Feasibility of a reconfigured domestic violence and abuse training and support intervention responding to affected women, men, children and young people through primary care

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Feasibility Report

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ABSTRACT

Background

Identification in UK general practice of women affected by domestic violence and abuse (DVA) is increasing, but men and children/young people (CYP) are rarely identified and referred for specialist support. To address this gap, we collaborated with IRISi (UK social enterprise) to strengthen elements of the IRIS+ intervention which included the identification of men, direct engagement with CYP, and improved guidance on responding to information received from other agencies. IRIS+ was an adaptation of the national IRIS (Identification and Referral to Improve Safety) model prioritising the needs of female victim-survivors of DVA. Without diminishing the focus on women, IRIS+ also responded to the needs of men experiencing or perpetrating DVA, and CYP living with DVA and/or experiencing it in their own relationships. Our study tested the feasibility of the adapted IRIS+ intervention in England and Wales between 2019-21.

Methods

We used mixed method analysis to triangulate data from various sources (pre/post intervention questionnaires with primary care clinicians; data extracted from medical records and DVA agencies; semi-structured interviews with clinicians, service providers and referred adults and children) to assess the feasibility and acceptability of the IRIS+ intervention.

Results

The rate of referral for women doubled (21.6/year/practice) from the rate (9.29/year/practice) in the original IRIS trial. The intervention also enabled identification and direct referral of CYP (15% of total referrals) and men (mostly survivors, 11% of total referrals). Despite an increase in self-reported clinician preparedness to respond to all patient groups, the intervention generated a low number of male perpetrator referrals (2% of all referrals). GPs were the principal patient referrers. Over two-thirds of referred women and CYP and almost half of all referred men were directly supported by the service. Many CYP also received IRIS+ support indirectly, via the referred parents. Men and CYP supported by IRIS+ reported improved physical and mental health, wellbeing, and confidence.

Conclusions

Although the study showed acceptability and feasibility, there remains uncertainty about the effectiveness, cost-effectiveness, and scalability of IRIS+. Building on the success of this feasibility study, the next step should be trialling the effectiveness of IRIS+ implementation to inform service implementation decisions.

KEYWORDS

Domestic violence and abuse; Male and female victims; Male and female perpetrators; Children and young people; Training; Intervention; General Practice; Primary Care; Feasibility study

BACKGROUND

Domestic violence and abuse (DVA) is a public health challenge (1-4) with vast social and economic costs (5, 6). It results in increased use of health and other services by people affected through victimisation and exposure. Primary care is a key location for interventions to prevent DVA and improve health outcomes for adults and children. In addition to providing a safe and confidential place for DVA disclosure, primary care can enable crucial access to specialist advocacy support. This specialist support in the UK largely comes from third sector DVA agencies. They have a crucial role in prevention, early identification, and provision of support.

DVA interventions so far have prioritised women, who are disproportionately affected in prevalence and severity (7, 8). Identifying female survivors in primary care and referring them to specialist support is effective and cost-effective through provision of DVA training linked with local DVA support (9). The leading UK service model is IRIS (Identification & Referral to Improve Safety), a widely commissioned evidence-based training and advocacy support programme addressing the needs of female DVA survivors. IRIS nurtures greater health service engagement with DVA by linking primary care to the third sector response to violence against women, via the DVA agency-employed advocate educator [20]. Success in identifying women through IRIS is growing, but male survivors and children/young people (CYP) who witness/experience DVA are rarely identified in primary care and referred for specialist support. The mental and physical health impact across the lifecourse of CYP (10, 11) and on male survivors (12-15) thus remains neglected in the primary care response to DVA.

To address these gaps, we collaborated with IRISi (UK social enterprise) and other partners in the DVA sector to develop and test the acceptability and feasibility of IRIS+, an adapted and enhanced IRIS programme. In addition to prioritising female survivors, IRIS+ also responds to the needs of men experiencing or perpetrating DVA, and children and young people living with DVA and/or experiencing it in their own relationships.

