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Commentary

Commentary: Actionable Steps for Addressing Pediatric Pain in Rural and Underserved Communities: Disrupting Our Approach to Psychological Science and Care

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Abstract

Although chronic pain is one of the most common health issues affecting children, disparities in access to behavioral healthcare limit its proper identification and management. There is a critical need to move beyond traditional care delivery approaches for chronic pain to reach those in communities that have limited access to care. We argue one means of doing so is to leverage our skills and expertise as psychologists to partner with and train professionals who have established relationships with youth in these communities. Drawing from a community-engaged dissemination and implementation science framework and our research implementing pain management strategies in rural and underserved communities, we review actionable strategies for disrupting traditional psychological methods to expand access to care for children with chronic pain.

Keywords: community-engaged; dissemination and implementation; equity; pain management; rural

Introduction

Chronic pain is one of the most prevalent and debilitating health issues affecting children. When identified, chronic pain can be treated and managed with empirically supported treatments such as cognitive behavioral therapy with a trained specialist (Fisher et al., 2022; Miller et al., 2021). However, marginalized groups of people, including those from rural and underserved communities, generally do not receive proper assessment for chronic pain nor have access to appropriate treatments (Huguet & Ezenwa, 2021), thereby contributing to observed disparities in chronic pain management.

Disrupting current models of research and practice are important if we are to address these problems and to increase access to pain management strategies. Our commentary is focused on the needs of youth from rural and *underserved* communities, where underserved is defined as populations (including rural communities) that do not have adequate access to medical care (National Institutes of Health [NIH], 2022). The communities of focus in our work have limited access to pediatric behavioral healthcare. Unfortunately, recent efforts to broadly improve access to behavioral healthcare have been largely insufficient and, in some cases, counterproductive for reducing disparities (Bowman et al., 2022). For example, although the COVID-19 pandemic prompted a rapid expansion of virtual behavioral healthcare, those who benefited the most were individuals who had the resources to advocate for, attend, and pay for services (Bowman et al., 2022). Moreover, telehealth has not improved the shortage of behavioral health providers in the United States, which disproportionately impacts communities that are socially and economically disadvantaged (Butryn et al., 2017). Other approaches, such as using digital pain self-management tools, often remove the need for a trained provider, yet high drop-off rates limit their impact (Beatty & Binnion, 2016). New approaches are clearly needed for delivering care to youth who have chronic pain from communities that are underserved.

Embracing Disruption

To address these challenges and to increase the relevance of and access to psychological treatments for marginalized youth with chronic pain, *psychologists must disrupt current approaches* to empirical investigation and clinical practices including practices that inadvertently or intentionally maintain care inequities. To sustainably promote health equity for children with chronic pain, pediatric psychologists should take their work to the communities where these children reside. This idea is not new; Miller's (1969) APA address put forth a similar call: "Psychology must be practiced by non-psychologists . . . the secrets of our trade need not be reserved for highly trained specialists. There simply are not enough psychologists . . . to meet every need for psychological services . . . Our responsibility is . . . to give it away to the people who really need it." Yet, despite this statement, psychological practice remains marked by gatekeeping and is seldom designed for the capacity building that Miller had in mind (Drake et al., 2022; Silva et al., 2022). In fact, psychological research

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and practice has largely contributed to disadvantaging marginalized and oppressed groups (APA, 2021a, 2021b). As psychologists, *we need to take action* to address inequities.

Where to begin? We can use our knowledge of best practices to partner with and train other professionals who already reach the lives of children from communities that currently lack access to care. Based on our collective research involving training school providers from rural and underserved communities in pain management techniques, key partnerships may optimize outcomes for children not equitably served.

Action Steps

We review actionable inter-related strategies for disrupting traditional psychological research and practice to foster equity for children with chronic pain.

Use Community-Based Methods and Dissemination and Implementation Science to Promote Equity

It has been estimated that only around 14% of research findings are used in clinical practice, and it takes approximately 17 years for findings to be implemented (Westfall et al., 2007). Undertaking research and advancing practice in tandem may help minimize existing disparities limiting access to care for the underserved. A step toward disrupting traditional psychological science and practice is to move from the proverbial "ivory tower" into the community. Dissemination and implementation (D&I) science can concurrently advance science, increase access to care (Delafield et al., 2016), and help psychologists create research that is applicable to marginalized groups. One means of conducting D&I science is to use community-based research methods to develop partnerships with key community members (Wallerstein & Duran, 2006). The level of engagement from community members can vary, but community members can help identify service and research needs and work collaboratively as partner investigators to address these needs in a feasible way. These partnerships can also facilitate more immediate transfer/uptake of research findings into the community.

