

Review

Recruiting Perinatal Fathers to Interventions and Research: A Conceptual Model of Engagement and Integrative Review of Barriers Encountered and Strategies Used

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Academic Editor: Jenn Leiferman

Special Issue: [Multi-level Approaches to Preventing Perinatal Mood Disorders](#)

OBM Integrative and Complementary Medicine
2022, volume 7, issue 3
doi:10.21926/obm.icm.2203041

Received: May 31, 2022

Accepted: August 31, 2022

Published: September 14, 2022

Abstract

The perinatal period represents a unique developmental window for families and an opportunity to reach and engage fathers in research and preventive interventions. The distinctiveness of this period stems from the changes and stressors that parents experience which affect their openness to enroll in interventions (e.g., adaptive parenting, physical and mental health, relationship skills, and economic self-sufficiency) and participate in research. While long understudied, paternal research in the perinatal period has flourished in the past decade. Recent studies find that fathers struggle with the transition to parenting and report increased health and mental health problems during this time; but, compared to mothers, they are less likely to enroll in supportive services. Intervention programs and research studies have found recruiting, engaging, and retaining fathers is difficult due to factors such as men's low knowledge of and openness to the use of available support resources as well as logistical, internalized, and program-level barriers. Aside from a few quasi-experimental studies on the impact of altering advertisement text to specifically state they are recruiting fathers, little systematic study of or conclusive evidence for the effectiveness of paternal recruitment strategies has been published. To frame future work, this manuscript first offers a conceptual



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model of phases of paternal engagement and the factors believed to impact father recruitment. Secondly, this paper summarizes, the predominantly anecdotal, previous publications on barriers faced and strategies found to be helpful in paternal recruitment and engagement.

Keywords

Paternal; father; parent; perinatal; recruitment; engagement; barriers; preventive intervention

1. Introduction

Traditionally, the term “father” referred to the male parent and his contributions to childrearing which encompassed many roles (e.g., primary or co-caregiver, affective co-regulator for the child, playmate, co-provider of nutrition and daily needs as well as co-provider of basic family resources). Considerable research has shown that father involvement conveys protective and, at times, risk influences that contribute significantly to child and family outcomes such as normative developmental milestones, mental and physical wellness, and school readiness [1-3]. For this review, the terms father(s), dad(s), and paternal are used synonymously and without clarification as to male genetic contribution to the pregnancy or, due to the fluid and changing nature within families, the nature of the parents’ intimate partnership, marital, or cohabitation status. While there is no universally recognized definition, this manuscript adopts a broad definition of the “perinatal period” [4] as referring to a time of parent, child, and family transitions resulting from a new pregnancy that persists beyond the birth, until the child’s first or second birthday.

For fathers, the perinatal period and transition to parenthood, whether it be the first time or with a subsequent birth, has been deemed a “magic moment” by studies such as *Fragile Families and Child Wellbeing* [5, 6]. The period is distinct due to the degree to which role changes contribute to parents’ openness to engage in support programs and developmentally focused research [7-9]. This period is also considered unique because perinatal fathers have, relative to other times in development, high engagement with the mother and child(ren) because parental intimate partnerships are still intact and they likely reside within the same household [10, 11]. The perinatal period is further important because fathers are engaged in, potentially malleable, health risk behaviors that impact parenting, caregiving, and co-parenting [12-16]. Paternal health studies in the perinatal period find that many fathers experience increased health and mental health problems; but, relative to mothers, men are poor health care consumers and do not anticipate negative impacts of the birth on their own wellbeing [17-23]. Outcome studies of paternal-focused (i.e., specific for dads) and father-included interventions find that programs can increase resilience and reduce the impact of existing risk factors, which result in enhanced support for mothers, more adaptive caregiving and co-parenting, and better child development outcomes [24-27].

The perinatal period may be an opportune time to engage fathers but paternal-focused interventions and research studies report that recruiting, engaging, and retaining fathers is a nearly universal challenge [27-30]. Currently, the paternal recruitment and engagement literature is comprised of a few program evaluations and quasi-experimental studies (e.g., [31, 32]), descriptive

reviews (e.g., [33, 34]), distilled opinions, beliefs, and recommendations from qualitative studies of fathers and other stakeholders (e.g., [29, 35, 36]), and recommendations from expert working groups [37, 38]. A protocol for systematic review and meta-analysis of paternal recruitment and engagement strategies was proposed [39]; but, this step only articulates a process for distilling key findings and lessons from a large number of studies. The literature on recruiting, engaging, and retaining fathers likely is not yet adequately developed for those techniques. Yarmeych & Perskey [32] found that almost “no conclusive evidence” has surfaced regarding the most fruitful approaches to recruit fathers into interventions or research.

Previous reviews of paternal recruitment and engagement found that most studies do not tally or describe the outreach strategies used (e.g., recruitment information found in only 2 of 200 studies) [40, 41]. The lack of data on how programs are recruiting fathers leads to a presumption that programs use widely ranging systematic and non-systematic (i.e., convenience) approaches. Programs that do not evaluate the representative demographics of fathers who are engaged in their activity, relative to the community being served or the degree to which specific strategies were successful in engaging fathers may inadvertently be relying on convenience-based strategies. A problem with such an approach is convenience recruitment may routinely miss certain sub-populations including Black, Indigenous, and People of Color (BIPOC) fathers and those facing greater socio-economic adversity [42, 43]. To date, very little has been published on how frequently perinatal father subgroups are disproportionately overlooked or not recruited for interventions and research studies. The few studies evaluating potential bias in paternal recruitment (i.e., mental health screening and child welfare services) found inadequate recruitment of BIPOC fathers (i.e., in studies of mental health screening and child welfare service engagement) and research studies using such approaches result in limited generalizability of findings [44, 45].

Nonetheless, to advance work in this area there is value in summarizing the current findings from the literature on paternal recruitment and engagement during the perinatal period. To frame and articulate what is included in the process of paternal recruitment and engagement, this manuscript offers a descriptive conceptual model and then provides an integrative narrative of themes and strategies highlighted in this literature to date. Given the significant overlap found in publications related to paternal recruitment and engagement for social programs, preventive interventions, and research, the term “activities” will be used to represent the variety of opportunities for which fathers are recruited.

