

ORIGINAL RESEARCH:
EMPIRICAL RESEARCH - QUALITATIVE

Factors influencing the implementation of an intimate partner violence intervention in nurse home visiting: A qualitative descriptive study

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Abstract

Aims: To identify factors that influenced: (1) integration of an intimate partner violence intervention into the Nurse-Family Partnership programme and (2) utilization of the intervention with fidelity to the clinical pathway by nurses in their home visits.

Design: A qualitative descriptive study embedded in the intervention arm ($n = 7$ sites) of a 15-site cluster randomized clinical trial to evaluate the intimate partner violence intervention.

Methods: Semi-structured interviews ($n = 13$) were conducted with supervisors. Nurses at the seven sites shared their experiences in focus groups conducted at two time points ($n = 14$ focus groups, 12 months after baseline and following collection of client trial data). Qualitative data were generated between May 2012 and September 2016, with this post hoc analysis completed in 2021. Focus group data were analysed using a rapid qualitative analysis technique. Conventional content analysis was used to categorize data from the supervisor interviews.

Results: Integration was negatively impacted by: (1) a lack of centralized programme support and (2) competing programme demands. At the practice level, multiple factors related to supervisor capacity, preservation of the nurse–client relationship and nurse, client and intervention attributes influenced nurses' capacity to address intimate partner violence with fidelity to the clinical pathway. A lack of privacy in home visits was the most common barrier to addressing clients' experiences of violence. The need for increased time for nurses to develop clinical expertise prior to the evaluation of the intervention was also identified.

Conclusion: Before implementing an intimate partner violence intervention, home visitation programmes need to attend to site readiness, provide support to supervisors to facilitate implementation, and provide nurses with time to develop the expertise and clinical judgement required to use a complex intervention whilst also respecting clients' agency to determine when and how they will respond to the violence in their relationships.

KEYWORDS

home visits, implementation, intimate partner violence, nurses, nursing, qualitative

1 | INTRODUCTION

In many countries, registered nurses or midwives provide early intervention services through home visitation programmes to improve the health outcomes of pregnant women or parents with young children. Whilst many health systems offer short-term universal home visiting services to all women in the prenatal or postpartum periods, the importance of also providing long-term home visitation programmes, particularly to families experiencing social or economic challenges has been recognized (Aston et al., 2014; World Health Organization, 2015). Nurses working with families enrolled in population-specific home visitation programmes, including the Nurse-Family Partnership® (NFP) programme, often develop long-term therapeutic relationships with their clients and provide holistic client-centred care that prioritizes improving multiple prenatal, maternal, and child health outcomes. For this reason, nurse home visitors are in an optimal position to identify women experiencing intimate partner violence (IPV) and then intervene to support women in increasing safety for themselves and their children (Adams et al., 2022). This qualitative process evaluation, which was part of an overall evaluation of an NFP IPV intervention using a cluster-based, single-blind randomized controlled trial (RCT), was conducted to understand the implementation of this IPV intervention and to identify factors influencing its use by nurses in their home visiting practice.

1.1 | Background

NFP is a home visitation programme where registered nurses work with young, first-time mothers experiencing social and economic disadvantage, with frequent home visits starting early in pregnancy (≤ 28 weeks gestation) and continuing until the child's second birthday. The programme goals are to improve: (1) pregnancy outcomes by promoting healthy behaviours; (2) children's health and development by supporting parents to provide safe and competent care; (3) parental life-course trajectories by reducing closely spaced pregnancies and supporting parents to complete their education and secure employment (Olds & Yost, 2021). NFP has been implemented in 41 states in the United States (US), 5 US Tribal Nations and the US Virgin Islands. Globally, the NFP has also been implemented in one or more regions of Australia, Bulgaria, Canada, and Norway, as well as in England, Scotland and Northern Ireland under the name of 'Family-Nurse Partnership'. The efficacy and effectiveness of the NFP programme have been evaluated for over 40 years and have included RCTs determining the programme's impact on a range of maternal and child health outcomes in the US (Olds, 2002), Netherlands (Mejdoubi et al., 2013, 2015), Canada (Catherine et al., 2020) and England (Robling et al., 2016).

Experiences of IPV are common amongst populations of young pregnant women eligible for enrollment in the NFP programme. In several trials to evaluate the effectiveness of NFP, rates of IPV amongst participants have ranged from 19.0% to 62.3% (Catherine

Impact

What problem did the study address?

Given the positive impacts that participating in the Nurse-Family Partnership intimate partner violence education had on nurse home visitors' attitudes and confidence to address this type of violence experienced by first-time mothers, it was important to understand what factors contributed to the low fidelity of intervention implementation in practice, a factor that may help to explain the lack of client-level impacts on maternal outcomes.

What were the main findings?

Implementation of an intimate partner violence intervention in a nurse home visiting programme was influenced by contextual factors at both programme and practice levels. At the practice level, a lack of privacy in the home limited nurses' capacity to use the intervention. Supervisors were identified as having an important role to support nurses develop the expertise to use the intervention. Nurses also consistently balanced the intervention requirements to address intimate partner violence with an understanding of the complexity of this type of violence in young women's lives and respect for clients' agency to determine when and how they will respond to the violence in their relationships.

Where and on whom will the research have an impact?

These findings will be of interest to: (1) researchers developing and evaluating complex nursing interventions to address intimate partner violence in home visitation programmes and (2) stakeholders leading the implementation of novel innovations in the Nurse-Family Partnership programme.

et al., 2019; Eckenrode et al., 2000; Mejoubi, 2013; Robling et al., 2016). The presence of IPV in clients' lives has been found to increase the complexity of home visiting work. For example, 283 NFP nurse home visitors in the US were surveyed about the impacts of IPV on the delivery of the NFP intervention; 72% reported that IPV in the home made delivering the programme with fidelity somewhat or very difficult and almost 40% of these nurses perceived that they did not have sufficient knowledge or skills to adequately address IPV (Jack et al., 2012). This perceived deficit in knowledge and skills indicates a need for an IPV intervention tailored for the NFP programme to support nurses to identify and respond to IPV (Olds et al., 2013). To address this issue, an IPV preventive intervention embedded in a single NFP programme (Oregon, US) that included structured IPV screening, a brochure-driven intervention and

a skill-based relationship curriculum was evaluated. Findings from this RCT concluded that their intervention held some promise for preventing some forms of IPV if past victimization had not occurred but did not demonstrate any positive effects for women who had experienced IPV (Feder et al., 2018).

Following the framework for developing new innovations to improve the NFP model (Olds et al., 2013), an IPV intervention tailored for NFP was formatively developed and pilot-tested for feasibility and acceptability (Jack et al., 2012). The NFP IPV intervention included: (1) a comprehensive programme of nurse IPV education (curriculum details available in Jack et al., 2021); (2) guidelines for reflective supervision; (3) a checklist to assist NFP sites with intervention implementation; (4) an intervention manual and a clinical pathway (Figure 1) aligned with the nursing process to guide clinical

decision-making. NFP sites were provided with client-facing activities or assessment tools for each step of the pathway (summary of resources available as supplementary files, Jack et al., 2019).