Drawing from our own work using community-based methods and D&I science, we train school providers (e.g., nurses and mental health specialists) to implement pain management techniques with students. School providers often are on the frontline of addressing children's pain and thus are ideal partners, yet they do not traditionally have training in behavioral pain management techniques. In the Helping Educators Learn Pediatric Pain Assessment and Intervention Needs program (HELP PAIN), school providers are trained in how to implement pain-focused CBT strategies (e.g., gate control theory of pain, relaxation training, activity pacing, promoting positive thinking, parent guidelines for responding to pain) that would traditionally be delivered by a psychologist. In another program called the Headache Action Plan Project for Youth (HAPPY), school nurses in a large school district were trained to identify and work with students with migraine on implementing evidence-based behavioral pain management strategies (e.g., relaxation training, health behavior modification) at school (Connelly et al., 2018). *Training non-psychologists to implement components of psychological interventions disrupts traditional care models by expanding equitable access to evidence-based treatments in the community*.

Reimage Our Role within a Stratified Approach

Kazak's pediatric prevention model (Kazak, 2006), a pyramid-shaped framework for health intervention based on psychosocial risk, has three levels: Universal (base of pyramid; low risk), Targeted (middle of pyramid; medium risk), and Clinical (top of pyramid; high risk). This model suggests that the type and intensity of care can be stratified according to the unique needs of different youth. We argue the role of pediatric psychologists may be represented throughout, serving more in a training/consultative role for the base and middle of the pyramid and reserving our direct care for the children with the greatest level of need at the top of the pyramid.

In the context of pain management, an example of a base-level intervention might be a universal mindfulness-based curriculum employed by school providers to help improve stress and reduce the risk of developing chronic pain across all schoolchildren. Youth with chronic/recurrent pain (including those with mild/moderate comorbid psychological symptoms) are in the middle of the pyramid. They are likely to be missed with current screening and management approaches. As such, we can arm school providers with psychological tools to assess and address pain in children who would otherwise not have access to a pediatric behavioral health provider. The level of familiarity with cognitive behavioral strategies for pediatric pain management may vary depending on the background of various school providers. For example, a mental health professional within a school setting may have more training in the use of CBT for mental health (but not pain) than other personnel such as school nurses. Yet, we have found that even the non-mental health specialists can learn and use pediatric pain management techniques effectively. A tailored training approach can enable a range of professionals who already serve youth who are experiencing pain symptoms to implement effective strategies to increase access to pain-focused care.

Finally, at the top of the pyramid are children with the most severe and disabling pain who also present with severe mental health concerns. Such youth would likely benefit from more intensive interventions with a trained and experienced psychological provider. *Sharing our knowledge to empower others to support their community disrupts current care approaches by improving equitable resource utilization and scalability of services*.

Partner with Intermediary Organizations

Engaging with intermediary organizations, or organizations that already serve members of the community, may be a viable method to reach rural and other communities with limited access to behavioral healthcare. This is key because a psychological provider who is not part of the community of focus—even an "established expert"—may have trouble engaging people from other communities as an outsider. Engaging with partner organizations, an approach that is commonly undertaken in other research areas such as addressing the health of workers in small businesses (Cunningham & Sinclair, 2015) is critical to enhance success. As an example from the HELP PAIN project, we collaborated with a local health department that employs and trains school providers within the rural communities of focus. Together, we co-created and delivered the HELP PAIN training to reach providers who serve children within those communities. We incentivized training (e.g.,

professional continuing education, certificate of completion) to enhance participation. The health department also afforded us access to existing networks to further increase our outreach within the communities we aimed to serve. For example, we were able to gain direct support from several school leaders facilitated by the health department. *We should aim to disrupt traditional approaches by leveraging the infrastructure of existing community systems.*

Partner with a Community Champion

A community champion is an individual within the community (can also be a member of the intermediary organization) that serves two main roles: (1) They see the need and partner (e.g., are trained, may further refine and deliver psychological approaches/trainings) as fellow investigators to better meet the needs of youth and (2) they provide access to difficult-to-reach populations. Thus, partnering with community members augments engagement with and sustainability of the implemented treatment strategies with populations that are marginalized.

