

ORIGINAL RESEARCH

Empowering Local Health Policy: A Case Study on the Impact of Community-Based Participatory Research

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ABSTRACT

The general internal medicine health services research community has played a pivotal role in shaping national and state health policies. Community-based participatory research (CBPR) serves as a valuable avenue for health services researchers to explore and address health policy issues at the grassroots level. In this discussion, we highlight four mechanisms through which CBPR can enhance the impact of health services researchers on local health policy. CBPR proves advantageous for community partners by involving them directly in the research process, providing academic researchers with access to localized data, improving the interpretation of research findings by considering local context, and establishing a natural infrastructure for influencing local policy through community partnerships. Using examples from a CBPR project led by one of us (M.O.), we illustrate each mechanism. Recognizing both the challenges and opportunities associated with CBPR, future endeavors will contribute to elucidating how this evolving research paradigm can effectively complement traditional health services.

Keywords: Community-based research, Community health centers, Health services, Infrastructure.

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INTRODUCTION

Health services research conducted by general internists serves a critical purpose in informing and shaping health policies, particularly at the national and state levels. This research is multifaceted, encompassing the evaluation of existing national or state health policies and programs to gauge their impact on various facets of healthcare.¹ Parameters such as patient outcomes, accessibility to healthcare services, and economic indicators are meticulously examined to provide a comprehensive understanding of the effectiveness of these policies. Furthermore, health services research acts as a proactive force by identifying new targets for potential national and state policy interventions. One notable focus area is the investigation of geographic variations in healthcare quality and cost. Understanding and addressing these variations are essential steps toward achieving more equitable and efficient healthcare delivery. Another critical dimension explored by health services research is the identification and mitigation of health

disparities, particularly those affecting rural and backward minorities. By delving into the root causes and manifestations of these disparities, researchers contribute to the development of policies aimed at reducing and eliminating health inequities. In essence, the expansive scope of health services research conducted by general internists not only evaluates the impact of existing policies but also contributes to the proactive identification of areas in need of policy attention. This comprehensive approach is instrumental in advancing the broader goals of healthcare improvement and promoting health equity on both national and state fronts.

Within the realm of health services research, there has been a notable imbalance in the attention given to the translation of research findings at the local level.² This gap, however, is being actively addressed through the adoption of community-based participatory research (CBPR) as a means to identify and tackle local health policy questions. CBPR serves as a transformative approach by fostering a collaborative and equitable

partnership between academic researchers and community members who possess intimate knowledge of the specific local circumstances that impact health. The foundational premise of CBPR involves the establishment of a shared vision and understanding between researchers and community stakeholders. This partnership takes a proactive stance in identifying prevalent health issues within the community and subsequently formulating research-driven strategies for tangible action. The uniqueness of CBPR lies in its inclusive nature, with community members playing a pivotal role in shaping the research agenda and contributing their insights throughout the entire research process. By integrating community members as active participants in the research journey, CBPR stands out in its ability to generate evidence that goes beyond academic rigor to become not just relevant but also directly applicable and actionable within the local context. This approach ensures that the research outcomes are not confined to scholarly discourse but have a tangible impact on improving health outcomes within the community. Notably, researchers specializing in general internal medicine are increasingly recognizing the value of CBPR. Its emphasis on community engagement and locally tailored solutions resonates with the broader goals of health services research, making it a powerful tool for addressing health challenges at the community level. As this collaborative and community-centric approach gains traction, it contributes to bridging the gap between research and practical, community-based health policy interventions.

DYNAMICS AND ILLUSTRATIONS OF COMMUNITY-BASED PARTICIPATORY RESEARCH (CBPR)

Mechanism 1: Community-Based Participatory Research (CBPR) stands as a robust and transformative framework, deeply engaging individuals and communities in the very core of research processes to yield direct, meaningful benefits. The vitality of CBPR lies not only in its commitment to producing well-informed interventions but also in fostering a sense of ownership and empowerment among community members.³ This collaborative approach extends beyond the traditional research model, actively shaping the development of interventions, enhancing the selection of study participants, and substantially increasing the likelihood of these interventions being embraced within the community where they are implemented. CBPR goes beyond the confines of traditional research participation; it strives to create a reciprocal relationship where community members not only contribute to the research endeavor but also stand to gain from it. The engagement of communities in surveys or data analysis becomes a catalyst for a deeper understanding of health issues, providing individuals with the knowledge and tools to advocate