In the NFP IPV clinical pathway used in the trial, nurses conducted an unstructured universal assessment of safety and discussed the attributes of 'healthy' and 'unhealthy' relationships with all newly enrolled clients during the fourth visit in pregnancy, followed by a structured IPV assessment. Nurses received education on initiating indicator-based assessments. For clients who disclosed their experience of current or past (last 12 months) IPV, nurses provided an empathic response that included active listening, validation of the client's experience and an offer of support. For these clients, nurses were then prompted to collect additional assessment data necessary to support the development of a tailored plan of care that included a

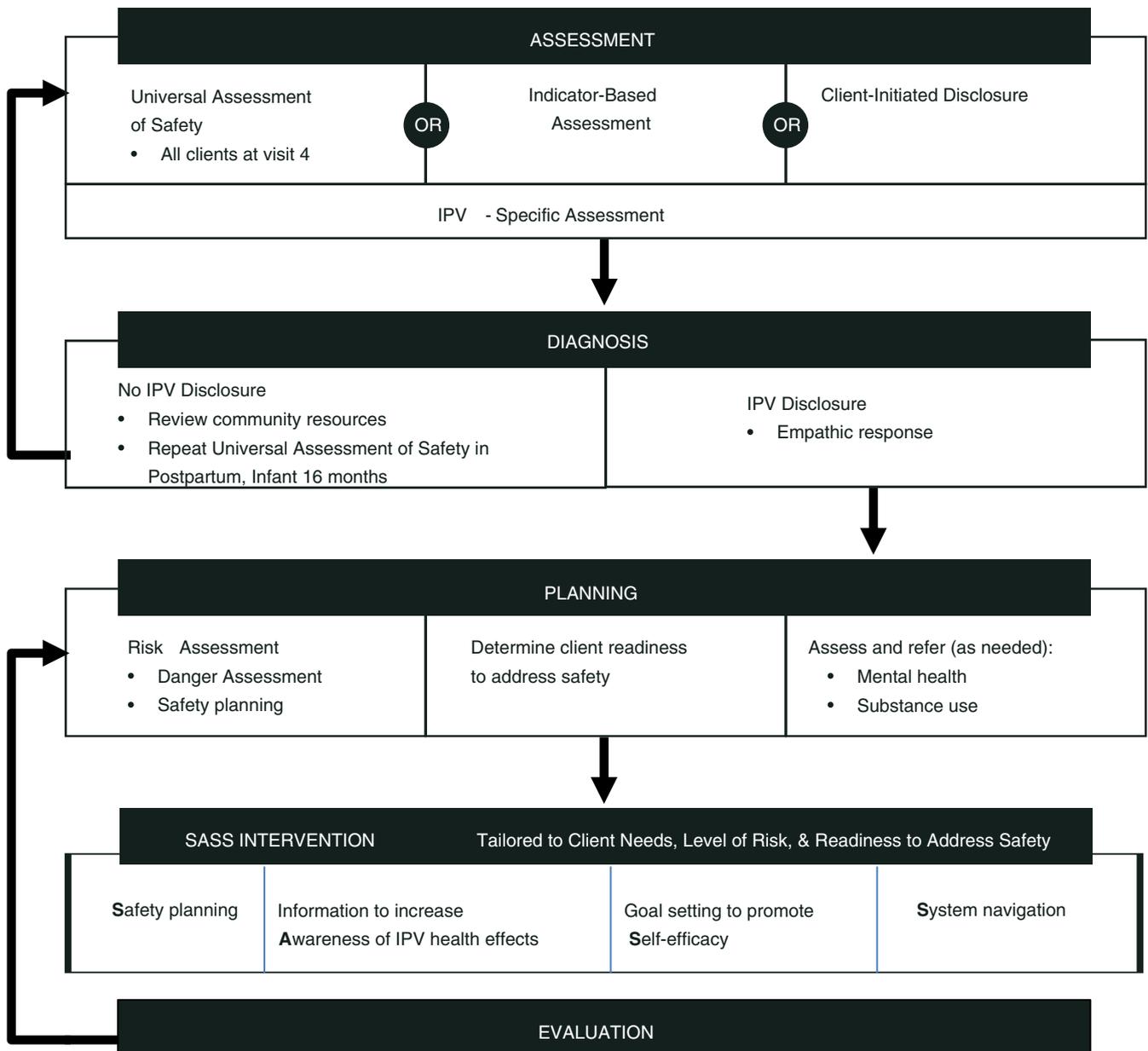


FIGURE 1 Nurse-Family Partnership intimate partner violence intervention clinical pathway.

risk assessment (the Danger Assessment; Campbell et al., 2009), determination of the client's readiness to address safety in the relationship and an assessment (and referrals as necessary) of mental health, including substance use, issues. Based on this information nurses and clients were encouraged to work through 'SASS' intervention activities from four domains on a weekly basis: (1) safety planning; (2) increasing awareness of the health effects of IPV through health education; (3) goal setting to enhance self-efficacy; (4) system navigation to identify and access community supports and services as required (Jack et al., 2012). The NFP IPV education included information about theories of women's experiences of leaving or resolving violence in intimate relationships (Dienemann et al., 2002). When working with women experiencing IPV, nurses were advised to utilize their motivational interviewing skills to promote client self-efficacy or explore options for behaviour change. Motivational interviewing is a counselling technique, underpinned by the transtheoretical model (Prochaska et al., 2002) that outlines five distinct stages of readiness to engage in behaviour change. With the NFP IPV intervention for women who had disclosed IPV, nurses were provided with tools to determine a client's stage of readiness to address safety from amongst five states (Table 1) closely aligned with the stages of change.

An RCT evaluating the IPV NFP intervention was conducted in 15 NFP sites in eight US states and enrolled 492 pregnant women (≥ 16 years) (methods are detailed elsewhere; Jack et al., 2019) (Trial Registration [ClinicalTrials.gov](https://clinicaltrials.gov) Identifier: NCT01372098). The objective of the trial was to determine the effectiveness of the NFP IPV intervention ($n = 7$ sites) relative to standard NFP ($n = 8$ sites) on maternal quality of life. In NFP IPV sites, all nurses were expected to participate in the IPV education and were provided with the clinical pathway, an intervention manual, and associated intervention assessment tools and client-facing activities by the research team. Nurse supervisors were provided with a brief checklist to support implementation and written guidance for reflective supervision. Participating sites were independently responsible for implementation yet also had access to an IPV intervention consultant from the research team to meet with on request. Results of the RCT showed that the NFP IPV intervention did

not improve quality of life, reduce violence or improve other health outcomes when compared with standard NFP (Jack et al., 2019).

During the RCT, nurses in the seven NFP IPV sites were asked to maintain written logs documenting their completion of different steps on the clinical pathway. A total of 216 (of 229) logs were returned to the study team. Analysis of these logs showed variable rates of completing several activities that were *required* for all eligible participants, reflecting lower than expected fidelity. Specifically, in the prenatal period, the universal assessment of safety was completed by 71% (154/216) of participants (Jack et al., 2019). Of the 100 women who disclosed IPV to the nurse, only 26% completed the required Danger Assessment and only 40% completed at least one component of the 'SASS' domain (Jack et al., 2019).

An explanatory sequential mixed methods study embedded in the above trial, evaluated the effect of the NFP IPV education on nurses' attitudes and confidence to address IPV in their home visiting practice, (study methods reported in detail elsewhere: Jack et al., 2021). Nurses in the intervention group ($n = 77$), compared to control ($n = 101$) reported large improvements in their thoughts, feelings and perceived behaviours. This strong education effect was found from baseline to 12 months and baseline to study closure. Furthermore, nurses who participated in the NFP IPV education and who shared their experiences in focus group interviews explained that the NFP IPV education, compared to prior IPV training, was more detailed, covered a broader range of topics and increased their confidence to initiate discussions about IPV in their home visiting practice (Jack et al., 2021).

