UC Irvine
UC Irvine Previously Published Works

Title
Relationships within MOMS Orange County care coordinated home visitation perinatal program

Permalink
https://escholarship.org/uc/item/4zs221p0

Journal
Public Health Nursing, 37(2)

ISSN
0737-1209

Authors
Guo, Yuqing
Bender, Miriam
Rousseau, Julie
et al.

Publication Date
2020-03-01

DOI
10.1111/phn.12689

Peer reviewed

eScholarship.org Powered by the California Digital Library
University of California

Author Manuscript
Author Manuscript
Author Manuscript
Author Manuscript

HHS Public Access
Author manuscript
Public Health Nurs. Author manuscript; available in PMC 2021 April 21.

Published in final edited form as:
Public Health Nurs. 2020 March ; 37(2): 215–221. doi:10.1111/phn.12689.

Relationships within MOMS Orange County Care Coordinated Home Visitation Perinatal Program

Yuqing Guo[1], **Miriam Bender**[1], **Julie Rousseau**[1], **Priscilla Kehoe**[1], **Jung-Ah Lee**[1], **Pamela Pimentel**[2], **Yvette Bojorquez**[2], **Michele Silva**[2], **Ellen Olshansky**[3]

[1]Sue & Bill Gross School of Nursing, University of California Irvine, Irvine, CA, USA.

[2]MOMS Orange County, Santa Ana, CA, USA.

[3]Department of Nursing, Suzanne Dworak-Peck School of Social Work, University of Southern California, Los Angeles, CA, USA.

Abstract

Purpose: The study aimed to examine how registered nurses (RNs) and paraprofessional home visitors (PHVs) work together as a team to care for underserved perinatal women in a coordinated home visitation program.

Design and Methods: Qualitative methods were used to understand the perspectives of three RNs and twenty PHVs who worked at MOMS Orange County, a community-based perinatal health program. Individual one-on-one interviews were administered with the RNs and focus groups with the PHVs. Qualitative content analysis was conducted to synthesize themes.

Results: RNs perceived themselves as educators, mentors, and supervisors. PHVs thought of themselves as supporters, coaches, and advocates. Interdependence and proactive communication were favorable characteristics of the relationship in which RNs trained PHVs to provide health education. The positive interactions between RNs and PHVs appeared to enhance the client-healthcare provider connection.

Conclusions: Our study is one of the first to describe relationships and communication patterns among the healthcare team in a coordinated home visitation program in the U.S. Future studies should examine how additional members of the team, including clients and healthcare providers, view their experiences with a home visitation program.

Keywords

care coordination; home visitation; prenatal and postnatal care; underserved population

Introduction

Home visitation programs are considered to be an effective approach to promote maternal and infant health for at-risk pregnant women and their families (Bell et al., 2018). There are three types of maternal and infant home visitation programs. One of the most common home visitation programs is conducted by health professionals such as registered nurses (RNs) (Koniak-Griffin et al., 2002; Olds et al., 2010). Another type of program is delivered by paraprofessional home visitors (PHVs), who are defined as individuals who have practical

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

experience in the community and familiarity with the people they serve and local resources but have not received formal professional training in healthcare (Swart, van Niekerk, Seedat, & Jordaan, 2008). A third type of program consists of a coordinated (blended or team) approach delivered by both RNs and PHVs (Meghea et al., 2013).

RN-delivered programs are for families with high risks, such as low-income mothers having their first child, or mothers less than 18 years of age (Donovan et al., 2007; Miller 2015). Three decades of research show that home visitation programs by RNs generate positive outcomes by increasing healthy pregnancies and reducing adverse birth outcomes, improving child physical and mental development, and enhancing family function (Koniak-Griffin et al., 2002; Olds et al., 2010). Despite the effectiveness of home visitation programs led by RNs, the high cost of the program limits its scalability (Miller, 2015).

PHV-delivered programs are designed for families living in underserved communities, primarily to promote care-seeking behavior, birth preparation, adequate nutrition, breastfeeding, family planning, and basic postpartum and newborn care (World Health Organization [WHO], 2012). The strengths of this type of home visitation program are that PHVs understand the target community that adds important value for the underserved population because women and families appreciate their shared language and culture with PHVs and thus can easily establish trust with them (Swart et al., 2008). The PHV home visiting programs are limited by the fact that PHVs need comprehensive training and ongoing supervision by health professionals to successfully implement health-related interventions (Glenton et al., 2013).