for health concerns they identify as pivotal. Furthermore, CBPR's impact transcends the immediate research outcomes. By integrating community voices into the research process, it becomes a catalyst for reshaping the services provided by partnering organizations, rendering them more attuned and responsive to the genuine needs of the community. The locally generated data through CBPR acts as a potent tool, not only for steering the course of the study but also for enabling partner organizations to articulate the significance of their services to funders, ensuring the sustainability and growth of their initiatives.⁴ A compelling example of CBPR's transformative potential is exemplified by the groundbreaking intervention study initiated at the Anganwadi Health Center (AHC), Roodahi. Addressing the critical issue of low cervical cancer screening rates, the coalition embarked on a community-driven educational campaign. Drawing insights directly from the community, the group opted to utilize community health workers as key conduits of information about cervical cancer and screening guidelines. The intervention, consisting of two 3-hour group workshops facilitated by community health workers following a pre-existing curriculum, yielded notable results. A subsequent randomized trial showcased significant improvements across key outcome measures, including enhanced cervical cancer knowledge, increased self-efficacy, and higher Pap screening rates observed over a 6-month period. The detailed documentation of the intervention, methods, and results underscored the transparency and accountability intrinsic to CBPR. Crucially, the success of this intervention extended well beyond the research period. Having demonstrated its efficacy, the AHC partnership successfully secured continued funding, ensuring the sustained availability and impact of the program. Today, this evidence-based health initiative not only ingrains itself in the fabric of the community but also finds a permanent home in the AHC. This dual achievement not only strengthens the centre capacity but also extends invaluable health resources to nearly 18,000 women in the local community. This narrative of success is emblematic of the transformative potential inherent in CBPR. It illustrates that collaborative, community-driven research doesn't merely generate knowledge; it serves as a catalyst for positive, sustainable change in healthcare delivery, amplifying the voices of communities and fostering a model of research that is truly participatory and impactful.

Mechanism 2: Community-Based Participatory Research (CBPR) stands as a transformative force in the realm of health services research, offering researchers a unique and invaluable avenue to delve into the intricacies of local communities.⁵ The utility of CBPR becomes particularly evident through its facilitation of access to, and generation of, local data—information that is deeply rooted in the realities of specific communities and serves as a potent tool for

addressing localized health challenges. While national and regional survey and administrative data provide a broad overview of health trends and lay the groundwork for identifying potential areas of intervention, CBPR takes this a step further. By actively involving community members in the research process, CBPR projects bring to light local nuances and perspectives that may be overlooked by more generalized data sets. This approach not only enriches the understanding of prevalent health issues but also refines the identification of intervention targets that are contextually relevant to a specific community. CBPR projects play a dual role by not only gathering data directly through community involvement but also by fostering collaboration with Anganwadi Health Center (AHC), Community health centers (CHC), and community-based organizations (CBOs). This collaborative effort, however, brings to the forefront the critical consideration of the variable quality of local data. Establishing and maintaining CBPR partnerships require careful attention to the intricacies of local data quality, ensuring that the information collected is robust and reliable. A key facet of CBPR's impact lies in its ability to empower local organizations by providing them with a voice in the research process. Partner organizations, often facing limitations in data analysis capacities, are more inclined to share their data when the research questions align with the priorities identified by the CBPR team. This collaboration, therefore, opens up new frontiers of inquiry for health services researchers, offering a wealth of localized data that can inform interventions in ways that national or regional data might fall short.^{6,7} The cervical cancer study, highlighted as an illustrative example, underscores the power of local data acquired through CBPR. National data hinted at a marginal difference in recent Pap smear rates between rural and urban women, but the local survey conducted through CBPR revealed a stark contrast. This difference in local context—where only 18% of rural had received a recent Pap smear and nearly 69% had never undergone screening—served as a clarion call for a targeted, community-based education initiative. The pivotal lesson drawn from this case is the potential divergence between national statistics and the ground realities of specific communities. Relying solely on national or regional data to design interventions may risk "missing the target," as it might not capture the nuanced problems unique to local contexts. CBPR, with its emphasis on community involvement and locally-driven data, emerges as a beacon guiding researchers to tailor interventions according to the specific needs and challenges faced by communities. Looking ahead, CBPR not only informs immediate interventions but also paves the way for future research directions. The recognition of disparities across rural/backward groups within the local community becomes a focal point for continued investigation, offering a roadmap for addressing

health inequalities at the grassroots level. In essence, CBPR stands as a linchpin in the realm of health services research, unlocking the door to a treasure trove of local data that not only informs the present but also shapes the trajectory of future healthcare initiatives. Through this approach, research becomes more than an academic endeavor; it becomes a collaborative, community-driven force for positive change, ensuring that interventions are not only evidence-based but also deeply rooted in the lived experiences of the communities they aim to serve.