An effective partnership involves a social exchange, where the researcher serves needs as defined by community members (e.g., as identified through a needs assessment) while the community member(s) provide access. Recognizing that resources vary greatly (e.g., not all schools have a school nurse or a mental health specialist), a flexible approach is needed with regards to forming such partnerships and whom should be the focus of training. In an example from our HELP PAIN work, we developed a partnership with an engaged school nurse. This community champion underwent training, educated us about barriers that may impact program uptake, and offered potential solutions. *We should aim to disrupt current approaches by serving a communities based on their identified needs, and collaborating with community members recognizing their knowledge and expertise, rather than solely imposing our own research ideas/agendas.*

Provide Outreach from within

In addition to directly partnering with/training identified provider(s) within the school setting, programmatic education and outreach (e.g., presentations, email blasts, and other informational material) should be delivered broadly within a given community to help overcome potential mistrust and ensure equitable access to knowledge about the collaborative program. The research investigator should also aim to be physically present in the community as much as is feasible (e.g., offering training and outreach in person) to foster trust and build relationships. Some communities prefer training/outreach from their own community member(s), and in such instances that should be honored. A team-based approach to outreach may be optimal. Opportunities should be made available for staff who are outside the training group to ask questions and voice concerns, such as during scheduled staff meetings or professional development days. Such an approach may increase buy-in and use of pain coping strategies in schools. For example, we were invited by a school administrator to present the HELP PAIN program to all school personnel at a staff meeting.

Within a school system, we found core teams may emerge based on their training and expertise to address pediatric pain. As an example, in HELP PAIN, we sometimes train both school nurses and mental health providers serving a single school through our health department partnership. These providers may naturally partner to leverage their existing strengths to increase access to care. For example, the nurse identifies and communicates the problem (e.g., leads the pain assessment) and the mental health specialist leads implementation of CBT strategies to manage pain for a given child. As another example, a school nurse champion who received HELP PAIN training reached out to co-create a weekly pain-focused CBT intervention group (co-led by the nurse and a school social worker). The nurse and social worker developed the content areas based on the training/their clinical experience and the study team developed a manual/materials to support this program and provided biweekly consultation directly to the school nurse (who had less experience in delivering CBT strategies). Targets of additional outreach may also include not just the child with chronic pain (in a group or individual setting) but also their caregivers. During broad outreach, particularly in communities with limited access to pediatric behavioral healthcare, it is important to query about the attitudes and opinions about pain in youth, care approaches, and potential barriers/facilitators to care. For instance, we learned from a community partner that some school providers may perceive any student time out of the classroom (e.g., to pain practice coping skills) as an impediment to success—even if there is improved school attendance. Therefore, education and communication with different team members who serve the student is key. *We should aim to disrupt current approaches by building trust versus being the distant experts, and by listening and learning from the communities we serve.* Such outreach may help increase engagement within a given school community, increase provider buy-in, and foster communication between school providers who are working together to support youth.

Resources to Promote Success

Many community champions are driven by passion, but compensation for community members supports sustainable work. While grant-supported research most commonly allows for financial compensation of team members, some academic institutions, such as Michigan State University (via the office of University Outreach and Engagement, https://engage.msu.edu/) foster community-engaged research in a number of ways including offering faculty training in community-engaged research, and providing funds for researchers to conduct community-engaged research, including the compensation community research partners.

Summary and Conclusion

We need to dedicate our expertise to empowering the communities of people we aim to serve. We can bring our knowledge of pediatric psychology to those who could use it with the goal of reaching people who are neglected by traditional psychological endeavors. This call to disrupt psychological science identifies several strategies to increase equitable access to pediatric pain management for youth. Although we focus on increasing access to care in rural and underserved communities, we believe these action steps (e.g., building trust, partnering with the community to understand needs, and working together to co-develop solutions) could be applied to promote equity in other communities/settings. We believe the lessons learned may be of broad interest to members of our discipline. By drawing from the actionable steps laid out in

this commentary, we can start to meet the needs of all youth by moving beyond the traditional patient–practitioner model to provide more equitable access to care.

Authors' notes. HELP PAIN is currently undergoing evaluation. Upon completion, the materials will be made available upon reasonable request (to the corresponding author, N.R.C.). The materials for HAPPY are available upon reasonable request (to co-author M.A.C.).

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Conflicts of interest

N.R.C. leads the HELP PAIN program (M.R.R. and S.C.L. are collaborators). M.A.C. led the HAPPY program. We have no conflicts of interest to disclose.

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