In the U.S., it is estimated that only 500,000 (5%) U.S. children and their families are being served by home visiting programs across 40 states (Astuto & Allen, 2009). Home visits by teams of RNs and PHVs have emerged to fill the gap by serving a larger number of women as well as overcoming the constraints of PHV-only delivered programs. Growing evidence shows that this type of coordinated home visitation program improves the health and wellbeing of women, children, and families (Guo et al., 2016; Ferguson & Vanderpool, 2013).

Studies show that building trust and respecting each other is key to beginning and maintaining therapeutic relationships between registered nurses/paraprofessional home visitors and clients (Appleton & Cowley, 2008; Dmytryshyn, Jack, Ballantyne, Wahoush, & MacMillan, 2015; Heaman, Chalmers, Woodgate, & Brown, 2007). In addition to client-professional relationship, other evidence shows that inter-profession collaboration such as with nurses and physicians have a beneficial effect on patient outcomes including patient satisfaction, quality of life, hospital length of stay, and cost of care (Matthys, Remmen, & Van Boqaert, 2017). To successfully implement a coordinated home visitation program, it is important to understand the process of the home visit and the relationships between professional and paraprofessional home visitors and their clients. However, little research examines the mechanism of the coordinated home visitation program, in particular, the working relationships between people that make this community-based program effective.

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

MOMS Orange County

MOMS Orange County (MOMS OC) is a community-based program that provides prenatal and postnatal services to an estimated 3,800 at-risk pregnant women annually in Orange County, California. The coordinated RN-PHV team approach to deliver home visitation is identified as a unique feature of this program in two aspects: 1) well-trained paraprofessionals who serve as home visitors are closely supervised and supported by registered nurses, and 2) RNs can promptly intervene when pregnant women need a higher level of medical service. The preliminary evidence demonstrates that the home visitation team approach may serve as a cost-saving model to reduce preterm births and low birth weight infants in underserved women (Guo et al., 2016).

Although MOMS OC provides a successful coordinated home visitation program, little is known about the relationships between the RNs and PHVs and their connections with clients and healthcare providers. The relevant information is critical in that it provides insights into how RNs and PHVs perceive their role, how they communicate with each other, as well as how these collaborative relationships benefit the clients. Therefore, the purpose of this study was to describe the roles of RNs and PHVs in this coordinated home visitation program and to elucidate the nature of their relationships. Because the focus of the current study is based on one highly successful community-based collaborative RN-PHV visitation home program, a qualitative method was used to demonstrate RNs' and PHVs' experiences.

Methods

Design

The project was an exploratory study that included interview and focus groups. The University's Institutional Review Board approved the study procedure. Interviews were facilitated using a semi-structured interview guide at MOMS OC. The individual interviews were conducted with RNs lasting up to 1 hour until saturation was reached. Focus groups were implemented with four to six PHVs in each group and lasting about one hour. Example interview questions included: How do you perceive your role? How do you perceive the communication between the RNs and PHVs?.

Sample

Twenty-three female MOMS OC staff members, who are directly involved in the home visitation program, participated in this study including three RNs and 20 PHVs. The RNs had an associate degree in nursing, perinatal nursing hospital experience, and had worked at MOMS OC for equal to or more than six years. Among 20 home visitors who are bilingual in Spanish or Vietnamese, 2 (10%) had some college experience, 16 (80%) a bachelor's degree and 1 (5%) a master's degree, but all in non-clinical majors. Eight (40%) had worked at MOMS OC for equal to or more than six years, 11 (55%) for two to five years, and 1 (5%) for less than one year.