2. Methods

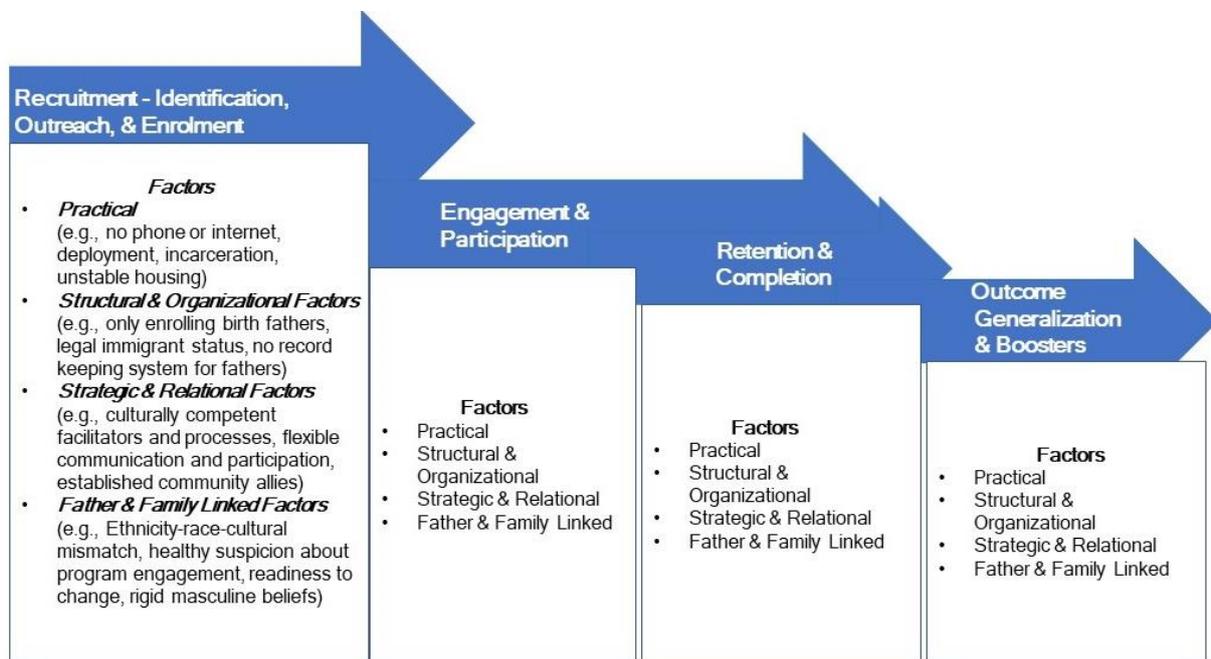
This manuscript chose the integrative review [46] approach due to little prior systematic study of paternal recruitment and engagement. Integrative reviews create a holistic representation of the issues and relevant concepts from diverse sources (e.g., quasi-experimental studies, program evaluations, organization reports, and recommendations from prior experience) to frame and inform future work on the topic. The steps of integrative review followed in this study were: (1) issue identification/problem formation, (2) literature search, (3) evaluation of findings, (4) data integration, and (5) interpretation of findings and presentation of results.

Specific search strategies included scanning relevant databases including Google Scholar, PsycInfo, Scopus, ProQuest, and PubMed. To identify relevant father-focused program evaluations and reports from social service initiatives and the private sector, electronic searches were repeated

in ResearchGate and the Google web browser. Search terms included - paternal, father, recruitment, engagement, outreach, barriers, fatherhood, perinatal, and early childhood. Manuscripts written in English, published during or after the year 2000, and found to describe strategies to reach out to and engage fathers in programs of education, service, or research were read for inclusion in this review. Citations and articles were downloaded to Mendeley citation management software where keywords and references were searched to identify additional manuscripts. In this review of paternal recruitment and engagement, six articles represented program evaluations of which three used a quasi-experimental design. The remaining manuscripts described barriers faced, strategies used, and lessons learned from recruiting and engaging fathers.

3. A Model of Processes and Factors Related to Paternal Activity Involvement (PAI)

A model of Paternal Activity Involvement (PAI) is presented below to represent the process of recruiting and engaging fathers in activities such as parenting interventions, psychotherapy, and research [47-49]. Figure 1 visually depicts the PAI phases of father engagement and the influential factors (i.e., barriers and facilitators) which have been identified by the literature on paternal recruitment.



Adapted from: Ingoldsby, 2010, Mitchell, et al., 2007, Pfitzer, Humphreys, & Hegarty, 2017, Staudt, 2007

Figure 1 Phases of Paternal Activity Involvement.

Adapted from previous narrative conceptualizations and visual models [28, 47-49], the PAI contains four overlapping periods of activity i.e., recruitment, engagement/participation, retention, and generalization. Recruitment includes steps such as identifying the father (i.e., invite partners from all new birth certificates or upon enrollment in the childcare setting), outreach (i.e., first contact), recruitment (i.e., discussion of what is offered and the degree of interest) and enrollment (i.e., formal acknowledgment of starting) [28]. Each activity may operationally define recruitment differently (e.g., the father was contacted and discussed participation with staff vs. the father enrolled and participated in the initial session); for most, recruitment likely transitions to

engagement during that first meeting. Paternal engagement represents the period of involvement across the full duration of the activity (e.g., asking about goals, using screening tools, delivery of the content, or completing research protocols). Across sessions, retention is an important aspect of engagement until the point in time when the father discontinues participation (i.e., attrition; actively indicating his stopping, passively such as through lack of response, or graduation/ending). Generalization of outcomes was added to the model as some activities have extensions from the initial episode of the activity (e.g., check-ups, boosters, or additional phases of longitudinal follow-up) and factors influencing engagement during this period of the activity may or may not differ from other phases (e.g., becoming a blended family with subsequent partners leading to lower interest in engagement among fathers).

Within each phase of paternal engagement, activities have an opportunity to identify potential barriers that reduce enrollment and facilitators that increase participation. For example, programs need to look at the degree to which practical (e.g., outreach materials, languages available, means of communication, times of day services are offered), cultural issues (e.g., participation in a service without one's partner, gender-based expectations of childrearing), relational (e.g., cultural competence, staff training, and skill, provider alliance), strategic (e.g., tele-sessions), and structural influences (e.g., program policies regarding fathers who are deployed during the intervention, and availability of sustained funding) impact father engagement and progression through an activity [50]. Unfortunately, almost no systematic research has been conducted on the degree to which different approaches are effective with fathers or to what degree barriers create impediments to paternal recruitment in the perinatal period. As this manuscript is focused on fathers in the recruitment phase, the next section presents integrated findings regarding factors influencing paternal engagement.

4. Factors Impacting Paternal Identification, Outreach, Recruitment & Enrollment

4.1 Practical, Structural, and Strategic Barriers

The most basic practical barriers to engaging fathers are a) not explicitly stating services are intended for fathers (i.e., general "parenting" activity flyer) and b) lack of awareness - either fathers do not know about the opportunity and/or providers are not aware of eligible fathers [51]. Programs that rely on passive recruitment (e.g., media advertisements, websites, and service listings) are far less likely to reach a majority of eligible fathers in a community. Passive approaches are more likely to engage highly motivated participants while missing socioeconomically stressed and marginalized dads, i.e., those who are most in need of support by their experiencing the greatest cumulative risks for negative child and family outcomes [40].