Mechanism 3: Community-Based Participatory Research (CBPR) emerges as a linchpin in fostering an informed interpretation of study findings, establishing a critical link between research outcomes and effective local policymaking. This mechanism hinges on the active involvement of community partners in the research process, where their insights and contextual knowledge become instrumental in shaping the interpretation of research findings and, consequently, guiding informed policy decisions at the local level.⁸ In the realm of CBPR, community partners play a pivotal role in assisting academic researchers in interpreting research findings for policymaking purposes. The wealth of local knowledge possessed by community partners is a valuable asset, providing crucial information about the local context. This includes insights into how local governmental agencies, community-based organizations (CBOs), and healthcare centers have previously addressed or approached the specific health issue under investigation. This contextual information becomes a cornerstone for researchers, enabling them to plan studies that are attuned to the nuances of the community, contextualize their findings within the local landscape, and advocate for programmatic and policy changes that align with the unique needs of the community. The absence of this contextual information, as often seen when researchers operate in isolation from community partners, can lead to misguided policy recommendations. Without insights into the local experiences and approaches taken by various stakeholders, researchers may inadvertently overlook important factors that could influence the success or failure of proposed policy changes. Anganwadi Health Center (AHC) cervical cancer intervention serves as a noteworthy example, where community partners were involved in every phase of the research, including the interpretation of study findings. The inclusion of community partners in the interpretation phase is particularly crucial, as it provides a check against potential oversights. Members of the CBPR partnership in the AHC initiative actively scrutinized the study findings and, importantly, could not identify any local factors—such as concurrent educational initiatives during the study period—that could offer alternative explanations for the study results. This not only highlights the robustness of the research but also underscores the significance of ongoing dialogue

between academic researchers and community partners.⁹ Acquiring an in-depth understanding of the local context is a complex task, and academic researchers often find it challenging to develop this knowledge without the continuous engagement of community partners. The local knowledge held by community partners is a dynamic source that complements traditional scientific literature, providing a nuanced perspective that may not be captured solely through academic sources. As such, health services researchers are encouraged to broaden their sources of reference, incorporating local newspaper stories and insights from discussions with local stakeholders into their grants and manuscripts. This practice not only enriches the understanding of the local context but also demonstrates a commitment to acknowledging and integrating the community's voice in the research process. In essence, Mechanism 3 of CBPR serves as a bridge between research and policymaking, ensuring that study findings are not only scientifically rigorous but also deeply embedded in the realities of the local community. Through the active involvement of community partners, CBPR facilitates a holistic and contextually rich interpretation of research outcomes, paving the way for policy recommendations that are not only evidence-based but also responsive to the diverse needs and experiences of the communities they seek to impact.

Mechanism 4: Community-Based Participatory Research (CBPR) serves as a powerful catalyst in establishing a natural infrastructure for influencing local health policy. This mechanism unfolds through a dynamic process that begins with a collaborative dialogue between researchers and communities, centering around topics of shared concern. This dialogue not only identifies the key health issues affecting the community but also helps pinpoint other stakeholders who are equally invested in addressing these concerns. Academic investigators, working hand-in-hand with community partners, meticulously develop a systematic process that ensures the continuous incorporation of community input throughout the entire research journey. Once the research is complete, the impact of CBPR extends beyond the dissemination of findings; it leverages the resources and social networks of community partners to mobilize the community for actionable change. The CBPR research team, having evolved into an invested and informed coalition, becomes a potent force capable of speaking with authority and conviction in the local policy arena. This collective voice, informed by both academic expertise and the grassroots insights of the community, carries a unique weight that resonates with local policymakers. Anganwadi Health Center (AHC), as an illustrative case, emerged in response to a pressing need—the limited access to primary care in the local rural community in Roodahi. This initiative, spearheaded by academic researchers alongside other stakeholders, exemplifies the collaborative essence of CBPR. The coalition