Analytic Strategy

The recordings of the focus groups were transcribed by a professional and independent company (VerbalLink, Los Angeles, CA) and the individual interviews were transcribed by a

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

Bachelor of Science (BS) nursing student who was trained by the first author. We chose content analysis because this analytic approach is used to describe phenomena based on human experience to provide knowledge, new insights and a practical guide to action. Participants' words are developed into categories for an understanding of the meaning of communication (Elo & Kyngäs, 2007; Hsieh & Shannon, 2005). There were four steps to code and organize the interview transcripts including 1) the transcripts were reviewed entirely to understand participants' perspectives; 2) the key concepts of the interview questions (e.g., role, communication) were used as the initial guide to code participants' responses to each question; 3) the codes were categorized into themes; and 4) the themes were synthesized representing the relationship between RNs and PHVs (Hsieh & Shannon, 2005).

Results

Perceived Roles by RNs and PHVs

As expected, three RNs described their role as an *educator, mentor, and supervisor*. One RN shared, "I'm the educator … We're able to use our knowledge to discuss different items with them (PHVs), and to provide a better level of answer..." Another RN elaborated on her viewpoint as a mentor, "I am only here to offer advice and suggestions … I'm here to support it (the care plan) and to make sure they (PHVs) have all of the details that they need from a medical or a community perspective so that they are making the best choice possible in the direction they give their clients. So, it's a very collaborative approach." The third RN shared her insight as a supervisor, "When we have new hires and we come in here and sit and tell about who we are … We try to be friendly and establish that bond with them and let them know that we are here to be very supportive of their roles. So the nurse does work very closely with them one-on-one with each assessment that comes back."

PHVs identified their roles as a *supporter, coach, and advocate for the client*. One PHV shared, "I feel like they're so overwhelmed with so many issues at times that they're just venting to us … So knowing that I can sit there and just listen to her and that she feels comfortable with me …" The PHVs see their essential role as a coach providing knowledge and information to these women and families ranging from healthy pregnancy to infant care. A second PHV reported, "…During pregnancy, of course, that we are there to guide them in knowing how they should be eating to gain weight appropriately, how to know if they need to go to the hospital or to speak to their doctor. " The PHVs use the term "empowerment" to characterize their role in advocating for vulnerable women. Another PHV stated, "We're not really doing things for them. We're pointing them in the right direction so that they can be proactive and do it for themselves."

Relationship between RNs and PHVs

The ratio of RN to PHV is approximately eight PHVs assigned to one RN. Review of health assessments collected by PHVs and the development of care plans for each client are the RN's responsibilities. From PHVs' perspectives, the relationship with RNs is reflected in emotional support and health education. One PHV shared her experience being supported emotionally, "I have a great relationship with her (RN). I love that she has always said, 'No

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

matter how busy I am, no matter how many charts I have, I'm always here for you. Come and talk to me.' In addition to emotional rapport, RNs also provided reliable educational information to PHVs. Another PHV emphasized that RNs played the role of an educator, "I think that RNs empower us as a health educator to feel like more confident in the information that we're presenting because we have our backup. You know, we have someone that's educating us … And I feel that having the nurses really helps fill in that clinical gap."

The communication between RNs and PHVs was characterized by openness. A few PHVs described that they had open communication with RNs. One PHV explained, "I think it is very open just because whenever we do have or see a problem at home, or if we don't know how to answer to a client for a specific question, we always refer back to our nurse, and it's very open." The frequent communication between RNs and PHVs promotes open dialogue and verbal and written coordination of care. Another PHV stated, "We (PHVs) usually have to check in with them (RNs) at least once a day to tell them (RNs) how the families are doing. Also, to see if they (RNs) have any questions about our charting work because it's all written on paper, so sometimes what's written needs more explanation at times, so we check in with them (RNs), and we do have a way to communicate if they (RNs) are not in their office, so they will put questions in our bins, and when we get in the office we check it."

In terms of accuracy, the interview data found that the RNs had general confidence in the PHVs' abilities to collect information and implement RNs' care plans, but there were also circumstances when the PHV's accuracy in reporting was questioned. One RN stated, "I have a lot of confidence that the home visitors are accurate in their documentation, accurate in carrying information back and making sure that we have an understanding of who this client is." However, RNs did point out how they facilitated correcting PHVs' assessments due to their lack of having a clinical background. Another RN shared, "Sometimes they get confused about gravida, para and stillbirth, and miscarriages and so I will have them explain to me 'The total of pregnancies is not adding up. Was there a loss there? Do you know approximately how many weeks it was because that makes a difference in the category?'"