How activities are set up to engage fathers can create barriers to enrollment and participation (i.e., is it a parenting activity that is father-inclusive vs. father-specific, is participation done as part of a group or more 1:1, center-based vs. home-based, or allows for asynchronous engagement) [27]. Qualitative studies presented mixed findings about the preferred format, as some find that fathers' stated preference is for paternal-only/group-based activities, especially when those services are linked to trusted community organizations, and others prefer to participate in programs serving both parents [52]. High-quality service delivery (e.g., high organizational and supervisory support, training to ensure facilitator expertise, low turnover) also likely impacts recruitment and engagement as it results in positive participant experiences and garners credibility in the community

[53-55]. The quality of interpersonal connection or bond between participants and facilitators has also been cited as a vitally important aspect of recruitment in parenting programs. The degree to which this is applicable in father-focused activities has not been as widely studied [56, 57].

Concrete barriers to paternal recruitment have been reported for issues such as transportation problems, the availability of remote/electronic participation, legal status requirements (e.g., immigration documented, biological father), hours the activity is available, and cost of or incentives for participating [28, 52, 58]. The idea that paternal engagement in perinatal activities is precluded by fathers' employment has been essentially debunked, as scheduling flexibility successfully overcomes this barrier [32].

Inadequate attention to culturally relevant and responsive activity development and adaptations also represent observed barriers to father recruitment and engagement [59-62]. Successful activities directly address cultural and gender-based differences, common misconceptions, as well as negative assumptions about fathers (e.g., dads are not interested, fathers prefer to leave parenting to moms, teens dads are not involved, fathers are just stoic or unemotional) [63]. Maintaining the status quo regarding attitudes, beliefs, and practices may contribute to professional gatekeeping or communications and behaviors that disenfranchise rather than successfully engage fathers [26, 64]. Another culturally relevant barrier is making assumptions about technology access and acquired skills (e.g., smartphone, application navigation savvy) as they can create rather than reduce barriers to access for vulnerable fathers [65, 66].

4.2 Barriers Linked to Family and Father Factors

A commonly reported family-associated barrier to paternal recruitment and engagement is gatekeeping. Gatekeeping refers to the father's participation being regulated by the other parent or another family member (e.g., maternal grandmother) [67-69]. Examples include passive gatekeeping such as not telling the dad about the opportunity or active gatekeeping such as refusing to include the father in home-visiting sessions.

Low paternal readiness or openness to engage in a service or activity will likely impact recruitment and engagement [40, 70-72]. Studies of fathers, relative to mothers, in parenting behavior training found the dads reported they were less ready for change, less confident about their ability to change, endorsed greater resistance to change, and saw their activity involvement as less central to affecting the child's behaviors [72].

Traditional masculine gender role beliefs, when strongly held and internalized by fathers, are reported as barriers to paternal activity engagement. Examples reported include men's preference for gender-segregated parenting roles [73-75] and men prioritizing work commitments to ensure the provision of basic needs and expenses [76]. Additional beliefs that were barriers to recruitment include stigma or fear of judgment by others [77]; a generalized avoidance of health and mental health providers [78-83] and rigidly held hegemonic masculine beliefs about accepting assistance from others (e.g., avoidance of vulnerability, dependence, and emotionality; the fierce need for independence and persevering without help) [30, 84-87]. Culture-based mistrust of health and intervention providers also is reported as higher for fathers, relative to mothers, and especially among BIPOC fathers [88-90].

Following a new birth, many fathers engage in health risk behaviors [22, 91], as they do not anticipate the negative impact of childrearing on their wellbeing [13, 92, 93]. Those behaviors can

result in increased health problems [13, 94, 95] which can interfere with paternal activity engagement. Similarly, the perinatal period represents a period of increased stress, depression, anxiety, alcohol/substance misuse, and other mental health difficulties [96-101] which can interfere with motivation to engage in paternal-focused activities.

Despite a range of observed barriers, the literature also contains observations of facilitating factors and recommendations for successful paternal engagement. The next section integrates findings regarding strategies that have been successful, or at least promising, in terms of paternal recruitment and engagement.

4.3 Paternal Recruitment Facilitators & Promising Approaches

4.3.1 Organization Context Facilitators

By using methods such as the PAI model proposed above to frame the important phases and influences for paternal participation in activities, organizations have an opportunity to continually improve their sustained processes for paternal recruitment and engagement [102]. Systematically tracking the impact of different recruitment and engagement strategies (i.e., including the perspectives of engaged clients as well as those who declined) and the occurrence of barriers to participation experienced can inform improvement over time [63]. Gaining consumer perspectives and feedback on all aspects of recruitment and engagement has been consistently cited as a key to success [29, 58, 103-105].

Implementing activities through a “father-friendly” or a father-integrated organizational framework is regularly highlighted as important for engaging dads. Father-welcoming physical spaces, materials, communications, processes, and staff trained to deliver activities in inclusive and non-assuming ways are reported as central to “getting dads” [30, 50, 106, 107]. Orienting staff and community champions on the specifics of how the activity is tailored for fathers and that there are ongoing efforts to reduce paternal barriers to engagement are also reported as important. An example of such an approach was presented by Denzmore and colleagues [108]; that paper described staff and collaborator training based on the acronym PATIENCE, which was developed to ensure success in recruiting African American fathers. The **PATIENCE** approach included strategies such as:

- *Passive* (or media-shared) information needs to be shared to create awareness of the opportunity for potential participants,
- *Active* recruitment by staff and champions to ensure paternal awareness and enrolment,
- *Training* to ensure competent delivery of program activities and cultural humility,
- *Involving* community champions as important for linking men to the program,
- *Education* involves orienting participants on how the activity will be meaningful and have a positive impact on them and their children,
- *Nurturing* participants speaks to listening closely to their needs, concerns, and making adaptations to the activity,
- *Commitment* represents how the team is supported to be integral to the activity,
- *Evaluation* for continual improvement to ensure delivery on the promise of the opportunity.

Additional organization-level factors found to impact paternal recruitment are the use of incentives and investments in quality improvement [29]. Financial and/or in-kind incentives are used to reduce economic barriers to participation and increase motivation to engage paternal-focused

activities. Barriers such as unreliable transportation and cost of childcare are often raised by fathers as lessening their opportunity for engagement. Another form of incentive that positively impacts paternal recruitment is offering additional service access (e.g., housing access, legal assistance, GED, job training, and placement) [29].

4.3.2 Passive Recruitment Strategies

The creation of father-specific “messaging” or advertising content impacts recruitment and includes planful decisions about content, delivery, and placement of those messages. Two quasi-experimental program evaluations demonstrated that paternal-specific content had a several-fold increase in successful paternal recruitment and engagement, relative to messages generically targeting parents [32, 109]. Successful messages were reported to include: a) the father-specific vs. father-included nature of the activity, b) what dads will learn about and do, c) how the activity builds from fathers’ existing knowledge and strengths, d) assurances that activities will be conducted well (i.e., culturally informed, ethically delivered, and providers have content expertise) and e) highlights the barrier reduction strategies available and benefits to family functioning and child development from participating [28, 30, 62, 110].