Given the improvement in nurses' self-reported confidence and attitudes related to addressing IPV following the NFP IPV education, it is important to understand what factors contributed to the low fidelity of intervention implementation, a factor that may help to explain the lack of client-level impacts. Exploring the implementation process will also provide insights to inform the implementation of other innovations into home visitation programmes as well as our understanding of what nurse home visitors require in their practice to address IPV.

TABLE 1 Stages of change aligned with cognitive states of women experiencing IPV

Transtheoretical model stages ^a	Cognitive states of women experiencing IPV through the trajectory of addressing Violence ^b
Precontemplation (not ready)	Committed to continuing the relationship
Contemplation (getting ready)	Committed to the relationship but questioning
Preparation (ready)	Considering changes and options
Action	Breaking away from the partner or curtailing abuse
Maintenance	Establishing a new life together or apart

^aAdapted from Prochaska et al. (2002).

^bAdapted from Dienemann et al. (2002).

2 | THE STUDY

A qualitative process evaluation was embedded in the RCT to identify factors influencing the implementation of the NFP IPV intervention. This included an examination of two types of implementation outcomes: the integration of the IPV intervention in the NFP programme and the feasibility or extent to which the nurses used the intervention in their practice. These findings have the potential to deepen our understanding of what is required to support nurses address IPV in their practice as well as insights to inform the implementation of other innovations into home visitation programmes.

2.1 | Aims

To identify and describe factors that influenced:

1. The *integration* of the IPV intervention into the NFP programme model in participating programme sites.
2. The *utilization* of the IPV intervention with fidelity to the clinical pathway by nurses in their home visits with pregnant women or first-time mothers.

2.2 | Design

A qualitative descriptive design (Neergaard et al., 2009) to identify nurses' and supervisors' perceptions of factors influencing the integration and use of the NFP IPV intervention.

2.3 | Sample/participants

A purposeful sample of nurses with experience implementing the NFP IPV intervention was invited to participate in this qualitative component. The inclusion criteria for participants in this analysis were: (1) nurse home visitor or nurse supervisor employed by one of the seven NFP IPV sites randomized to the NFP plus IPV intervention arm of the trial; (2) participation in the IPV education; and (3) availability to participate in an interview.

2.4 | Data collection

Interviews (either semi-structured or focus group) were conducted with all participants to explore their experiences and perceptions about factors influencing the intervention implementation process. At each of the seven sites, two focus groups were conducted with nurse home visitors and included questions specific to integrating the IPV intervention into the NFP programme and their use of the IPV clinical pathway ($n = 14$ focus groups). The first seven focus groups occurred approximately 12 months after baseline (May 2012–February 2013); the second round was conducted 4 months after all client data in the RCT had been collected (between September 2015 and September 2016). These 14 focus groups were facilitated by the lead author (S.M.J.), an experienced qualitative researcher with extensive content expertise in home visitation, family violence and public health nursing practice. At the end of the trial, a single semi-structured interview was conducted with each supervisor that had participated at some point in the study. At the time of the interviews (March–April 2016) seven of the individuals interviewed remained in an NFP supervisor role and six had left the role (i.e. to retire or take a new position) during the trial. The supervisor interviews were conducted by an experienced homecare nurse supervisor (C.S.); the interviewer was also enrolled in a graduate programme during the course of the study which provided her with training on qualitative methods. Semi-structured interview guides were developed for all interview types. Focus group and individual interviews were recorded, and raw data were transcribed verbatim with all identifying information removed. Field notes from each site contact ($n = 57$) during the trial were maintained by the IPV intervention consultant.

2.5 | Data analysis

Focus group data were analysed using a rapid qualitative analysis technique (Hamilton, 2013) which is commonly employed in implementation research (Hamilton & Finley, 2019). Each focus group transcript was first read in its entirety by the lead analyst (S.M.J.) to identify domains describing different types and levels of factors influencing implementation. A template listing each domain was created and content from each focus group interview was summarized in the template. Next, matrices were developed to list and compare factors across sites and time points. Once key factors influencing implementation were identified, data relevant to each factor were extracted and summarized to identify the conditions under which the factor may have served as either a barrier or facilitating influence. To promote dependability in categorizing the data, a second analyst (D.D.) independently replicated this process for six transcripts (three from each timepoint) and worked with the first analyst to confirm domains included in the template. The analysts' two matrices were then converged. The data from the interviews were analysed using an inductive approach to content analysis, two analysts (S.M.J., C.S.) read all transcripts in their entirety; CS then conducted line-by-line coding of the full dataset and developed seven categories to describe supervisory roles related to implementation and delivery of the IPV intervention, and functions associated with each of those roles. To provide a more comprehensive description of the supervisor role in implementation, the lead analyst (S.M.J.) then compared and contrasted data in the 'roles' categories from the supervisor transcripts with data from the focus groups. In reading the transcripts, all analysts extracted exemplary quotes to illustrate the properties or dimensions of the identified factors influencing implementation. In the latter stages of analysis, to assist with interpretation and to align category labels with commonly employed terms, theoretical triangulation was employed. Multilevel and multidimensional determinant frameworks (Nilsen, 2015) from implementation science (Damschroder et al., 2009; Harvey & Kitson, 2015; Rogers, 1995) were reviewed to facilitate the process of labelling the factors found to have a perceived influence on integration or use of the IPV intervention based on our qualitative analysis. Field notes were then reviewed to inform data interpretation.

2.6 | Ethical considerations

The RCT protocol, which included this qualitative process evaluation, was approved by the Hamilton Integrated Research Ethics Board, McMaster University, and organizational and site-specific Institutional Review Boards. Informed consent to participate in the trial components was provided by all participants and confirmed verbally prior to each interview type.

2.7 | Rigour

Trustworthiness of these findings was promoted through the use of multiple strategies across different phases of the research process.

Data credibility was enhanced through data type (interviews, focus groups and field notes), data source (nurse home visitors and supervisors), researcher and theoretical triangulation. Other strategies to promote credibility included time sampling to explore how nurses' practices evolved over time, the engagement of researchers with known expertise and credibility in the field, and the maintenance of reflexive journals by two of the analysts (SMJ, CS). Data dependability was promoted through the use of multiple analysts, double coding procedures and data source triangulation.

2.8 | Reflexivity

In this program of research, the lead author (S.M.J.) participated in all qualitative aspects to develop, pilot, and evaluate the IPV intervention, including delivery of the nurse education. These activities involved multiple site visits and engagement with nurse supervisors and home visitors. These working relationships created circumstances for potential conflicts of interest. To mitigate this risk, a minimum of two research team members were involved in the delivery of the nurse education and all phases of data collection and analysis. To allow nurse supervisors to speak candidly about their experiences leading the intervention implementation, a qualitative researcher (C.S.) unknown to the supervisors conducted the interviews. Interview guides were purposefully structured to ask about both facilitators and barriers to implementation, to ensure that the findings reflected a range of both positive and negative experiences. Finally, for this specific study component, the individuals responsible for data collection (S.M.J., C.S.) maintained reflexive journals to document how the researchers' interactions may have either benefited or challenged the research process.