Our previous study, conducted between 2017-18, showed that the IRIS+ intervention had filled a service gap in responding to the needs of children and men experiencing DVA, had been feasible to deliver and was a valuable resource for primary care clinicians in identifying and referring male survivors and children (16). Our study also revealed that despite increased levels of preparedness reported by clinicians after training in managing the complexity of DVA in their practice, the intervention proved to be insufficient to catalyse identification and specialist referral of men and direct identification and referral (without their non-abusive parents) of CYP. The study highlighted that reports provided to general practice

by other agencies are important sources of information about adult and child patients affected by DVA. However, in the absence of guidance about how to use this information in patient care, there were uncertainties and variation in practice. The study pointed out the specific adaptations required to catalyse larger scale identification and referral of men and direct referral of children (16-18). These included the extension of the professional scope of the IRIS+ training to include key health care professional groups linked with general practice.

This evidence from our previous study informed the re-design of the IRIS+ intervention to support the identification of men, direct engagement with children, and improved guidance on responding to information received from other agencies. In the current study, conducted between 2019-21, we have tested the adapted IRIS+ intervention for feasibility and prospective cost-effectiveness.

The aims of the current study were to (i) test the feasibility of the adapted IRIS+ intervention, consistent with the MRC guidance on evaluation of complex interventions (19, 20), using mixed method evaluation: capturing DVA identification and referral data and an assessment of clinician and patient engagement with and experience of the intervention; and (ii) to evaluate the prospective cost-effectiveness of the IRIS+ programme when compared to the IRIS programme. Here we report key findings of the feasibility study and identify implications for practice and future research. Given the well-established evidence on the feasibility and effectiveness of IRIS to female survivors (9, 21, 22), this paper primarily focuses on the implications of the IRIS+ feasibility findings to men and children. Findings from the cost-effectiveness feasibility work (23), and from a sub-study on IRIS+ patient and healthcare professional perspectives (24) during the COVID-19 pandemic are reported elsewhere.

METHODS

Intervention reconfiguration

The IRIS+ training and support intervention was designed to engage general practices by extending the IRIS model and improving how general practice professionals respond to all patients experiencing or perpetrating DVA. This complex intervention aimed to improve the identification and management of DVA in general practice by (i) consolidating and improving general practice clinicians' knowledge of DVA and its impact on health; (ii) enabling clinicians to identify, respond to and support female and male patients affected by DVA and their children; (iii) enabling clinicians to offer referral for all family members affected by DVA by improving understanding and knowledge of referral routes; (iv) enabling clinicians to safely and accurately record DVA in patients' electronic medical records (EMR); and (v)

enabling clinicians to manage ongoing relationships with affected patients including members of the same family.

The intervention comprised the following components: (i) clinical training to primary care teams about DVA among women, men and CYP; an online resource for clinicians alongside the training; and a medical records prompts system; (ii) direct referral pathway for affected women, men and CYP to a named specialist from a local DVA agency, called an advocate educator (AE); (iii) specialist 1:1 advocacy support by the AE for female and male survivors and for CYP living with DVA and/or experiencing it in their own relationships; (iv) risk assessment and signposting/referral to a local perpetrator group programme for adult male perpetrators (Figure 1). The clinical training was co-delivered by an AE, a social worker specialised in children and DVA, and an IRIS+ clinical lead (practising clinician with an expertise in DVA and based at one of the study areas). Advocacy support for adult patients was provided by the AEs. CYP were supported by the children and young persons' workers (CYPW). The AEs and the CYPWs were based in local voluntary sector DVA agencies (IRIS+ hubs) in the intervention sites. They received referrals from clinicians and provided expert advocacy to referred female and male adults and CYP affected by DVA. The theoretical framework of the intervention was based on educational outreach, adult learning theory, normalisation process theory and peer influence (25-27). It was developed using the MRC framework for complex interventions (19, 20). The clinical training (i), the availability of a direct referral pathway (ii), the specialist advocacy support (iii), and signposting (iv) was built on and expanded the IRIS training and advocacy support programme.