included the AHC, CHC, and various community-based organizations (CBOs), forming a diverse alliance with a shared commitment to addressing the health challenges faced by the largely uninsured and backward community. In recognizing the multifaceted nature of local health issues, this coalition strategically decided to create a healthcare center tailored to the unique needs of the community. The development of the healthcare center and its comprehensive programs drew upon the collective resources of each partner. As the center gained recognition for its dedicated service to the community, AHC found itself at the intersection of community health and policy advocacy. The impact of this CBPR initiative transcended the confines of the clinic. The diverse and influential network cultivated through CBPR positioned AHC as a key participant in a village-wide task force focused on improving the health of rural/backward communities. In this role, leaders from local area actively contribute to discussions and initiatives that shape rural health policy in the state. The political connections and collective influence of the coalition contribute to the broader effort to positively impact policy decisions that directly affect the health and well-being of the community. This transformative process, exemplified by AHC, showcases how CBPR not only addresses immediate health concerns but also establishes a lasting infrastructure for community engagement in policy development. By integrating the community into the research process and forming collaborative alliances, CBPR becomes a powerful vehicle for creating sustainable change, where local health policies are shaped not only by academic expertise but also by the authentic voices and needs of the communities they aim to serve.

DISCUSSION

The integration of Community-Based Participatory Research (CBPR) into health services research signifies a transformative shift toward a more community-centric and nuanced approach.¹⁰ In contrast to traditional methodologies that often rely on regional or national data, CBPR introduces dynamic mechanisms that enhance the effectiveness of health services researchers in addressing health challenges at the local level. CBPR initiates a collaborative dialogue between researchers and local communities, transcending the conventional model of research as a one-time data collection exercise.¹¹ This dialogue is not merely an exchange of information but a participatory engagement that uncovers shared health concerns and identifies key local stakeholders. Involving the community in defining research questions ensures that the research agenda is reflective of the community's priorities. A hallmark of CBPR is the systematic integration of community input throughout the entire research journey. This continuous engagement ensures that the research is not only scientifically rigorous but also deeply

embedded in the context of the community. By involving the community at every phase, from defining research questions to interpreting findings, CBPR creates research outcomes that resonate with the lived experiences of the local population. The impact of CBPR extends beyond the research phase to the mobilization of resources and social networks within the community. The collaboration between academic researchers and community stakeholders results in a coalition that is not only informed but also invested in advocating for change. This mobilization becomes a powerful force for driving community-driven initiatives and influencing local policy decisions.

CBPR places a strong emphasis on the informed interpretation of study findings, actively involving community partners in this critical phase. This collaborative approach helps contextualize research findings within the local landscape, guarding against oversights and ensuring that the outcomes are not only scientifically sound but also deeply rooted in the community's unique context. The integration of CBPR with traditional approaches represents a synergistic strategy. While national and state policies play a crucial role, the localized lens of CBPR adds a depth of understanding that is often missing in broader approaches. It acknowledges the heterogeneity of health problems and emphasizes the importance of tailoring interventions to the specific needs of the community. In essence, this integrated approach is poised to yield more effective and sustainable local health programs and policies. By acknowledging the importance of community-driven research, health services researchers can bridge the gap between data collection and meaningful, community-centric change. The collaborative principles of CBPR promise to enrich the trajectory of health services research, fostering healthier and more resilient communities. Developing and sustaining effective Community-Based Participatory Research (CBPR) partnerships demands a skill set that significantly overlaps with the abilities employed by policymakers.¹² The initial stages of forging a CBPR partnership mirror the skills essential for effective policymaking, such as networking with stakeholders and establishing a mutually beneficial agenda. These initial steps lay the foundation for a collaborative and productive partnership. As the CBPR process unfolds, negotiation becomes a central theme among partners, akin to the diplomatic negotiation skills often employed by policymakers. The AHC partnership, as an illustrative example, has navigated challenges intrinsic to CBPR efforts. These challenges encompass the delicate task of reconciling diverse priorities and incentives among stakeholders, aligning timelines to ensure coherence, and equitably distributing resources among both community and academic investigators. The intricacies of conducting CBPR, especially from the perspective of an academic investigator, present a unique advantage in

influencing local health policy. The challenges faced in CBPR mirror the complexities encountered in the policymaking arena. Successful navigation of these challenges not only leads to the effective execution of research but also enhances the potential for translating research findings into actionable policies. The negotiation skills required to address varying priorities and timelines in CBPR are inherently aligned with the skills needed to navigate the policymaking landscape. Moreover, the ability to understand and manage disparate incentives among stakeholders is crucial both in CBPR and policymaking. A successful CBPR partnership often hinges on the equitable allocation of resources, a process that necessitates negotiation and compromise—a skill set highly transferable to the policymaking realm.