3 | FINDINGS

A total of 77 nurses ($n = 64$ nurse home visitors, $n = 13$ supervisors) participated in the NFP IPV education (Table 2). These qualitative findings reflect the insights and perceptions of 60 participants which consisted of all 13 supervisors and 47/64 nurses (73.4%) who were working in the NFP programme on the dates of the scheduled focus groups. The overall degree of integration of the NFP IPV intervention varied across the seven participating NFP sites. In general, integration into the NFP programme model was negatively impacted by (1) a lack of centralized (i.e., national) programme support and (2) the need to integrate the IPV intervention whilst simultaneously integrating other new (and required) programme model innovations required by the NFP National Service Office. The integration process however was facilitated in some sites where the nurse supervisor became a champion for the IPV intervention, created a positive climate for implementation, and who had the capacity to actively facilitate uptake. At the clinical level, multiple factors related to supervisor-led processes, nurse home visitor characteristics, the home visit environment, the client context, the nurse-client relationship and intervention characteristics were

TABLE 2 Demographic characteristics

Nurse-family partnership intervention sites	($n = 7$)
Location of sites by state (no.)	California (1) Nevada (1) Minnesota (1) New Jersey (1) Pennsylvania (1) Texas (2)
Participant demographics characteristics	($n = 77$) (M, SD)
Years since completing education	14.42 (10.37)
Years with the NFP Programme	2.25 (2.26)
Demographics (categorical variables)	n (%)
Role	
Nurse home visitor	64 (83.1)
Nurse supervisor	13 (16.9)
Gender (Female)	77 (100)
Age (years)	
20-29	11 (14.3)
30-39	21 (27.3)
40-49	24 (31.2)
50-59	17 (22.1)
60-69	3 (3.9)
Highest professional qualification	
Nursing diploma	3 (3.9)
Associate nursing degree	7 (9.1)
BSN/BScN	55 (71.4)
Master's degree	12 (15.6)
History of personal experiences of IPV (yes)	20 (26.0)

identified as influencing nurses' capacity to use the clinical pathway in practice to assess for and respond to IPV. Tables 3 and 4 list all factors perceived to influence the implementation of the IPV intervention as identified by nurses across NFP sites and data collection time points. In the interviews and focus groups, participants described the varied contexts under which these factors served as either barriers to, or facilitators of and implementation.

3.1 | Factors influencing NFP IPV intervention integration

3.1.1 | NFP Programme context (national programme level)

All participating sites identified that, in comparison to other NFP programme innovations rolled out by the NFP National Service Office, the IPV intervention clinical pathway, assessment tools, client-facing activities and other resources were not seamlessly integrated into the centralized programme structures. Without integration of the IPV intervention into the visit-to-visit guidelines, programme checklists, data collection and documentation systems, nurses explained

TABLE 3 Nurse perceptions of the factors that influence integration of the NFP IPV intervention by NFP site and data collection timepoint

Factor	Site 1		Site 2		Site 3		Site 4		Site 5		Site 6		Site 7	
	12m	End												
NFP programme model context (national level)														
Model structures	X			X	X	X	X	X	X	X	X	X	X	X
Model learning and support networks		X		X	X	X	X	X	X	X	X	X	X	X
Innovations to augment model		X		X	X	X	X	X	X	X	X	X	X	X
NFP programme model context (local NFP site level)														
Relative priority of the importance to address IPV		X		X	X	X	X	X	X	X	X	X	X	X
Implementation climate		X		X	X	X	X	X	X	X	X	X	X	X
Supervisors as champions		X		X	X	X	X	X	X	X	X	X	X	X
Supervisor capacity to facilitate integration (local NFP site level)														
Knowledge of NFP model							X		X			X		X
Knowledge of IPV intervention											X		X	
Time and resources	X			X		X		X		X		X		X

that they then lacked 'cues' or 'reminders' on when to initiate the IPV intervention or what components should be offered to which clients. As one nurse shared:

It's confusing with all these different things, maybe with the e-guidelines it would be easier if there was a pop-up to remind you, that would be super helpful. That's the biggest challenge right now. Everyone gets behind because there are too many things in the NFP programme to remember, and then you say, 'Oh, I didn't do that, I was supposed to do that last month'.

Most teams shared that ongoing implementation of the IPV intervention would have been facilitated if NFP nurse consultants and educators from the National Service Office could have been oriented to the IPV intervention and available to consult on how to integrate the intervention into existing programme structures and to provide ongoing professional development about IPV-related topics.

During the period of the RCT, the NFP National Service Office was also piloting or rolling out multiple new programme innovations including: (1) a tool to improve nurses' dyadic assessment of naturalistic caregiver-child experiences (DANCE); (2) a system to classify families' strengths and risks (STAR); and (3) a new data collection system to support continuous quality improvement (Olds et al., 2013). Each programme augmentation was developed by a distinct team. This resulted in the creation of unique pathways, assessment tools and documentation requirements for each innovation. Participants at all sites explained that at the clinical level, it was challenging, time-consuming, and confusing to figure out how to seamlessly integrate all changes, including the addition of the IPV intervention, to their daily workflow. Supervisors also noted that research-related documentation, specifically completion of the intervention implementation log, added an additional burden to nurses' workloads. Nurses further highlighted that NFP is a multi-faceted programme, developed to address multiple maternal, child or family domains in each home visit and that efforts to adopt a new innovation substantially increase their workloads. One nurse stated, 'the whole challenge is that we have 25 clients, and we now have to do STAR, we have to do DANCE, and now we have to do the IPV [intervention].' NFP sites also varied in their capacity and access to resources to facilitate this work. In sites with fewer resources (e.g. clerical support) or more frequent supervisor or nurse turnover, the team often prioritized implementation of the 'mandatory' programme innovations required by the National Service Office. Such prioritization, from the nurses' perspectives, left less time, energy and resources to focus on the integration of the IPV intervention, which was perceived as a more 'voluntary' intervention to implement.

3.1.2 | NFP Programme context (local NFP site level)

In the sites participating in the RCT, despite multiple demands on team members' time, allocating resources to learn the NFP IPV

intervention and use it in their practice was supported. This occurred because the relative priority to address IPV in practice was high and met an oft-discussed gap in their knowledge and the new IPV intervention presented a potential solution to a complex clinical challenge. A site's capacity for change and a team's receptivity and interest in learning this new intervention were identified as factors which facilitated a positive climate for implementation. The presence of a supervisor who became a champion for the IPV intervention and who was able to inspire their teams to be engaged in the work was perceived to be the most critical factor contributing to a team's ability to integrate the intervention into their work. Supervisors characterized as champions promoted the intervention as an important NFP augmentation, engaged in advancing their own knowledge and skills with respect to addressing IPV, prioritized implementation efforts, developed creative solutions and resources to assist nurses to integrate the pathway into their home visits, and regularly discussed the intervention in reflective supervision. In this process evaluation, supervisors at four sites were identified as active champions of this work; three of these supervisors remained with their team for the duration of the project. In the remaining sites, the non-emergence of a supervisor champion of the IPV intervention may have been influenced by supervisor turnover, as well as supervisor capacity to balance competing demands associated with day-to-day programme management. Nurses were empathetic to this situation, as one nurse explained, 'Our [Supervisor] is overwhelmed, overwhelmed and she just doesn't have enough time to do all of the things she has to do. So, I think we stop relying on the [IPV resources] being in the files.'

