.
- Kim, W.J., & American Academy of Child and Adolescent Psychiatry Task Force on Workforce Needs. (2003). Child and adolescent psychiatry workforce: A critical shortage and national challenge. *Academic Psychiatry*, 27, 277-282.
- Koppelman, J. (2004). *The provider system for children's mental health: Workforce capacity and effective treatment* (NHPF Issue Brief No. 801). Retrieved January 9, 2009, from http://www.nhpf.org/pdfs_ib/IB801_ChildMHProvider_10-26-04.pdf
- National Alliance on Mental Illness. (2002). *Policy topics: Prescribing privileges for psychologists: An overview*. Retrieved January 9, 2009, from http://www.nami.org/Template.cfm?Section=Issue_Spotlights&template=/Content-Management/ContentDisplay.cfm&ContentID=8375
- The Nurse Practitioner Association New York State. (n.d.). *About nurse practitioners*. Retrieved June 17, 2008, from <http://thenpa.affiniscape.com/displaycommon.cfm?an=1&subarticlenbr=169#whatcan>
- Perraud, S., Delaney, K.R., Carlson-Sabelli, L., Johnson, M.E., Shepard, R., & Paun, O. (2006). Advanced practice psychiatric mental health nursing, finding our core: The therapeutic relationship in the 21st century. *Perspectives in Psychiatric Care*, 42, 215-226.
- Pesämaa, L., Ebeling, H., Kuusimäki, M.L., Winblad, I., Isohanni, M., & Moilanen, I. (2004). Videoconferencing in child and adolescent telepsychiatry: A systematic review of the literature. *Journal of Telemedicine and Telecare*, 10, 187-192.
- Substance Abuse and Mental Health Services Administration. (2003, February 5). Policy options: Subcommittee on children and family. *Promoting preserving and restoring children's mental health*. Retrieved March 1, 2008, from http://www.mentalhealthcommission.gov/subcommittee/children_family020703.doc
- U.S. Department of Health and Human Services. (1999). *Mental health: A report of the Surgeon General*. Retrieved January 9, 2009, from <http://www.surgeongeneral.gov/library/mentalhealth/home.html>
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- Dr. Kaye is Research Scientist, Dr. Lewandowski is Director, Ms. Greene is Associate Director, and Ms. Chiarella is Research Support Specialist, Center for Human Services Research, University at Albany; Dr. Kaye is also Assistant Research Professor, Dr. Warner and Dr. Lewandowski are Associate Professors, and Ms. Acker is Research Assistant, School of Social Welfare, University at Albany, The State University of New York, Albany, New York.
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- Address correspondence to Lara Kaye, PhD, MSW, Research Scientist, Center for Human Services Research, and Assistant Research Professor, School of Social Welfare, Richardson 184, University at Albany, 135 Western Avenue, Albany, NY 12222; e-mail: lkaye@uamail.albany.edu.

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