Across qualitative studies, fathers report placement of messages is also important. To maximize fathers noticing activity advertisements, messages need to be placed frequently, through a variety of outlets, and in locations where men are present. Fathers described that such a multipronged approach conveys that the activity is solidly established (and potentially lasting) to contrast it with fly-by-night projects or those mainly serving the interests of providers or researchers [29]. Widespread communication was also rated by fathers (and mothers) to reduce their perception of stigma associated with engaging in parenting activities [30]. These studies identified priority locations for message placement to be recreation and youth sports centers, churches, clinics, barber shops, and mass transit. Fathers also recommended the use of multiple father-child images and text in applicable languages to reach immigrant and BIPOC fathers as well as marginalized subpopulations such as teen dads [29, 40]. Not only does such an approach help with recruitment reach, but it was also noted to convey important information about the culturally-grounded nature of the activity [29].

There are mixed observations about the use of high-profile people’s images and voices (i.e., celebrities, athletes, actors, artists) as messengers to reach fathers for recruitment. Some studies indicate high-profile messengers help reduce paternal barriers like stigma [111]. Others observed greater success using local leader voices, as they lend credibility to the initiative and conveys how involvement is approachable for diverse and marginalized fathers [112].

Passive recruitment via the Internet (e.g., listservs, placed ads) and social media approaches are increasingly used to recruit fathers. When these approaches were evaluated, relative to other strategies, there were reportedly cost- and time-efficient [32]. Given the shifting nature of what media outlet is most widely used at any one time (e.g., TV or radio ads, MySpace, Craigslist posts, ads on Meta or Google), it is difficult to study whether one will consistently be the most successful for paternal recruitment [32]. Similarly, the relatively new approach of recruiting fathers through “crowdsourcing” and the use of paid services (e.g., ResearchMatch, Amazon Tuk, or MTuk) was also reportedly effective [113, 114]. These types of services actively maintain information about available activities and lists of potentially interested participants or use small efforts from large

groups to actively outreach to and engage potential participants [115]. Such approaches may have unidentified or unintended drawbacks that need to be considered (e.g., another form of convenience sampling, high homogeneity from the self-selective nature of fathers reached through these methods, participant online privacy, and identity protection).

4.3.3 Direct Recruitment Strategies

The most traditional (and frequently cited as successful) recruitment strategy is directly inviting potential father participants either face-to-face or by phone [31]. This type of recruitment is conducted by organization staff, collaterals from other services, recruiters nested in the community, through influential community champions, or participants engaged with the organization. Face-to-face recruitment by staff is the most personal approach and, when it is done in settings wherein fathers already are and feel comfortable, this method is consistently cited as successful in engaging a range of fathers [28, 31, 40, 116, 117]. Staff outreach is time intensive but ensures accurate information is delivered and it can address barriers or sources of resistance to enrolling (e.g., from low understanding of the program or problematic past experiences) [47]. Even when activity staff is doing the outreach, there are reported benefits from developing relationships with community stakeholders and other program providers to effectively position staff to reach dads for recruitment (e.g., education settings at pick-up time, school festivals, community events) [28, 29, 118].

Two additional, program-based, personal-outreach approaches are kinscription and snowball recruitment. Kinscription is where paternal recruitment is facilitated by already service-engaged family members (e.g., mothers in group-based obstetric care, and antenatal classes) [76, 119-121]. Similarly, programs report success by asking participating fathers to help with “snowball” recruitment or inviting fathers from their networks of friends, colleagues, and social settings to participate [29]. A downside of these approaches is the systematically selective nature of the recruitment which likely results in engaging less diverse and fewer higher need fathers in the activity [2, 122].

The use of non-staff recruitment surrogates (e.g., staff from health care settings, community centers, legal clinics, or court) is also cited as successful in recruiting fathers [123]. When using surrogate recruitment, programs report that it is important to implement orientation strategies that help non-program staff understand core aspects of the activity (e.g., key contacts, how the activity benefits dads) and establish a sense of shared ownership in the recruitment process [29, 99, 108, 124]. Another reportedly helpful, community-grounded, surrogate paternal recruitment strategy is subcontracting to recruitment champions from the community, especially when involving recruiters from backgrounds similar to those of fathers you seek to engage [63]. A specific example of surrogate recruitment was the Community Engagement Corps project which was grounded in “oral-culture” recruitment [124]. This approach coordinates key, organically identified, community leaders who ensure information is disseminated to specific groups of fathers by talking with a wide range of individuals within a community. This approach was described as uniquely successful in instilling fathers with trust in the activity and thereby impacting recruitment [124].

5. Conclusion and Recommendations

In the past decade, paternal research in the perinatal period has flourished [1, 80, 125-128]. Most fathers are active caregivers, they engage in many roles and contribute significantly (i.e., protective

and at times risk influences) to a healthy child and family outcomes [1-3]. The perinatal period represents a unique developmental window for families and an opportunity to reach and engage fathers in preventive interventions and research. While previously underacknowledged, fathers struggle with the transition to parenting, and many report increased health and mental health problems during this time; but, compared to mothers, they are less likely to enroll in programs and services that could mitigate those difficulties [82, 129]. Intervention programs and research studies have found recruiting, engaging, and retaining fathers is difficult due to factors such as men's low knowledge of available resources as well as logistical, internalized barriers (e.g., values, beliefs), and program level impediments [27, 29, 130]. Aside from a few quasi-experimental studies on the impact of changing advertisement text to specifically state they are seeking fathers, there has been no systematic study of or conclusive evidence on effective paternal recruitment strategies.

The Phases of Paternal Activity Involvement model (PAI) was developed as a framework to facilitate program evaluations and research on the distinct but interwoven periods of paternal participation in interventions and research activities as well as the multiple factors (e.g., barriers and successful strategies) that affect fathers' participation during the perinatal period. Within phase influences (i.e., barriers and facilitators) were identified from prior studies of parent recruitment and participation, with some specific studies related to fathers [28, 32, 47, 48, 131]. Previous research on barriers and facilitators of paternal recruitment and engagement led to organizing these influences within the PAI model as practical, structural & organizational, strategic & relational, and father & family linked factors.