3.1.3 | Supervisor capacity to facilitate integration (local NFP site level)

In the majority of sites, where a consistent supervisor champion of the IPV intervention did not emerge, this was perceived to be an important barrier hindering overall implementation. In contrast, implementation was perceived to be facilitated by full-time NFP supervisors who were experienced in their role and knowledgeable about the NFP programme model. This knowledge allowed them to understand where and how different elements of the IPV intervention could be seamlessly integrated into team meetings, reflective supervision and home visits. Supervisor champions were also described as being highly invested in learning the IPV intervention which enabled them to assume an ongoing educator role in the site, creating opportunities to reinforce and review concepts from the IPV education with nurses on their teams. In sites where there was supervisor turnover, supervisors new to NFP allocated more time to learning the programme model and had limited capacity to learn the IPV intervention, which further limited their role in supporting its integration into all elements of practice. In sites with supervisor champions, they demonstrated initiative by investing time and human resources (e.g. clerical support) to create locally developed resources to facilitate integration. For example, two supervisors developed their own checklists to support implementation in the organization; another

supervisor developed a system to track nurses' use of the intervention with fidelity to the clinical pathway. Nurses across some sites expressed a deep appreciation for supervisors who developed a 'packet' consisting of all the IPV assessment tools and client-facing activities collated together that a nurse would need in a home visit. As one nurse described:

We are fortunate that our supervisor is so organized. We have packets. So, for the fourth visit in pregnancy all we have to do is reach in the file cabinet, grab it and we're ready to go. We have all the resources needed to do the universal assessment of safety. We also have the IPV clinical pathway laminated. That makes it so much easier for us.

For sites that lacked these types of 'grab and go' resources, the nurses included this in their 'recommendations' as an enhancement to the implementation checklist.

3.2 | Factors influencing NFP IPV intervention utilization

3.2.1 | Supervisor-led actions to facilitate nurses' utilization of the IPV clinical pathway

Supervisors were identified as having a critical role in coaching nurses about how to apply their knowledge to assess for and respond to IPV in their home visits with clients. Nurses at two sites described purposeful actions by their supervisor to either model IPV assessment techniques on joint home visits or to review their use of the IPV clinical pathway during weekly reflective supervision. Likewise, seven supervisors discussed reviewing the IPV clinical pathway in reflective supervision and encouraging nurses to bring clinically challenging IPV-related cases for discussion. Eight supervisors indicated they allocated time in bi-weekly meetings, particularly during the early stages of the RCT, to discuss IPV-related issues. Only four supervisors indicated that during a joint home visit, they took the opportunity to role model for a nurse on how to address IPV. None of the 13 supervisors discussed using the supervisor-specific 'NFP IPV reflective supervision guidelines' that were provided as part of the intervention resources.

3.2.2 | Home visit environment

The most common and consistent barrier to assessing for and responding to IPV in the home visit environment as reported by both nurses and supervisors, was a lack of privacy between the nurse and client to confidentially discuss IPV-related content. When other people were present, and in particular the client's partner, nurses unanimously confirmed that they did not initiate any IPV assessments nor IPV-related content. Across focus groups, nurses

repeatedly provided statements like, 'the father was at every single visit'. This persistent barrier to utilizing the IPV intervention was also confirmed by supervisors, with one explaining, 'The father of the baby is always there no matter what you try. So, if you are keeping track of the [implementation] statistics, you can see why the nurses aren't getting this certain [intervention] completed.'

Only two teams identified concerns about nurses working in homes with known perpetrators of IPV as a factor limiting their ability to assess for or address IPV in their practice. Supervisors noted that safety concerns were amplified, and plans to address IPV modified, particularly when it was known that there was a gun in the home or clients experiencing abuse were residing in a rural community, living in a place isolated from neighbours, or where cellphone reception was poor. Nurses on three teams identified that a feeling of 'chaos' in the home (e.g. dogs barking, baby crying, multiple people moving through the space, television on) created a less than ideal environment to safely navigate sensitive discussions about the client's IPV experiences. One nurse summarized the situation in this way, 'it's challenging for the client. She's so busy with the baby and then if somebody comes into the room, she just kind of freezes. It's difficult. The whole environment is always difficult.'

3.2.3 | Characteristics and practices of nurse home visitors

Almost all sites identified that a nurse's level of experience in using the IPV clinical pathway influenced how often and how well it was used with fidelity. In the early phase of intervention implementation, nurses and supervisors both spoke of feeling 'overwhelmed' by the time required to familiarize themselves with the intervention components and to seamlessly weave it into their existing home visiting practices. For example, in a focus group conducted 12 months after the IPV education, one nurse declared, 'I'm still a novice in using this intervention'. There was a general consensus that it took over 2 years for many nurses to develop expertise in knowing (1) how and when to use different components of the clinical pathway to respond to their different client's unique needs and (2) which client-facing activities would be appropriate to introduce to a client depending on her level of readiness to discuss the violence in her life.

A practical barrier to using the intervention during a home visit was a lack of nurse preparedness. Nurses at five sites identified that there were times during a home visit when they did not have the required assessment tool (e.g. copy of the Danger Assessment) or client-facing activity (e.g. worksheet to develop a safety plan) physically on-hand to use. Another barrier, identified by nurses at three sites and validated by supervisors, was that some nurses found it emotionally difficult to address IPV in their practice. Nurses spoke of being particularly overwhelmed, and sometimes avoiding a discussion, when clients reported experiencing pervasive coercive control, sexual coercion or being trafficked by their partner, especially when there was a perceived lack of additional community services to

support the client. One nurse reflected on her feelings with respect to this work:

I'm finding it stressful. One of my clients, she's just had so much abuse in her past. She's kind of matter of fact when she's telling me, but I'm not feeling 'matter of fact' inside when I'm listening to all that. I just thought, 'I just can hardly handle this'. I just went past the [universal of assessment of safety] and then thought I should get back reviewing her danger [assessment]... I just thought, I need a break from this, ok? I do not want to talk about this anymore. We could talk about this every single visit for the next two years and still have stuff to talk about... I need my own psychotherapy. I'm feeling it bad.

One supervisor also confirmed that nurses were feeling overwhelmed and stated, 'you hear it from everybody, all eight nurses. So yes, it [addressing IPV] does affect you.'

3.2.4 | Characteristics of client context

Nurse home visitors also identified how characteristics of the client or the context of their lives influenced their abilities or decisions to implement the IPV intervention with fidelity to the clinical pathway. Amongst these, the 'timing' of the woman's enrollment into the NFP programme seemed important. When women enrolled in the NFP programme at or close to 28 weeks gestation this served as a significant barrier as nurses had fewer visits to review all pregnancy-related content across NFP programme domains. As one nurse explained:

A challenge can be when someone signs up at 28 weeks, I've only got maybe six visits with them, maybe seven before they're ready to have their baby. So, the struggle for me is to get [the universal assessment of safety] done on the fourth visit knowing that I only have a couple of visits left with her and that there are so many things that the *client* wants to know, videos to watch on labour and delivery and discussing how to take care of baby. There's just a lot of content that she would like to cover and then the content I need to cover, and then the IPV assessment pretty much takes a whole visit.

In contrast when pregnant women enrolled in NFP earlier (i.e. between 12 and 16 weeks gestation), nurses explained this facilitated their ability to develop a foundation of trust over multiple visits prior to initiating the universal assessment of safety. Most expressed that during this period of time, clients tended to be more open to discussing content related to healthy relationships and safety and were less focused on preparing for the birth of their infant.