The translation of research into policy is a pivotal phase where the skills cultivated during CBPR play a significant role. Bridging the gap between research findings and actionable policies requires effective communication, collaboration, and negotiation—all skills honed during the CBPR process. The nuanced understanding of community needs, gained through CBPR, positions academic investigators as valuable contributors to the policymaking discourse. In essence, the journey of conducting CBPR as an academic investigator serves as a strategic advantage in influencing local health policy. The skills honed in networking, negotiating, and reconciling priorities—integral to successful CBPR—directly contribute to the effective translation of research into policies that resonate with and benefit the community.^{13,14} This convergence of skills underscores the symbiotic relationship between CBPR and policymaking, reinforcing the notion that successful research not only generates knowledge but also has the potential to drive meaningful and equitable policy changes at the local level. The paramount value of Community-Based Participatory Research (CBPR) for health services researchers lies in its capacity to inform and shape local programs and policies through the active involvement of non-academic partners. As CBPR evolves as a practice, it prompts critical questions that necessitate thoughtful consideration. Two pivotal inquiries emerge: Firstly, what constitutes the appropriate unit of analysis or "community" size when seeking to drive policy change? The assumption that a state-level analysis of data logically informs state policy may not universally translate to improved health outcomes across all communities within that state. The complexity lies in recognizing the diverse needs and dynamics that characterize individual communities. Secondly, the generalizability of CBPR findings from one community to another surfaces as a significant challenge. Can the insights gained from a CBPR initiative such as AHC in Roodahi be seamlessly applied to the distinct context of the rural population in state? This question delves into the transferability and applicability of CBPR findings

across varied community settings, acknowledging the uniqueness of each community's characteristics, priorities, and challenges. Addressing these challenging questions remains at the forefront of refining the practice of CBPR.¹⁵ Determining the optimal unit of analysis for policy change involves a delicate balance between overarching state-level policies and the nuanced, community-specific interventions necessary for impactful change. Likewise, the transferability of CBPR findings requires an understanding of the contextual factors that may vary between communities. While certain principles and approaches from CBPR may be broadly applicable, the nuanced intricacies of each community demand a careful examination of the contextual factors influencing health outcomes. Despite these challenges, CBPR represents an untapped and promising opportunity for health services researchers. The collaborative nature of CBPR not only opens new lines of inquiry but also establishes a symbiotic relationship between researchers and the communities they aim to influence. The ongoing evolution of CBPR offers a platform for delineating this emerging research paradigm. Future CBPR efforts are poised to contribute to defining the optimal unit of analysis for policy impact and elucidating the conditions under which findings can be effectively transferred between communities. Through a continued commitment to collaboration and mutual benefit, CBPR holds the potential to drive a more inclusive and impactful approach to informing health policy, ultimately fostering healthier and more resilient communities.

CONCLUSION

Community-Based Participatory Research (CBPR) stands as a transformative force in the realm of health services research, offering a dynamic approach that involves non-academic partners in shaping and informing local programs and policies. While the practice of CBPR raises challenging questions regarding the appropriate unit of analysis for policy change and the transferability of findings across diverse communities, it represents a largely untapped opportunity for health services researchers. The collaborative nature of CBPR, exemplified by initiatives like AHC, not only opens new avenues of inquiry but also establishes a unique synergy between researchers and the communities they seek to influence. The evolving landscape of CBPR holds promise in defining this emerging research paradigm, providing insights into the optimal units of analysis for policy impact and elucidating the conditions under which findings can be effectively transferred between communities. Despite the complexities, CBPR remains a powerful vehicle for fostering inclusive, community-driven health policies that address the distinctive needs and challenges of diverse populations. As future CBPR efforts continue to unfold, they have the potential to shape a more responsive and equitable approach to health policy,

ultimately contributing to the creation of healthier and more resilient communities.

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