To further work in this area, the following are proposed as the next steps related to paternal recruitment. 1) Activities are encouraged to use some form of logic model, such as PAI, to structure their thinking about specific influences and strategies used to facilitate paternal recruitment and engagement [48, 108]. 2) Activities that engage fathers are encouraged to collect and summarize the degree to which methods of recruitment result in differing levels of paternal enrollment and whether interactions by demographic variables are evident to suggest differential success in recruiting socioeconomically marginalized and BIPOC fathers. 3) As this literature evolves, the degree to which similarities and differences between paternal recruitment for engagement in interventions/parenting programs vs. participation in research need to be clarified. 4) Passive approaches to paternal activity engagement were reported to be important but, alone, they are reportedly less successful in recruiting BIPOC, underserved, and socioeconomically marginalized fathers. Thus, additional approaches need to be developed and evaluated as to what leads to the most successful recruitment [29]. 5) Personal outreach to fathers for recruitment is cited as successful, especially when coupled with efforts to establish long-term relationships with community partners, but these approaches can be augmented by innovative strategies grounded in oral traditions of BIPOC groups such as seen in the "Community Engagement Corps" approach [124]. 6) Previous studies found that soliciting consumer feedback and making adaptations based on that information positively impacts paternal recruitment and engagement, by addressing fathers' perceived needs and removing identified barriers (e.g., [40, 60, 103]). The generalizability of those findings needs to be further studied. 7) Initial studies found that the relatively new approaches to paternal recruitment via social connection technology and crowdsourcing were effective [113, 114], but there may be as of yet unidentified drawbacks which need to be studied.

Acknowledgments

The author wants to acknowledge the concept development and planning contributions to this manuscript by Jenn Leiferman, Ph.D., James F. Paulson, Ph.D., Tracy Moran-Vozar, Ph.D., Jessi Walls, MPH, and Rachael Lacy, MPH.

Author Contributions

The author did all the research work of this study.

Funding

This work was supported by a grant from the Kirkpatrick Family Foundation.

Competing Interests

The author has no competing interests to disclose.

References

1. Brumberg HL, Shah SI. Got daddy issues? Fathers impact on perinatal outcomes. *Semin Perinatol.* 2020; 44: 151238.
2. Cabrera NJ, Shannon JD, Tamis-LeMonda C. Fathers' influence on their children's cognitive and emotional development: From toddlers to pre-K. *Appl Dev Sci.* 2007; 11: 208-213.
3. Fitzgerald HE. Overview to part I: Fathers, developmental systems, and relationships. In: *Handbook of fathers and child development: Prenatal to preschool.* Cham: Springer International Publishing; 2020. pp. 3-4.
4. Helfer RE. The perinatal period, a window of opportunity for enhancing parent-infant communication: An approach to prevention. *Child Abuse Negl.* 1987; 11: 565-579.
5. Hohmann-Marriott BE. Father involvement ideals and the union transitions of unmarried parents. *J Fam Issues.* 2008; 30: 898-920.
6. Padilla YC, Reichman NE. Low birthweight: Do unwed fathers help? *Child Youth Serv Rev.* 2001; 23: 427-452.
7. Parent J, Forehand R, Pomerantz H, Peisch V, Seehuus M. Father participation in child psychopathology research. *J Abnorm Child Psychol.* 2017; 45: 1259-1270.
8. Matthey S, Reay R, Fletcher R. Service strategies for engaging fathers in the perinatal period — What have we learned so far? *Int J Ment Health Promot.* 2009; 11: 29-41.
9. Rosan C, Grimas E. The power of couple-focused approaches in the perinatal period. *J Fam Health.* 2016; 26: 10-13.
10. Gibson-Davis CM. Family structure effects on maternal and paternal parenting in low-income families. *J Marriage Fam.* 2008; 70: 452-465.
11. McLanahan S, Haskins R, Paxson C., Sawhill I. *Fragile Families.* Princeton: Princeton University; Washington: Brookings Institution; 2010. Available from: https://futureofchildren.princeton.edu/sites/g/files/toruqf2411/files/media/fragile_families_20_02_fulljournal.pdf.
12. Garfield CF. Supporting fatherhood before and after it happens. *Pediatrics.* 2015; 135: e528-530.

13. Garfield CF, Duncan G, Gutina A, Rutsohn J, McDade TW, Adam EK, et al. Longitudinal study of body mass index in young males and the transition to fatherhood. *Am J Mens Health*. 2015; 10: NP158-NP167.
14. Garfield CF, Isacco A, Rogers TE. A review of men's health and masculinity. *Am J Lifestyle Med*. 2008; 2: 474-487.
15. Torche F, Rauf T. The transition to fatherhood and the health of men. *J Marriage Fam*. 2021; 83: 446-465.
16. Young MD, Morgan PJ. Paternal physical activity: An important target to improve the health of fathers and their children. *Am J Lifestyle Med*. 2017; 11: 212-215.
17. Bakermans-Kranenburg MJ, Lotz A, Alyousefi-van Dijk K, van Ijzendoorn M. Birth of a father: Fathering in the first 1,000 days. *Child Dev Perspect*. 2019; 13: 247-253.
18. Healthy Fathers, Healthy Families [Internet]. Washington: U.S. Department of Health and Human Services; 2015 [cited date 2021 June 7]. Available from: https://www.fatherhood.gov/sites/default/files/resource_files/e000003368.pdf.
19. Garfield CF, Clark-Kauffman E, Davis MM. Fatherhood as a component of men's health. *JAMA*. 2006; 296: 2365-2368.
20. Owen J, Wong YJ, Rodolfa E. Empirical search for psychotherapists' gender competence in psychotherapy. *Psychotherapy*. 2009; 46: 448-458.
21. Poh HL, Koh SSL, He HG. An integrative review of fathers' experiences during pregnancy and childbirth. *Int Nurs Rev*. 2014; 61: 543-554.
22. von Essen BS, Kortsmid K, D'Angelo DV, Warner L, Smith RA, Simon C, et al. Opportunities to address men's health during the perinatal period—Puerto Rico, 2017. *MMWR Morb Mortal Wkly Rep*. 2021; 69: 1638-1641.
23. Widarsson M, Kerstis B, Sundquist K, Engström G, Sarkadi A. Support needs of expectant mothers and fathers: A qualitative study. *J Perinat Educ*. 2012; 21: 36-44.
24. Cowan PA, Cowan CP, Pruett MK, Pruett K, Wong JJ. Promoting fathers' engagement with children: Preventive interventions for low-income families. *J Marriage Fam*. 2009; 71: 663-679.
25. Feinberg ME, Kan ML. Establishing family foundations: Intervention effects on coparenting, parent/infant well-being, and parent-child relations. *J Fam Psychol*. 2008; 22: 253-263.
26. Holmberg JR, Olds DL. Father attendance in nurse home visitation. *Infant Ment Health J*. 2015; 36: 128-139.
27. Panter-Brick C, Burgess A, Eggerman M, McAllister F, Pruett K, Leckman JF. Practitioner review: Engaging fathers – recommendations for a game change in parenting interventions based on a systematic review of the global evidence. *J Child Psychol Psychiatr*. 2014; 55: 1187-1212.
28. Mitchell SJ, See HM, Tarkow AKH, Cabrera N, McFadden KE, Shannon JD. Conducting studies with fathers: Challenges and opportunities. *Appl Dev Sci*. 2007; 11: 239-244.
29. Stahlschmidt MJ, Threlfall J, Seay KD, Lewis EM, Kohl PL. Recruiting fathers to parenting programs: Advice from dads and fatherhood program providers. *Child Youth Serv Rev*. 2013; 35: 1734-1741.
30. Tully LA, Piotrowska PJ, Collins DAJ, Mairet KS, Black N, Kimonis ER, et al. Optimising child outcomes from parenting interventions: Fathers' experiences, preferences and barriers to participation. *BMC Public Health*. 2017; 17: 550.
31. Sherr L, Davé S, Lucas P, Senior R, Nazareth I. A feasibility study on recruiting fathers of young children to examine the impact of paternal depression on child development. *Child Psychiatr*