Nurses at all sites spoke about the importance of addressing client-identified needs as a priority during a home visit. With limited time for a home visit and in the presence of multiple, complex issues to address (e.g. typically related to infant health, maternal mental health, housing issues), nurses and clients often focused on these topics, with the nurse making the decision to delay the introduction of an IPV assessment or, with women who had disclosed IPV, to not include content from the 'SASS' intervention component on the clinical pathway. Nurses also explained that sometimes the symptoms or behaviours associated with a client's mental health concern (e.g. particularly if diagnosed with a mood disorder, anxiety, attention deficit hyperactivity disorder or post-traumatic stress disorder) challenged the nurses' skills to introduce, and limited clients' abilities to engage, focus or participate in intervention activities such as safety planning, goal setting or system navigation. One nurse summarized these challenges by explaining:

Whatever is going on in the client's home may consume all the time in a visit. The IPV becomes a backburner issue. I've had clients with medical issues, issues with the pregnancy, so talking about IPV just didn't fit because all of the visits have focused on the medical issues. Or a client being hospitalized, so that wasn't a good time [to address IPV]. Then whatever psychosocial issues a client has, they overtake the visits. Before you know it, it's already been two months and IPV hasn't been talked about. Or clients miss visits. So, by the time you see them again, something big has happened, so now you are talking about that and you're not able to talk about the IPV.

Additionally, it was not uncommon for clients to 'disappear' from the programme for an extended period of time, or to cancel or miss scheduled home visits, often following a disclosure of IPV to their nurse. When the client's availability for a home visit was limited, this inhibited nurses' abilities to utilize any component of the clinical pathway, until such time that the client returned to the programme and was ready to re-engage. One nurse shared:

There would be times where I had a client disclose and then they went MIA [missing in action]. Because they were afraid I would call someone on them, which, of course, I addressed immediately, 'You know, I will never call anyone unless I'm worried about the safety of your child'. What I hear when they come back months later is, 'I was afraid of what you thought of me'. So, what's beautiful about [NFP] is we're able to build such a beautiful bond and relationship with our clients. But sometimes, in IPV, I think it can work against us.

Nurses at all sites, across the full duration of the study, identified that if they perceived that a client who had disclosed a current (or

past) experience of IPV was 'not ready' to discuss her experiences or engage in any of the 'SASS' intervention activities, they would often make the decision to not continue with the intervention. One nurse explained:

I was surprised that no matter what way I tried to present this to her, she just did not want to talk about it....I was in a bind. I just wasn't sure how to handle that because you can't force anybody to talk about something they don't want to talk about.

Another nurse was quite blunt with her explanation that the intervention was sometimes not implemented with fidelity to the clinical pathway based on the nurse's clinical judgement of the client's context:

To answer your question 'well, why didn't these get done?' What I think is that once the client says they don't want to talk about IPV, you don't. You skip over the whole thing. You just move into discussing their goals and their strengths and all that. I think that's why it's getting missed.

For many nurses, it was their perception that clients who had disclosed IPV but were in a 'precontemplation' or 'contemplation' stage, were more hesitant to engage with the nurse in completing a risk assessment or any of the 'SASS' intervention activities. One nurse shared:

So many of our clients are in that pre-contemplation to contemplation... They haven't even come to terms with the fact that they are in a dangerous relationship, even if there is physical abuse. They know that part of it is not okay, but they are not ready to see how often it happens. So, they're not ready to go there [to complete a risk assessment] yet.

Women experiencing IPV who were assessed to be in either a 'preparation' or 'action' stage were perceived as being much more receptive to completing a risk assessment and engaging in safety planning and system navigation. As one nurse explained:

I have two clients in 'SASS' right now and they're actually both in an action phase. One of them asked for help to make a police report, so we called together, the police came out. We then scheduled an appointment for a legal advocate and she went to the appointments.

It is important to note that for many clients who disclosed a history of past IPV (last 12 months) that neither nurses nor clients perceived a need to continue to utilize the NFP IPV intervention. In particular, for clients who had 'left' their partner, nurses reported that it was difficult for the client to understand the relevance of conducting a risk assessment

and challenging for nurses to tailor the intervention content for clients no longer in a relationship with the abusive partner. One nurse shared this reflection:

I've had situations where they were in a relationship a year ago and the partner is nowhere close. I just find it difficult still talking about [IPV] when the client doesn't see the relevance of it. They're like, 'I already know what I have to do, I'm never going to put myself in that situation again, so why are we still talking about the subject?' So, I guess for me like is there a different way to *approach* it to make her understand the relevance because for the client they're completely disengaged with the conversation because they're wanting to talk about pregnancy. You know they're about today, not yesterday. They obviously can't see the future so trying to prepare them for something that they can't see right now is kind of hard to do.

Finally, nurses in five of the sites reflected that IPV as a relational construct itself is complex. The clients they worked with were continuously navigating multiple and intersecting personal, social, economic and system-level barriers that keep them entrapped in their relationships with their partner and trying to parent whilst experiencing violence. In working with women living and parenting in these complex situations, nurses discussed that they prioritized being available to actively listen and provide emotional support, being 'ready' when they sensed that a client was ready to discuss their relationships or enhancing safety strategies, and using their skills in motivational interviewing to engage in 'change talk' to support women reflect on what decisions can be made to enhance their safety, and their child's, in the relationship. There was an acknowledgement, that for some clients, perhaps the role of the NFP nurse is to 'plant the seeds' for future change, to support clients to set goals to promote self-efficacy and prepare clients with the knowledge, skills and resources so they can take future actions when the time is right for them. At the conclusion of one focus group, a nurse summarized:

You want to give [the client] everything that we can in that short time frame [of the NFP programme], so that she has the resources that she needs. Then she can be like [in the future], 'I don't remember that nurse's name, but I remember she said I can call this number or I should do this, or I should make sure I'm safe'. We're planting the seeds.

3.3 | Nurse–client relationship

In discussions of their home visiting practice, nurses at all sites spoke of the value and priority placed on establishing, nurturing and maintaining therapeutic relationships with their clients. With the introduction of the NFP IPV clinical pathway, there was consensus that moving the initial relationship assessment from the first visit (the previous NFP programme practice) to the fourth visit (a

change introduced with the IPV intervention) provided nurses with more time to build a foundation of trust with their clients before engaging in any discussions about safety or 'unhealthy' relationships. However, nurses were constantly assessing the quality (including fragility) of the nurse–client relationship, and if they perceived that an assessment of or response to a disclosure of IPV might negatively impact the relationship, potentially increasing the risk for the client to miss visits or leave the programme, they often made the decision to not use the IPV intervention. Yet these nurses discussed the importance of ongoing assessment and 'keeping the door open' to identify future opportunities to assess for or respond to IPV. As a guest in a client's home, one nurse described it as such:

Nurses have to be really careful when raising the issue of IPV. Because if you are pushing a button too hard, you're done. You're not coming back. So, it's a dance. Don't push too hard or they will disengage from us.

When a woman discloses her experiences of abuse in the context of the nurse–client relationship, nurses in three sites also spoke about their responsibility to report children's exposure to IPV to the local child protection agency. They were astutely aware that this legal responsibility to report following a disclosure had the potential to negatively impact the therapeutic relationship and needed to be handled sensitively so that the client would not leave the programme. As nurses gained more experience in implementing the NFP IPV intervention, their ability to introduce flexibility around the timing of the assessment or introducing the 'SASS' interventions increased. So, whilst the clinical pathway provided guidance for when and how often certain activities should be completed, to prioritize and honour the nurse–client relationship, nurses relied on their assessment of the client's needs and readiness to engage to determine more appropriate times to assess or intervene.