The interview data showed that both RNs and PHVs agreed that they had few disagreements and also utilized positive strategies to deal with them. One PHV shared, "They (RNs) are the ones that create the care plan and then we implement it…I'd say I don't think I've ever had a disagreement. It's more like a conversation." Another PHV stated, "They (RNs) are pretty good about letting us know if, 'Hey, there's this issue you probably didn't address. Maybe your experience might've not caught it. You should follow up on this.' They help us see the urgency of things that can happen if we don't address those needs." One RN stated, "I personally have not really had any disagreement over a client's needs, because these women (PHVs) that we are working for are very capable, and their knowledge about what they are doing, but if there is a disagreement in the path we will sit down and discuss it."

Relationships between RNs/PHVs and Clients and Healthcare Providers

Each PHV has four to five home visits a day with each visit lasting approximately 45–90 minutes. According to PHVs, a client has their contact information so she could reach them by direct office line and/or email. One PHV stated, "They (clients) will call me sometimes and they will ask me, 'Can you ask the nurse this?' So I think they do value more what we

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

say because we do have knowledge to help and assist with anything our clients may need. We do try to make them feel very comfortable about any topics, and we don't judge them, and I think that's why they prefer to stay with us as opposed to having a nurse visit the actual home." RNs usually do not have direct contact with clients because the PHV develops a trusting relationship with clients. One RN stated, "…I've called the client if I've had a worker (PHV) who's on vacation and if something happened, I didn't want to let that go." Another RN shared, "I am limited to English speaking, and a lot of our clients are Hispanic or Vietnamese … I will do it in conjunction with the home visitor if there is a significant need to talk to that client. We try to enable the home visitor however, to talk to the client as necessary, because she's developed the relationship with them."

It seemed that RNs promoted the connection between clients and healthcare providers by sending the providers the care plans and contacting them directly with any medical concerns. One RN stated, "I am able to transcribe into something that's a little more usable for the physician, and to tell the physician how his/her client is doing, away from the office, and maybe the psychosocial aspects..." However, the RNs reported that the healthcare providers inconsistently responded to the care plan. Another RN shared, "It depends upon the OB, it depends upon the office staff, and their desire to understand what the client is telling us." When an urgent medical condition is identified by the RNs, they contact healthcare providers promptly. One RN also described, "…We go through the medical provider if it's something that we feel is really a risk; or the medical provider needs to know, we'll call the medical provider, and they in turn, use their staff to call the client to get them in to see them if they need to."

It appeared that PHVs also enhanced the connection between healthcare providers and clients. One PHV stated, "If they (clients) don't know how to talk to their doctor we guide them to know how to ask questions, we help them to find a way to open up to their doctor." Another PHV shared, "I think most of the time they bring it to us, because doctor appointments going so quickly and feeling like they aren't able to get any questions in at times, I know it does depend on which pediatrician, there are some that do sit with them, and they give them some information, but I think they always come to us first."

Discussion

The purpose of this study was to describe the relationship between RNs and PHVs in the MOMS Orange County care coordinated home visitation program; specifically, the study sought to explore how the team members perceived their roles, interacted with each other, and engaged with clients and other healthcare providers. As expected, our study found that RNs provide ongoing health education, mentorship, and supervision to trained PHVs who are supported to competently collect health assessments and implement care plans. The PHVs offer support, coaching and are advocates for their clients. The new findings of this study revealed that the relationship between RNs and PHVs are interdependent as well as having open communication in nature. Furthermore, the positive interactions between RNs and PHVs appeared to bolster the connections between clients and their healthcare providers.