- Hum Dev. 2006; 36: 295-309.
32. Yaremych HE, Persky S. Recruiting fathers for parenting research: An evaluation of eight recruitment methods and an exploration of fathers' motivations for participation. *Parenting*. 2022. doi: 10.1080/15295192.2022.2036940.
 33. Maxwell N, Scourfield J, Featherstone B, Holland S, Tolman R. Engaging fathers in child welfare services: A narrative review of recent research evidence. *Child Fam Soc Work*. 2012; 17: 160-169.
 34. Tiano JD, McNeil CB. The inclusion of fathers in behavioral parent training: A critical evaluation. *Child Fam Behav Ther*. 2005; 27: 1-28.
 35. Anderson EA, Kohler JK, Letiecq BL. Low-income fathers and "responsible fatherhood" programs: A qualitative investigation of participants' experiences. *Fam Relat*. 2002; 51: 148-155.
 36. Gershy N, Omer H. Engaging fathers in parent training: A qualitative study. *J Fam Psychother*. 2017; 28: 38-58.
 37. Bronte-Tinkew J, Burkhauser M, Metz AJR. Elements of promising practices in fatherhood programs: Evidence-based research findings on interventions for fathers. *Fathering*. 2012; 10: 6-30.
 38. Fletcher R, May C, St George J, Stoker L, Oshan M. *Engaging fathers: Evidence review*. Canberra: Australian Research Alliance for Children and Youth; 2014.
 39. Keys EM, Norris JM, Cameron EE, Bright KS, Tomfohr-Madsen LM, Benzies KM. Recruitment and retention of fathers with young children in early childhood health intervention research: A systematic review and meta-analysis protocol. *Syst Rev*. 2019; 8: 300.
 40. Davison KK, Charles JN, Khandpur N, Nelson TJ. Fathers' perceived reasons for their underrepresentation in child health research and strategies to increase their involvement. *Matern Child Health J*. 2017; 21: 267-274.
 41. Morgan PJ, Young MD, Lloyd AB, Wang ML, Eather N, Miller A, et al. Involvement of fathers in pediatric obesity treatment and prevention trials: A systematic review. *Pediatrics*. 2017; 139: e20162635.
 42. Nielsen M, Haun D, Kärtner J, Legare CH. The persistent sampling bias in developmental psychology: A call to action. *J Exp Child Psychol*. 2017; 162: 31-38.
 43. Piotrowska PJ, Tully LA, Lenroot R, Kimonis E, Hawes D, Moul C, et al. Mothers, fathers, and parental systems: A conceptual model of parental engagement in programmes for child mental health—connect, attend, participate, enact (CAPE). *Clin Child Fam Psychol Rev*. 2017; 20: 146-161.
 44. Arroyo J, Zsembik B, Peek CW. Ain't nobody got time for dad? Racial-ethnic disproportionalities in child welfare casework practice with nonresident fathers. *Child Abuse Negl*. 2019; 93: 182-196.
 45. Kennedy E, Munyan K. Sensitivity and reliability of screening measures for paternal postpartum depression: An integrative review. *J Perinatol*. 2021; 41: 2713-2721.
 46. Whittemore R, Knafel K. The integrative review: Updated methodology. *J Adv Nurs*. 2005; 52: 546-553.
 47. Ingoldsby EM. Review of interventions to improve family engagement and retention in parent and child mental health programs. *J Child Fam Stud*. 2010; 19: 629-645.
 48. Pfitzner N, Humphreys C, Hegarty K. Research review: Engaging men: A multi-level model to support father engagement. *Child Fam Soc Work*. 2017; 22: 537-547.

49. Staudt M. Treatment engagement with caregivers of at-risk children: Gaps in research and conceptualization. *J Child Fam Stud.* 2007; 16: 183-196.
50. Moran P, Ghate D, Van Der Merwe A, Bureau PR. What works in parenting support? A review of the international evidence. London: DfES Publications; 2004.
51. Davison KK, Kitos N, Aftosmes-Tobio A, Ash T, Agaronov A, Sepulveda M, et al. The forgotten parent: Fathers' representation in family interventions to prevent childhood obesity. *Prevent Med.* 2018; 111: 170-176.
52. Henry JB, Julion WA, Bounds DT, Sumo J. Fatherhood matters: An integrative review of fatherhood intervention research. *J Sch Nurs.* 2019; 36: 19-32.
53. Korfmacher J, O'Brien R, Hiatt S, Olds D. Differences in program implementation between nurses and paraprofessionals providing home visits during pregnancy and infancy: A randomized trial. *Am J Public Health.* 1999; 89: 1847-1851.
54. Korfmacher J, Green B, Staerkel F, Peterson C, Cook G, Roggman L, et al. Parent involvement in early childhood home visiting. *Child Youth Care Forum.* 2008; 37: 171-196.
55. Cowan CP, Cowan PA. Enhancing parenting effectiveness, fathers' involvement, couple relationship quality, and children's development: Breaking down silos in family policy making and service delivery. *J Fam Theory Rev.* 2019; 11: 92-111.
56. Falbe J, Friedman LE, Sokal-Gutierrez K, Thompson HR, Tantoco NK, Madsen KA. "She gave me the confidence to open up": Bridging communication by promotoras in a childhood obesity intervention for Latino families. *Health Educ Behav.* 2017; 44: 728-737.
57. Thompson SJ, Bender K, Lantry J, Flynn PM. Treatment engagement: Building therapeutic alliance in home-based treatment with adolescents and their families. *Contemp Fam Ther.* 2007; 29: 39-55.
58. Julion W, Sumo J, Schoeny ME, Breitenstein SM, Bounds DT. Recruitment, retention, and intervention outcomes from the Dedicated African American Dad (DAAD) Study. *J Urban Health.* 2021; 98: 133-148.
59. Bayley J, Wallace LM, Choudhry K. Fathers and parenting programmes: Barriers and best practice. *Community Pract.* 2009; 82: 28-31.
60. McGirr S, Torres J, Heany J, Brandon H, Tarry C, Robinson C. Lessons learned on recruiting and retaining young fathers in a parenting and repeat pregnancy prevention program. *Matern Child Health J.* 2020; 24: 183-190.
61. Outlaw FH, Bourjolly JN, Barg FK. A study on recruitment of black Americans into clinical trials through a cultural competence lens. *Cancer Nurs.* 2000; 23: 444-451.
62. Valdez LA, Garcia DO. Hispanic male recruitment into obesity-related research: Evaluating content messaging strategies, experimental findings, and practical implications. *Int Q Community Health Educ.* 2020; 42: 85-93.
63. Kumpfer KL, Alvarado R, Smith P, Bellamy N. Cultural sensitivity and adaptation in family-based prevention interventions. *Prevent Sci.* 2002; 3: 241-246.
64. Frascarolo F, Feinberg M, Sznitman G, Favez N. Professional gatekeeping toward fathers: A powerful influence on family and child development. *Perspect Infant Ment Health.* 2016; 26: 4-7.
65. Fletcher R, Vimpani G, Russell G, Keatinge D. The evaluation of tailored and web-based information for new fathers. *Child.* 2008; 34: 439-446.
66. Valdez RS, Gibbons MC, Siegel ER, Kukafka R, Brennan PF. Designing consumer health it to