3.4 | NFP IPV intervention attributes

Five attributes (Table 4) of the NFP IPV intervention were identified that influenced the ease, or difficulty, nurses experienced in following the IPV clinical pathway with fidelity. However, to increase the 'fit' of the intervention with their home visiting practices, nurses requested increased guidance in 'how' and 'when' to introduce the tailorable components of the intervention to clients in different phases of the programme (e.g. pregnancy, infancy or toddlerhood). There was an overall consensus that the IPV intervention was complex. The difficulty in using it in practice was reflected by the: (1) need for nurses to tailor the intervention to meet each client's different needs, (2) understanding that the clinical pathway had to be followed in a consistent stepwise fashion, (3) number of steps and skills required for both assessment and response, (4) time required to become familiar with a significant number of client-facing activities, (5) the intricacy required to address a sensitive and multifaceted issue like IPV and (6) knowledge of when and how to use a range of client-facing activities from the four 'SASS' domains.

The most common advantage of the IPV pathway discussed by nurses was related to the introduction of the universal assessment of safety. There was an overall consensus that the use of an unstructured approach introduced at or around the fourth visit in pregnancy was preferable to the 'usual' practice of administering a structured relationship assessment at the first visit. The nurses' perceived that this new discursive approach to assessment that explored the client's sense of safety in her relationship, the number and quality of social supports in her life, as well as her understanding of the 'healthy' or 'unhealthy' aspects of her relationship was non-threatening to clients, allowed for a comprehensive dialogue, and, ultimately, resulted in more IPV disclosures. The primary challenge, however, became that these detail-rich discussions were lengthy, lasting often double the time of a regular home visit. Three sites noted that the provision of English-only IPV intervention resources was a specific relative disadvantage that was a significant barrier for bilingual-speaking nurses who typically conducted home visits in Spanish to their Spanish-speaking clients (including those who were able to consent to participate in the study in English).

In the early stages of implementation, nurses described that the IPV clinical pathway as a visual tool provided detailed guidance on when and how often specific intervention elements should be reviewed with clients. Whilst this step-by-step guidance was appreciated when learning the intervention, over time it interfered with nurses' practices of collaborating with clients to determine the focus for a specific home visit. By the end of the study, nurses had a renewed appreciation for the flexibility of the clinical pathway and shared their strategies on how they adapted the assessment and intervention steps to meet clients' needs. A supervisor further confirmed this growth in the nurses' awareness of how to adapt the intervention to meet client needs by stating:

It was very beneficial when nurses used their own clinical judgment... That they don't have to see the client once a week and bring this facilitator every single time. At first, we felt going over IPV facilitators at every visit, you could tell the client was starting to build a wall. Then once we got more feedback, we understood, 'okay, the client is not in a major crisis, I've gone through everything, the risk has been addressed and I handled the immediate needs'. Then later we can tailor [the rest of the intervention] to where the client is at. When that clinical judgment wasn't there, it made it a lot more difficult. But once that became part of our known practice, it made it easier to [use the pathway].

Finally, with respect to design quality and packaging, there was consensus that the IPV clinical pathway became an essential resource to guide their decision-making.

4 | DISCUSSION

This qualitative process evaluation was conducted to identify factors influencing the implementation and uptake of an IPV intervention

in the NFP home visitation programme. This analysis was critical to help explain the low-fidelity implementation (Jack et al., 2019), particularly when NFP nurse home visitors had reported significant improvements in their attitudes and confidence to address IPV in practice (Jack et al., 2021). The NFP IPV intervention is a complex intervention (Craig et al., 2008) with multiple interacting components that required shifts in standard practices and behaviour changes by supervisors, as well as nurses delivering and clients receiving the intervention. Given this, it is not surprising that multiple factors at both programme and nursing practice levels were identified as influencing intervention integration and use.

The lack of national-level programme model structures and learning networks were important contextual factors that impeded the integration of the intervention into NFP sites' workflow. In implementation science frameworks, context (the setting where a proposed change or new intervention is being considered) is a critical construct associated with successful implementation initiatives and attention to structures, processes and practices at micro, meso and macro levels of the system may enable implementation (Damschroder et al., 2009; Harvey & Kitson, 2015). Given the need to introduce the NFP IPV intervention for the purpose of evaluation into a small number of sites as part of a study, it would not have been acceptable to adapt national programme guidelines, data collection and documentation systems to provide nurses with the structures, prompts and reminders that they usually rely on to guide practice.

Across these findings, it became evident that a lack of time amongst nurse home visitors and supervisors hindered implementation. Even though participants at all sites indicated that addressing IPV was an important nursing priority and that this need facilitated their commitment to participating in the IPV education and shifting their visit practices to incorporate the IPV clinical pathway, the intervention was not fully taken up as planned. Multiple local and programme demands on their time and the number of other initiatives being simultaneously rolled out left them overwhelmed by competing expectations, resulting in several sites assigning a low priority to the IPV intervention implementation. These findings confirm that even in circumstances where clinicians articulate a need for practice change, if a site is not ready for implementation, then integration of novel innovations will be given a lower relative priority in contrast to other organizational priorities (Greenhalgh et al., 2004; Helfrich et al., 2007). Given this, it is important that research teams evaluating complex interventions nested in well-established programmes prioritize the conduct of a site readiness assessment during the recruitment period to identify and address implementation barriers. Prior to approving any practice-based research in their programmes, there is a need for NFP to carefully assesses site readiness (Olds et al., 2013). However, the addition of an environmental scan to ensure that *research* projects are coordinated with or do not overlap with national-level programme changes and requirements is also recommended.

Time was also identified as an element necessary for nurses to develop proficiency in using the NFP IPV intervention in practice.

Our findings show that both nurses and supervisors appreciated the complexity of IPV and the process of learning how to support clients who were often dealing with multiple issues, in addition to IPV. Thus, even as seasoned NFP nurses, participants identified themselves as novices with respect to using the IPV intervention in their day-to-day work for up to 2 years. As opportunities to use the intervention in practice increased, their practice shifted from an early focus on *trying* to use the pathway as written, to a more nuanced, flexible, and tailored approach that was grounded in clinical expertise and judgement. This finding reflects a well-established understanding of how clinical competence is developed in nursing as informed by Benner's (1982) Novice to Expert Model with implications for understanding lower than expected fidelity of the intervention in the trial. Given that we evaluated the effectiveness of the NFP IPV intervention as nurses were also developing their expertise, we recommend adopting a run-up period prior to the enrollment of participants, when nurses are provided with time to familiarize themselves with the intervention components and develop facility in its use, prior to initiating the evaluation (Campbell et al., 2000). In the context of IPV, this is particularly essential given the complexity of providing ongoing support to women who are dealing with so many concurrent issues.

Supervisors were identified as being strongly positioned in their role to initiate and manage the implementation process. In the majority of sites, supervisor turnover and workload demands were barriers to consistently leading and managing implementation strategies, thus impairing nurses' capacity to use the intervention. In sites where the presence of an IPV champion was noted, important insights about the central role of supervisors as implementation facilitators emerged. Notably, our findings show the potential for supervisors to actively (1) support the development of nurses' expertise in the intervention, (2) provide instrumental support including creating structures to support implementation, (3) role model and provide guidance on how to tailor the intervention to the care context and (4) debrief through reflective supervision. Opportunities to debrief in reflective supervision might be particularly salient for the one in four nurses who completed the NFP IPV education and who disclosed past personal experiences of IPV. It has been suggested that the successful implementation of interventions into practice relies on the presence of this type of facilitator who is responsible for initiating implementation and supporting those responsible for intervention delivery to tailor it to their care context and to meet the needs of intervention recipients (Harvey & Kitson, 2015). Yet relatively little attention has been given to describing the details of this role in existing IPV interventions. Further, in developing and evaluating complex IPV interventions, it is important for researchers to be mindful of the need to develop support for both the clinicians delivering the intervention and those individuals who facilitate implementation. Failure to provide facilitators with focused and adequate preparation, supports, knowledge and skills to optimize implementation will ultimately compromise the consistent use of an intervention in practice (Harvey & Kitson, 2015). In response to this identified need, in the development of a Canadian NFP curriculum,

increased attention, time and resources have been allocated to the stakeholders that support implementation, through the enrichment and expansion of the IPV education specifically offered to NFP supervisors (Croswell et al., 2020).