The reconfigured intervention strengthened specific elements of the IRIS+ intervention. These included training and practical guidance on: (i) use of third-party information (information sent into general practice by other agencies about DVA, e.g. police reports) for the identification of patients experiencing/perpetrating DVA; (ii) direct engagement with and support of CYP affected by DVA, including options of advocacy support available for CYP via the IRIS+ pathway and how clinicians can talk to CYP and parents about DVA (delivered by the local CYPW); (iii) enabling engagement with men who are victims and/or perpetrators (particularly identified in reports received from other agencies), with emphasis on the relevance, acceptability and benefits of selectively asking men about DVA. The clinical training interventions were adapted to reflect previous IRIS training (targeted to either IRIS-trained or IRIS-naïve sites) and to be relevant locally. They included discussion of how the experiences of abuse may differ for those from diverse communities, and how experiences of intersectionality may lead to additional barriers to disclosure. Reconfiguration also included the nomination of an IRIS+ lead clinician in each practice, and a wide inclusion of

clinicians affiliated with local primary care teams (i.e. health visitors, substance abuse liaison workers, and other allied health professionals based at the practice), training them together with core primary care teams, and enabling them to make patient/client referrals to IRIS+.

Work also included the adaptation of the IRIS+ online resource. The freely accessible resource for clinicians receiving the IRIS+ training was intended to supplement and consolidate learning by providing easy access to key components of the clinical training intervention and practical information. Patient- and clinician-facing publicity materials and a system of electronic prompts triggered by codes for health conditions associated with DVA have also been updated.

Practice recruitment and intervention delivery

IRIS+ was tested in two urban areas in England and Wales in a mixture of IRIS-trained and non-IRIS trained general practices. Eligible practices were identified using data provided by IRIS clinical leads, local DVA agencies, IRIS AEs and the Clinical Research Network (CRN). Recruitment of practices was informed by practice size, socio-demographics characteristics of the population served, DVA referral activity in the past year (for IRIS-trained practices), and practices' availability for training and their ability to engage with the research study.

Three non-IRIS trained practices that had not previously received IRIS or practice-based DVA interventions and four IRIS-trained practices received the IRIS+ clinical training intervention. Two of the seven recruited practices were a larger cluster of two and three smaller practices in a close geographical location. Non-IRIS practices received two sessions of two-hour face-to-face interactive training intervention and IRIS-trained practices received one two-hour training session. Training sessions were delivered between June 2019-Jan 2020 to whole practice clinical teams. The training intervention included a one-hour information session for reception and administrative staff and an additional brief (up to half an hour) online reminder and question and answer session during a clinical practice meeting during the IRIS+ intervention period.

The IRIS+ intervention was delivered between June 2019 and June 2021. This included a direct patient referral pathway from general practices to the IRIS+ hubs between June 2019 and December 2020. Referred patients received DVA advocacy support from the IRIS+ hubs for up to six months. IRIS+ hub support was closed in June 2021. Following the IRIS+ referral pathway closure, practices which had no previous experience with IRIS participating in the study transitioned to IRIS and were able to continue to refer female survivors to the IRIS programme.

Evaluation of feasibility

We used a range of methods to assess the feasibility of the reconfigured IRIS+ intervention. This included (i) measuring change in clinicians' practice and behaviour through a pre/post questionnaire (PIM+); (ii) DVA identification data extracted pre-and post-intervention from the EMR of the participating practices; (iii) IRIS+ referral and service support contact data extracted from the third sector partner agency; (iv) semi-structured interviews with participating clinicians; (v) semi-structured interviews with professionals delivering the intervention; (vi) semi-structured interviews with referred adults and children. Data collection took place between June 2019 - August 2021, which included a period of disruption caused by the COVID-19 pandemic.

(i) The PIM+ questionnaire was developed from the PIM (PROVIDE Intervention Measure) questionnaire (28) and was adapted to include questions relevant to IRIS+ about clinicians' perceived knowledge and preparedness to perform various key tasks relevant to DVA (ask patient groups about DVA, identify signs and symptoms of abuse, validate disclosures, offer referral, safely record DVA, provide ongoing support). The survey also collected general demographic and workload-related information about the respondents, and information on the number of DVA identifications they made in different patient groups in the previous six months. The questionnaire used in our study was not a fully validated measure, although it had reasonable test-retest reliability. Clinicians undertaking the training were asked to complete the online survey before the training and again after 12 to 16 months.