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

Interdependent Relationship between RNs and PHVs

The interview results indicated that both RNs and PHVs perceived their relationship as interdependent with clearly differentiated roles in the home visitation program, but facilitated by a close working partnership. RNs with perinatal nursing experience train PHVs, who lack clinical education or experience; together as a team, they can reliably collect health information, and consistently provide health education and emotional support for vulnerable prenatal and postnatal women. PHVs perceived that their health knowledge was enhanced through convenient access to RNs' feedback and support. PHVs also felt more confident about their home visiting skills after receiving multi-modality training from RNs including didactic sessions, role-playing, shadowing experience, as well as continuous RN's supervision. The results indicated that the coordinated RN-PHV home visitation program can successfully and readily deliver education in the home with linguistic and cultural responsiveness, due to the shared language and culture between the client and the PHV. Also, PHVs in this coordinated program can competently provide health education to their clients due to close assistance and supervision provided by RNs. Our results differed from a previous study in which a hierarchical and subservient relationship between nurses and unlicensed assistive personnel was found in a major metropolitan hospital center (Lancaster, Kolakowsky-Hayner, Kovacich, & Greer-Williams, 2015). Lack of or poor communication among healthcare professional leads to patient care errors and jeopardizes quality patient care (Burke, Boal, & Mitchell, 2004; Tschannen, Keenan, Aebersold, Kocan, Lundy, & Averhart, 2011). The contribution of the present study is to elucidate how RNs can supervise PHVs as well as develop a collaborative relationship with them in a community-based program.

Communication between RNs and PHVs

The results provided evidence indicating that RNs and PHVs had efficient communication. In the interview data they described that there are multiple channels to promote open RN-PHV communication, including daily check-in with an assigned RN, multiple RNs as a back-up when the assigned RN is not available, a variety of RN-PHV communication tools such as phone calls, emails, face-to-face individual and/or group meetings, and written documents (e.g., care plans). RNs felt that PHVs required feedback because their information was somewhat less accurate due to their lack of clinical background and experience. This finding supports a conceptual proposition that comprehensive and ongoing supervision is important for paraprofessionals to best deliver health-related home visitation (Hiatt, Sampson, & Baird, 1997). Despite a few disagreements between RNs and PHVs, both team members emphasized that the MOMS OC program promotes a collaborative environment that reduces and/or manages discrepancies. This includes RNs respect for PHVs' cultural knowledge and language skills, and the PHV's abilities to carry out home visits. In turn, the PHVs expressed trust for the RNs' clinical judgment, commitment to open discussions about their different perspectives, a willingness to accept RNs' feedback, and a desire to follow through with the RNs' advice. Our findings are inconsistent with a prior study in which unlicensed assistive personnel were dissatisfied with communication with nurses as they felt that they were not included in meaningful patient discussions in a hospital setting (Lancaster et al., 2015). In contrast, the present study showed how a community-

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

based maternal and infant program supports open and respectful communication between RNs and PHVs in a care-coordination home visitation program.

Enhanced Relationships between Clients and Healthcare Providers

The results indicated that the relations between healthcare providers and clients were enhanced due to RNs' coordination and PHVs' empowerment. A national survey reported that only one-third of home visiting programs keep regular communication with healthcare providers and two-thirds of programs contact providers only if an urgent concern arises (Belknap, Neill, Paradis, & Minkovitz, 2015). In contrast, the MOMS OC home visitation program is designed with RNs regularly sending clients' care plans to their healthcare providers and ensuring that providers are promptly informed once a red-flag issue is identified. This program efficiently divides tasks between the RN and PHV, so the RNs prioritize sending regular updates to providers. Furthermore, RNs engender empowerment of the PHV through this role division and their work to provide ongoing emotional support and enhancing their clinical health knowledge. PHVs thus feel supported and competent to coach their clients to better manage their pregnancy and postpartum health. Our findings are in line with prior studies that describe empowerment as one essential practice of home visitation (Houston & Cowley, 2002; Peckover, 2002). Importantly, we provided further evidence of how PHVs empowered clients to be an efficient communicator with their healthcare team. PHVs assisted the clients to make the phone calls relevant to a clinical appointment or practiced role-play with clients in seeking community services or support. In other words, PHVs' physical presence and tangible prompts facilitated the clients to carry out the newly acquired skills in real-life situations. The dynamic of support from the RNs to the PHVs to the clients is an important example of a well-functioning team-based care model to promote patient empowerment.

In summary, to our knowledge, this study provides the first evidence that interdependent collaboration and open communication are critical components for this community-based home visitation program to succeed. Our study supports prior research that interdisciplinary collaboration and communication play important roles in improving the quality of care and patient outcomes (Ma, Shang, & Bott, 2015; Siegler, Finegan, Kasner, & Price, 2017; Renz & Carrington, 2016). Future studies need to examine how open and collaborative relationships between RNs and PHVs will contribute to successful community-based home care models.