Findings from this process evaluation inform our understanding of how the home visiting context influences nurses' decisions to assess for, or respond to, IPV in practice. Consistent with previous research conducted in varied clinical settings (Feder et al., 2006; Heron & Eisma, 2021) the lack of privacy during a home visit was identified as the most common barrier limiting nurses' ability to use any component of the IPV intervention. Findings of this study highlight the particular challenges of limited privacy in the home setting and the context of an ongoing (2+ year) relationship. Similar to previous literature (Bacchus et al., 2016; Beynon et al., 2012; Dyer & Abildso, 2019), nurses in this study experienced clinical challenges in relation to assessing or responding to IPV when their client's partner or family members were in the home; suggesting that more work is needed in how to address and manage this complex home-visitation and safety issue, including qualitative work to document nurses' tacit knowledge of strategies used to safely secure space and time to meet with the client alone.

In comparison to acute health care contexts, long-term home visitation programmes provide a unique practice environment where frequent home visits, over an extended period of time, with a consistent primary nurse facilitate the development of an enduring therapeutic relationship that serves as the vehicle through which care is provided. Our findings highlight that to maintain this relationship and to tailor their care to reflect the priorities of their clients, nurses consistently balanced the intervention requirements to address IPV with an understanding of the complexity of IPV in young women's lives and respect for clients' agency to determine when and how they will respond to the violence in their relationships. The importance of addressing the client's presenting needs often required delaying or not using the IPV clinical pathway during a visit. Attention to the client's agenda (Bacchus et al., 2016) or clarifying the client's needs and goals and then aligning visit expectations with these is a primary strategy employed to retain clients in the NFP programme (Olds et al., 2015). As the NFP IPV intervention was implemented and evaluated in the context of a trial, it was important to reinforce the standardization of the clinical pathway to know what was being evaluated. However, these qualitative findings suggest this rigid intervention structure was, at times, at odds with (1) the complexity of NFP practice; (2) nurses' expertise and clinical judgement and (3) women's experiences of IPV and their priorities. In this sense, low fidelity to the IPV intervention may be a reflection of nurses' growing use of clinical judgement and expertise appropriate to the practice context, a finding that aligns with increased confidence in identifying and addressing IPV over time as reported elsewhere (Webster et al., 2006). That the Universal Assessment of Safety was the most often adopted of all required elements in the IPV pathway (71%) is consistent with this explanation, given that this approach to identification was highly relational, dialogic and flexible, features that 'fit' with the NFP practice approach. Collectively, these findings

reinforce the importance of developing and evaluating more flexible approaches to using the clinical pathway and intervention resources.

Given the implementation challenges experienced by NFP sites, findings from this process evaluation have informed adaptations to all components of the NFP IPV intervention prior to its use in subsequent pilot studies and evaluations in Canada, Northern Ireland, Norway, and the US. The process for adapting the intervention included many elements from the Framework for Reporting Adaptations and Modifications-Expanded (FRAME) (Wiltsey Stirman et al., 2019). In these adaptation initiatives, project teams consisting of local NFP programme leads, nurse supervisors and educators, researchers and the intervention developer were established. Informed by these key findings, combined with information about local practices, modifications were then made to the NFP IPV education content and training activities. Content modifications to the clinical pathway focused on making the practice guidance less structured, allowing nurses more flexibility to use their clinical judgement on when and how to assess for or respond to the violence in their client's lives. In most jurisdictions, in collaboration with the team leads, contextually specific and more-detailed 'site implementation' checklists were developed. No contextual modifications were made to the intervention setting or the personnel to deliver it, however, formatting modifications to some resources were made, including translation of the materials to Spanish in the US.

4.1 | Limitations

There are three important limitations associated with this qualitative process evaluation. First, the research team member responsible for developing the intervention, delivering the IPV education to five of seven NFP sites, and providing clinical consultations also facilitated the 14 nurse focus groups and participated in the analysis of data. The establishment of these relationships between the researcher and the participating sites may have created conditions in the nurse focus groups that may have limited some participants' comfort in discussing implementation barriers. To limit this threat to data credibility, a separate team member, with no pre-existing relationship with participants, conducted the supervisor interviews and the engagement of three analysts participated in the review and interpretation of the data. Second, this was a post hoc analysis of the qualitative dataset conducted to explain the low degree of intervention fidelity measured in the trial. Therefore, concurrent qualitative data collection and analysis did not occur. Thus, as factors influencing implementation were identified in one site, we were unable to explore their presence or absence in subsequent interviews with the other NFP sites. However, a review of the factors identified independently by site and across data collection time points (Tables 3 and 4) reveals a fairly consistent list of variables influencing implementation. Finally, this process evaluation speaks to the implementation of an IPV intervention in NFP, a home visitation programme delivered by nurses to young, first-time mothers, which may limit the transferability of the findings to home visitation programmes delivered by lay or paraprofessional home visitors or tailored to meet the needs of different populations.

5 | CONCLUSION

There is a high prevalence of IPV amongst clients enrolled in the NFP programme. Nurse home visitors in these long-term relationships are well-positioned to support clients to define their goals and address their identified needs. It was challenging however for NFP sites to fully integrate and then use a complex, multi-component, structured IPV intervention in practice. In this analysis, we identified multiple factors that contributed to low implementation fidelity in the context of the RCT to evaluate the effectiveness of the NFP IPV intervention. The identification of supervisors as facilitators of the implementation process was a critical insight, including their potential to support nurses to learn, adapt and use new interventions in their clinical practice. However, in the context of implementation, low fidelity does not necessarily imply a problem with nursing practice. In addition to explaining the observed low fidelity, these findings provided important insights into the challenges of addressing IPV in home visiting practice and the clinical judgements made by nurses to preserve the therapeutic relationship and to ensure that practice aligns with client priorities. Nurses emphasized the importance of clinical reasoning in determining whether it was appropriate to use various components of the clinical pathway. Beyond the context of developing and evaluating IPV interventions, these findings will also be of interest to researchers or administrators implementing new innovations into established programmes.

AUTHOR CONTRIBUTIONS

All authors have agreed on the final version and meet at least one of the following criteria (recommended by the ICMJE [<http://www.icmje.org/recommendations/>]):

1. Substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data.
2. Drafting the article or revising it critically for important intellectual content.

Criteria author initials—SMJ, DD, CS, MK, CM, MFG, HLM: Made substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data. SMJ, DD, CS, MK, CM, MFG, HLM: Involved in drafting the manuscript or revising it critically for important intellectual content. SMJ, DD, CS, MK, CM, MFG, HLM: Given final approval of the version to be published. Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content. SMJ, DD, CS, MK, CM, MFG, HLM: Agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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CONFLICT OF INTEREST

Susan M. Jack reported receiving consultation fees from Invest in Kids (Colorado), Nurse-Family Partnership (NFP) National Service Office (Colorado) and Prevention Research Center (University of Colorado) and the Public Health Agency of Canada (PHAC). No conflicts of interest have been declared by the other author(s).

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Research data are not shared.

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