(ii) Data were extracted from the EMR for a period of 18 months after the delivery of the first IRIS+ intervention to measure clinical DVA identifications during the study period. We searched for specific codes relating to DVA victimisation or perpetration. Identifications were individually checked for DVA relevance and for the action taken by the clinician. We also extracted data on gender, age, children in the household, reason for consultation, and source of DVA identification (consultation and/or third-party report). We also examined EMR for DVA identifications during the pre-pandemic (1st June 2019 to 22nd March 2020) and pandemic periods (23rd March 2020 to 31st December 2020) to determine the impact of the COVID-19 pandemic on DVA identifications. Of the seven GP practices involved in the feasibility study, four practices were able to support the EMR data collection.

(iii) The agencies hosting the IRIS+ service (IRIS+ hubs) collected data on the number of patient referrals from the study practices, as well as client contact over the course of the study. Data on the source of referrals, the number, type and duration of client contacts (adults and children) with the AE and CYPW as well as victim/perpetration

status, and non-identifiable demographic information on age, gender, ethnicity and number of children were collated and passed onto the research team for analysis.

(iv) We conducted semi-structured interviews with primary care clinicians participating in the training intervention between six and twelve months after the IRIS+ training. The interviews focused on clinicians' experiences of the IRIS+ intervention, their views on the service and what enablers and barriers they experienced during implementation.

(v) We conducted semi-structured interviews with key IRIS+ professionals delivering and/or facilitating the delivery of the training and support intervention. Interviews focused on professionals' views on clinician and patient engagement with the training and support intervention and how the IRIS+ intervention had been received and implemented in practice.

(vi) We conducted semi-structured interviews with referred adult patients soon after their referral/first meeting with the IRIS+ AE and upon completion of their support intervention, 3-6 months later. We also conducted semi-structured interviews with CYP receiving direct support, upon support completion. We asked adult interview participants about their experiences of being referred to the IRIS+ hub and their experiences of receiving support. We also asked parents about their children and what impact any direct or indirect support had had upon them. CYP were recruited via their non-abusive parent who, in turn, were introduced to the study by the AE. The CYP's interviews focused on their experiences of receiving support from the CYPW.

All professional and patient interviews were audio-recorded, transcribed verbatim, uploaded to qualitative data analysis software (NVivo v.12) and analysed thematically (29) using a coding frame incorporating concepts that emerged from the data. Data in (ii)-(iv) were analysed descriptively in Stata (v. 16.1/MP). Due to small sample size, the study did not aim to draw inferences from quantitative data.

For the mixed method analysis, we used a convergent design where we first independently analysed data sources and then used triangulation to refine our coding frame and map dimensions of feasibility and acceptability to our data. Cross-mapping analytical frameworks around key themes and connecting qualitative and quantitative methods of data interpretation facilitated the emergence of new insights beyond those identified through separate analysis of various data components (30). We also checked our data against our logic model (Figure 2.) to track intervention flow and determine whether there was evidence that steps in the logic model were being reached in the study. We refer to our logic model's short term and medium- and long-term outcome domains in the 'Discussion' section and

describe how our findings in different outcome domains contribute evidence for or against the feasibility of the intervention.

Two service user expert groups (female survivor, male survivor) have been closely engaged with the researchers from development of the original proposal, through protocol development, writing of participant recruitment materials, development of the intervention, conduct of the study, interpretation and dissemination of findings.

RESULTS

Participants' characteristics

(i) PIM+ questionnaire: 94 (65 female, 29 male) of 170 invited primary care clinicians completed the survey at a minimum of one timepoint, with 31 completing the full survey at both time points. Of these, 17 were general practitioners, including 3 trainees, and 14 were other primary care clinicians based at participating general practices, including practice nurses, nurse practitioners, healthcare assistants, substance abuse liaison workers, urgent care practitioners and health visitors.

(ii) Interviews with primary care clinicians: 16 clinicians (11 female, five male) completed the interview at one timepoint. Of these, eight were general practitioners and eight were other clinicians based at participating general practices. Other primary clinicians included five practice nurses, one substance abuse liaison worker, one urgent care practitioner, one health visitor and one heath care assistant. Eleven clinicians (seven GPs and four other clinicians) completed interviews at two timepoints.