Limitations

There are three limitations to this study. First, the relationship dynamics underpinning the MOMS OC home visitation program might not represent other coordinated RN-PHV model programs. Second, the generalization of these findings might be limited due to the small sample size of RNs in the study. Lastly, clients and healthcare providers were not participants in this study, and thus, the findings only represent the perspectives of the RNs and/or PHVs. Future work should include all team members and focus on the client as a key partner in care.

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

Conclusion

Our study is one of the first to describe the relationships between team members of a coordinated community-based home visitation program in the U.S. These findings can be utilized for stakeholders who seek to replicate this model of a home visitation program in low-resource communities. Clearly defined roles with strong communication were found to be key in successful RN-PHV collaborative programs. Future studies are needed to directly assess the perspectives and/or experiences of clients and healthcare providers engaged in a coordinated home visitation program to better understand the functioning of this model.

References

Appleton JV & Cowley S (2008). Health visiting assessment processes under scrutiny: A case study of knowledge use during family health needs assessments. International Journal of Nursing Studies, 45(5), 682–696. doi: 10.1016/j.ijnurstu.2006.12.009 [PubMed: 17418848]

Astuto J & Allen L (2009). Home visitation and young children: An approach worth investing in? Society for Research in Child Development, XXIII(IV): 3–23.

Bell K, Corbacho B, Ronaldson S, Richardson G, Torgerson D, Robling M, & Building Blocks trial group. (2018). The impact of pre and perinatal lifestyle factors on child long term health and social outcomes: A systematic review. Health Economics Review, 8(1),2. 10.1186/s13561-018-0186-6 [PubMed: 29368151]

Belknap A, O'Neill K, Paradis H, & Minkovitz C (2015). Coordination between Home Visiting Programs and Medical Homes. Retrieved from https://www.hvresearch.org/wpcontent/uploads/2018/01/harc_brief_communication_mh.pdf

Burke M, Boal J, & Mitchell R (2004). Communicating for better care: Improving nurse-physician communication. American Journal of Nursing, 104(12), 40–47.

Dmytryshyn AL, Jack SM Ballantyne M, Wahoush O, & MacMillan HL (2015). Long-term home visiting with vulnerable young mothers: An interpretive description of the impact on public health nurses. BMC Nursing, 14:12. doi: 10.1186/s12912-015-0061-2 [PubMed: 25767414]

Donovan EF, Ammerman RT, Besl J, Atherton H, Khoury JC, Altaye M, … Van Ginkel JB (2007). Intensive home visiting is associated with decreased risk of infant death. Pediatrics, 119(6), 1145–1151. 10.1542/peds.2006-2411 [PubMed: 17545382]

Elo S & Kyngäs H (2007). The qualitative content analysis process. Journal of Advanced Nursing, 62(1), 107–115. doi: 10.1111/j.1365-2648.2007.04569.x

Ferguson JM, & Vanderpool RC (2013). Impact of a Kentucky maternal, infant, and early childhood home visitation program on parental risk factors. Journal of Child and Family Studies, 22(4), 551–558. 10.1007/s10826-012-9610-4

Glenton C, Colvin CJ, Carlsen B, Swartz A, Lewin S, Noyes J, & Rashidian A (2013). Barriers and facilitators to the implementation of lay health worker programs to improve access to maternal and child health: Qualitative evidence synthesis. The Cochrane Database of Systematic Reviews, (10), CD010414. 10.1002/14651858.CD010414.pub2 [PubMed: 24101553]

Guo Y, Pimentel P, Lessard J, Rousseau J, Lee JA, Bojorquez Y, … Olshansky. (2016). A community-based home visitation program's impact on birth outcomes. MCN: The American Journal of Maternal and Child Nursing. 41(1):16–23. doi:10.1097/NMC.0000000000000203.

Heaman M, Chalmers K, Woodgate R, & Brown J (2007). Relationship work in an early childhood home visiting program. Journal of Pediatric Nursing, 22(4), 319–330. 10.1016/j.pedn.2007.02.002 [PubMed: 17645959]

Hiatt SW, Sampson D, & Baird D (1997). Paraprofessional home visitation: Conceptual and pragmatic considerations. Journal of Community Psychology, 25(1), 77–93.