- enhance usability among different racial and ethnic groups within the United States. *Health Technol.* 2012; 2: 225-233.
67. Fagan J, Barnett M. The relationship between maternal gatekeeping, paternal competence, mothers' attitudes about the father role, and father involvement. *J Fam Issues.* 2003; 24: 1020-1043.
 68. Schoppe-Sullivan SJ, Altenburger LE, Lee MA, Bower DJ, Kamp Dush CM. Who are the gatekeepers? Predictors of maternal gatekeeping. *Parenting.* 2015; 15: 166-186.
 69. Sicouri G, Tully L, Collins D, Burn M, Sargeant K, Frick P, et al. Toward father-friendly parenting interventions: A qualitative study. *Aust N Z J Fam Ther.* 2018; 39: 218-231.
 70. Davison KK, Gavarkovs A, McBride B, Kotelchuck M, Levy R, Taveras EM. Engaging fathers in early obesity prevention during the first 1,000 days: Policy, systems, and environmental change strategies. *Obesity.* 2019; 27: 525-533.
 71. Hearn G, Clarkson G, Day M. The role of the NICU in father involvement, beliefs, and confidence: A follow-up qualitative study. *Adv Neonatal Care.* 2020; 20: 80-89.
 72. Niec LN, Barnett ML, Gering CL, Triemstra K, Solomon DT. Differences in mothers' and fathers' readiness for change in parent training. *Child Fam Behav Ther.* 2015; 37: 224-235.
 73. Amato PR, Gilbreth JG. Nonresident fathers and children's well-being: A meta-analysis. *J Marriage Fam.* 1999; 61: 557-573.
 74. Cabrera NJ, Fitzgerald HE, Bradley RH, Roggman L. The ecology of father-child relationships: An expanded model. *J Fam Theory Rev.* 2014; 6: 336-354.
 75. Maurer TW, Pleck JH, Rane TR. Parental identity and reflected-appraisals: Measurement and gender dynamics. *J Marriage Fam.* 2001; 63: 309-321.
 76. Matthey S, Barnett B. Parent-infant classes in the early postpartum period: Need and participation by fathers and mothers. *Infant Ment Health J.* 1999; 20: 278-290.
 77. Hammer JH, Vogel DL, Heimerdinger-Edwards SR. Men's help seeking: Examination of differences across community size, education, and income. *Psychol Men Masc.* 2013; 14: 65-75.
 78. Hayward RA, Honegger LN. Perceived barriers to mental health treatment among men enrolled in a responsible fatherhood program. *Soc Work Ment Health.* 2018; 16: 696-712.
 79. Henderson C, Evans-Lacko S, Thornicroft G. Mental illness stigma, help seeking, and public health programs. *Am J Public Health.* 2013; 103: 777-780.
 80. Livingston JD, Youssef GJ, StGeorge J, Wynter K, Dowse E, Francis LM, et al. Paternal coping and psychopathology during the perinatal period: A mixed studies systematic review and meta-analysis. *Clin Psychol Rev.* 2021; 86: 102028.
 81. O'Brien R, Hunt K, Hart G. 'It's caveman stuff, but that is to a certain extent how guys still operate': Men's accounts of masculinity and help seeking. *Soc Sci Med.* 2005; 61: 503-516.
 82. Schuppan KM, Roberts R, Powrie R. Paternal perinatal mental health: At-risk fathers' perceptions of help-seeking and screening. *J Mens Stud.* 2019; 27: 307-328.
 83. Yousaf O, Grunfeld EA, Hunter MS. A systematic review of the factors associated with delays in medical and psychological help-seeking among men. *Health Psychol Rev.* 2015; 9: 264-276.
 84. Addis ME, Mahalik JR. Men, masculinity, and the contexts of help seeking. *Am Psychol.* 2003; 58: 5-14.
 85. Berger JL, Addis ME, Green JD, Mackowiak C, Goldberg V. Men's reactions to mental health labels, forms of help-seeking, and sources of help-seeking advice. *Psychol Men Masc.* 2013; 14: 433-443.