Houston AM, & Cowley S (2002). An empowerment approach to needs assessment in health visiting practice. Journal of Clinical Nursing, 11(5), 640–650. [PubMed: 12201891]

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

Hsieh H-F, & Shannon SE (2005). Three approaches to qualitative content analysis. Qualitative Health Research, 15(9), 1277–1288. 10.1177/1049732305276687 [PubMed: 16204405]

Koniak-Griffin D, Anderson NLR, Brecht ML, Verzemnieks I, Lesser J, & Kim S (2002). Public health nursing care for adolescent mothers: Impact on infant health and selected maternal outcomes at 1 year postbirth. The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine, 30(1), 44–54.

Lancaster G Kolakowsky-Hayner S Kovacich J, & Greer-Williams N (2015). Interdisciplinary communication and collaboration among physicians, nurses, and unlicensed assistive personnel. Journal of Nursing Scholarship, 47(3), 275–284. doi: 10.1111/jnu.12130. [PubMed: 25801466]

Ma C Shang J, & Bott MJ (2015). Linking unit collaboration and nursing leadership to nursing outcomes and quality of care. The Journal of Nursing Administration, 45(9), 435–442. doi: 10.1097/NNA.0000000000000229 [PubMed: 26301550]

Matthys E Remmen R, & Van Boqaert P (2017). An overview of systematic reviews on the collaboration between physicians and nurses and the impact on patient outcomes: What can we learn in primary care? BMC family practice, 18(1), 110. doi: 10.1186/s12875-017-0698-x [PubMed: 29273023]

Meghea CI, Li B, Zhu Q, Raffo JE, Lindsay JK, Moore JS, & Roman LA (2013). Infant health effects of a nurse-community health worker home visitation programme: A randomized controlled trial. Child: Care, Health and Development, 39(1), 27–35. 10.1111/j.1365-2214.2012.01370.x

Miller TR (2015). Projected outcomes of Nurse-Family Partnership home visitation during 1996–2013, USA. Prevention Science: The Official Journal of the Society for Prevention Research, 16(6), 765–777. 10.1007/s11121-015-0572-9 [PubMed: 26076883]

Olds DL, Kitzman HJ, Cole RE, Hanks CA, Arcoleo KJ, Anson EA, Stevenson AJ (2010). Enduring effects of prenatal and infancy home visiting by nurses on maternal life course and government spending: Follow-up of a randomized trial among children at age 12 years. Archives of Pediatrics & Adolescent Medicine, 164(5), 419–424. 10.1001/archpediatrics.2010.49 [PubMed: 20439792]

Peckover S (2002). Supporting and policing mothers: An analysis of the disciplinary practices of health visiting. Journal of Advanced Nursing, 38(4), 369–377. [PubMed: 11985688]

Renz SM & Carrington JM (2016). Nurse-physician communication in long-term care: Literature review. Journal of Gerontological Nursing, 42(9): 30–37. doi: 10.3928/00989134-20160615-04 [PubMed: 26716459]

Siegler JE, Finegan D Kasner SE, & Price RS (2017). Interprovider communication using a scheduled provider alert-response communication system in 3 inpatient neurology units. The Journal of Neuroscience Nursing, 49(5), 258–263. doi: 10.1097/JNN.0000000000000312 [PubMed: 28817503]

Swart L, van Niekerk A, Seedat M, & Jordaan E (2008). Paraprofessional home visitation program to prevent childhood unintentional injuries in low-income communities: A cluster randomized controlled trial. Injury Prevention, 14(3), 164–169. doi: 10.1136/ip.2007.016832. [PubMed: 18523108]

Tschannen D, Keenan G, Aebersold M Kocan MJ, Lundy F, & Averhart V (2011). Implications of nurse-physician relations: Report of a successful intervention. Nursing Economics, 29(3), 127–135. [PubMed: 21736176]

World Health Organization (2012). Optimizing health worker roles to improve access to key maternal and newborn health interventions through task shifting. Geneva: World Health Organization. Retrieved from http://www.optimizemnh.orga