86. Mahalik JR, Dagirmanjian FR. Working-class men's constructions of help-seeking when feeling depressed or sad. *Am J Mens Health*. 2019; 13: 1557988319850052.
87. Seidler ZE, Dawes AJ, Rice SM, Oliffe JL, Dhillon HM. The role of masculinity in men's help-seeking for depression: A systematic review. *Clin Psychol Rev*. 2016; 49: 106-118.
88. Ayalon L, Alvidrez J. The experience of black consumers in the mental health system— Identifying barriers to and facilitators of mental health treatment using the consumers' perspective. *Issues Ment Health Nurs*. 2007; 28: 1323-1340.
89. Hammond WP. Psychosocial correlates of medical mistrust among african american men. *Am J Community Psychol*. 2010; 45: 87-106.
90. Lindsey MA, Marcell AV. "We're going through a lot of struggles that people don't even know about": The need to understand African American males' help-seeking for mental health on multiple levels. *Am J Mens Health*. 2012; 6: 354-364.
91. Shorey S, Dennis CL, Bridge S, Chong YS, Holroyd E, He HG. First-time fathers' postnatal experiences and support needs: A descriptive qualitative study. *J Adv Nurs*. 2017; 73: 2987-2996.
92. Kotelchuck M, Lu M. Father's role in preconception health. *Matern Child Health J*. 2017; 21: 2025-2039.
93. Yogman M, Garfield CF. Fathers' roles in the care and development of their children: The role of pediatricians. *Pediatrics*. 2016; 138: e20161128.
94. Freeman E, Fletcher R, Collins CE, Morgan PJ, Burrows T, Callister R. Preventing and treating childhood obesity: Time to target fathers. *Int J Obes (Lond)*. 2012; 36: 12-15.
95. Saxbe D, Corner GW, Khaled M, Horton K, Wu B, Khoddam HL. The weight of fatherhood: identifying mechanisms to explain paternal perinatal weight gain. *Health Psychol Rev*. 2018; 12: 294-311.
96. Benoit C, Magnus S. "Depends on the father" defining problematic paternal substance use during pregnancy and early parenthood. *Can J Sociol*. 2017; 42: 379-402.
97. Fisher SD. Paternal mental health: Why is it relevant? *Am J Lifestyle Med*. 2016; 11: 200-211.
98. Fisher SD, Cobo J, Figueiredo B, Fletcher R, Garfield CF, Hanley J, et al. Expanding the international conversation with fathers' mental health: Toward an era of inclusion in perinatal research and practice. *Arch Womens Ment Health*. 2021; 24: 841-848.
99. Fletcher R, Garfield CF, Matthey S. Fathers' perinatal mental health. In: *Identifying perinatal depression and anxiety*. Chichester: John Wiley & Sons; 2015. pp. 165-176.
100. Frank DA, Brown J, Johnson S, Cabral H. Forgotten fathers: An exploratory study of mothers' report of drug and alcohol problems among fathers of urban newborns. *Neurotoxicol Teratol*. 2002; 24: 339-347.
101. Taylor M. *Problem drug use and fatherhood*. Glasgow: University of Glasgow; 2012.
102. Axford N, Lehtonen M, Kaoukji D, Tobin K, Berry V. Engaging parents in parenting programs: Lessons from research and practice. *Child Youth Serv Rev*. 2012; 34: 2061-2071.
103. Frank TJ, Keown LJ, Dittman CK, Sanders MR. Using father preference data to increase father engagement in evidence-based parenting programs. *J Child Fam Stud*. 2015; 24: 937-947.
104. Julion WA, Breitenstein SM, Waddell D. Fatherhood intervention development in collaboration with african american non-resident fathers. *Res Nurs Health*. 2012; 35: 490-506.
105. Sanders MR, Kirby JN. Consumer engagement and the development, evaluation, and dissemination of evidence-based parenting programs. *Behav Ther*. 2012; 43: 236-250.
106. Berlyn C, WiSe S, Soriano G. Engaging fathers in child and family services: Participation,

- perceptions and good practice. *Fam Matt.* 2008; 80: 37-42.
107. Weeks W. Creating attractive services which citizens want to attend. *Aust Soc Work.* 2004; 57: 319-330.
108. Denzmore P, Dilorio C, McCarty F. The P.A.T.I.E.N.C.E. model: An approach to recruiting African American fathers and sons for behavioral research studies. *Challenge.* 2005; 11: 38-54.
109. Narayan AJ, Atzl VM, Merrick JS, River LM, Peña R. Therapeutic perinatal research with low-income families: Leveraging benevolent childhood experiences (BCEs) and fathers' perspectives to promote resilience. *Zero Three.* 2019; 39: 43-53.
110. Spoth R, Redmond C, Shin C. Modeling factors influencing enrollment in family-focused preventive intervention research. *Prevent Sci.* 2000; 1: 213-225.
111. Ferrari A. Using celebrities in abnormal psychology as teaching tools to decrease stigma and increase help seeking. *Teach Psychol.* 2016; 43: 329-333.
112. Icard LD, Bourjolly JN, Siddiqui N. Designing social marketing strategies to increase African Americans' access to health promotion programs. *Health Soc Work.* 2003; 28: 214-223.
113. Schleider JL, Weisz JR. Using mechanical turk to study family processes and youth mental health: A test of feasibility. *J Child Fam Stud.* 2015; 24: 3235-3246.
114. Weissbourd R, Batanova M, McIntyre J, Torres E. How the pandemic is strengthening fathers' relationships with their children. Cambridge: Harvard Graduate School of Education; 2020.
115. Créquit P, Mansouri G, Benchoufi M, Vivot A, Ravaud P. Mapping of crowdsourcing in health: Systematic review. *J Med Internet Res.* 2018; 20: e187.
116. Doyle O, Weller BE, Daniel SS, Mayfield A, Goldston DB. Overcoming barriers to fathers' participation in clinically relevant research: Recommendations from the field. *Soc Work Res.* 2016; 40: 260-264.
117. Vollmer RL, Adamsons K, Mobley AR. Perspective recruitment, engagement, and retention of fathers in nutrition education and obesity research. *Journal of Nutrition Education and Behavior.* 2019; 51: 1121-1125.
118. Selekman R, Holcomb P. Father engagement in human services. Princeton: Mathematica; 2021.
119. Coffman S, Levitt MJ, Brown L. Effects of clarification of support expectations in prenatal couples. *Nurs Res.* 1994; 43: 111-116.
120. Dimova ED, McGarry J, McAloney-Kocaman K, Emslie C. Exploring men's alcohol consumption in the context of becoming a father: A scoping review. *Drugs.* 2021: 1-12. doi: 10.1080/09687637.2021.1951669.
121. Roy K, Burton L. Mothering through recruitment: Kinscription of nonresidential fathers and father figures in low-income families. *Fam Relat.* 2007; 56: 24-39.
122. Lilienfeld SO, Ammirati R, David M. Distinguishing science from pseudoscience in school psychology: Science and scientific thinking as safeguards against human error. *J Sch Psychol.* 2012; 50: 7-36.
123. Crane MM, Seburg EM, Levy RL, Jeffery RW, Sherwood NE. Using targeting to recruit men and women of color into a behavioral weight loss trial. *Trials.* 2020; 21: 537.
124. Juzang I. Urban trends: Effectively engaging men and fathers to support the health and wellness of their families. Philadelphia: MEE Productions Inc.; 2019.
125. Baldwin S, Malone M, Sandall J, Bick D. Mental health and wellbeing during the transition to fatherhood: A systematic review of first time fathers' experiences. *JB I Evid Synth.* 2018; 16: 2118-2191.

126. Gemayel DJ, Wiener KKK, Saliba AJ. Development of a conceptual framework that identifies factors and challenges impacting perinatal fathers. *Heliyon*. 2018; 4: e00694.
127. Lee JY, Knauer HA, Lee SJ, MacEachern MP, Garfield CF. Father-inclusive perinatal parent education programs: A systematic review. *Pediatrics*. 2018; 142: e20180437.
128. Rominov H, Pilkington PD, Giallo R, Whelan TA. A systematic review of interventions targeting paternal mental health in the perinatal period. *Infant Mental Health J*. 2016; 37: 289-301.
129. Goldstein Z, Rosen B, Howlett A, Anderson M, Herman D. Interventions for paternal perinatal depression: A systematic review. *J Affective Disord*. 2020; 265: 505-510.
130. Pruettk MK, Pruettk KD, Cowan CP, Cowan PA. Enhancing paternal engagement in a coparenting paradigm. *Child Dev Perspect*. 2017; 11: 245-250.
131. Fabiano GA. Father participation in behavioral parent training for ADHD: Review and recommendations for increasing inclusion and engagement. *J Fam Psychol*. 2007; 21: 683.



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