(iii) Interviews with key IRIS+ professionals: Eight IRIS+ professionals (all female) completed at least one interview. These included three AEs, one DVA clinical lead trainer, one social worker trainer, two CYPWs, one IRIS+ support service manager. Two of the eight professionals (two AEs) completed interviews at two timepoints, soon after delivering the clinical training and following the completion of the IRIS+ support intervention delivery.

(iv) Interviews with referred adult patients and CYP: Thirty adults (20 female, ten male) completed at least one interview. Twenty-nine adults (19 female, ten male) completed interviews at baseline, soon after their referral and 14 (eight female, six male) completed interviews upon completion of their support intervention. Twelve adults (six female, six male) completed interviews at two timepoints. Upon support completion, five CYP aged 8-16 (one female, four male) completed semi-structured interviews.

Identifications and referrals

Preparedness to respond to DVA

Clinicians' PIM+ survey responses completed at both time points on perceived preparedness indicated that the IRIS+ training and support intervention had led to improvements in all areas of practice. Participating primary care clinicians' perception of preparedness consistently improved in relation to responding to the needs of all patient groups, including female and male survivors, CYP and their parents. Clinicians felt more prepared to ask questions, identify signs and symptoms of DVA and provide appropriate response to disclosures (Table 1.).

Interviews with clinicians echoed these findings. Those participating in the intervention reported increased knowledge and confidence in asking patients, including men, CYP, and their parents about their experiences as a result of completing the clinical training and working within the IRIS+ referral and support structure. As a lead nurse (PN5) explained:

> *Certainly with the younger girls, it's encouraged me to talk to people about relationships a bit more and what's okay and what isn't okay in relationships. It's opened up that conversation a little bit if anything. […] and to give them options. […] That training does make you much more aware about what's relevant to ask in those situations.*

Although GPs have ample experience discussing sensitive issues with patients, the training gave clinicians confidence to ask them specifically about DVA. A practice nurse found the clinical training helpful in hearing practical examples, from both the trainers and the rest of the clinical team, of what follow-on questions to ask from difficult conversations or disclosures:

> *Things like, "Do you think anyone else doesn't feel safe when you get angry like that?" Just to move that conversation on.* (practice nurse, PN4)

> *I do feel more comfortable about asking people about domestic violence […] it's a bit like asking people about suicide, basically. You have to do it, and you just get in the habit and you find your way of doing it. It's, kind of, similar, you find.* (GP6)

Knowing that there is a way to 'prescribe' help, in the form of specialised DVA support that can be put in place via the IRIS+ referral, enabled clinicians' confidence to ask patients about DVA:

> *It just felt nice that I was able to help these people. Nice to be able to offer them something.* […] *It's a breath of fresh air.* (GP3)

IRIS+ support service professionals who were training clinical teams also observed increased preparedness and self-efficacy among clinicians in their responses to DVA in all patient groups:

> *I think right from the start, the GPs were more confident about asking males this time. […] It's proved by doing that we've had an increase in male referrals. (*IRIS+ support service manager - SM1)

They also noted their clinical teams' eagerness to be more prepared to support patients affected by DVA. A social worker (SW) trainer described that clinical teams were keen to discuss:

> *how to support children who were clearly having a difficult time, but were not ever going to be accepted for referral at children's social care level and, how to introduce the topic of domestic violence and abuse, when you could maybe talk to a child by themselves.* (SW1)

Features of identifications and referrals

Clinicians' readiness to respond translated into DVA referrals. In total 256 adults (227 female and 29 male) and 44 CYP were directly referred from seven general practices to the IRIS+ hubs from the end of June 2019 to the end of December 2020. Although 44 CYP were referred directly to IRIS+, there were an additional 213 CYP identified as potentially being exposed to DVA by being listed on the adults' referral forms. The rate of referral for women in the study period was more than double than that of the original IRIS trial: 21.6 per year per IRIS+ intervention practice compared to 9.29 per year per IRIS intervention practice (9). IRIS+ referrals included mostly female survivors. Eleven percent of all referrals were for men (24 survivors, five perpetrators) and 15 percent of all referrals were for direct referrals for CYP. Of the 300 referred patients in total, 157 women (69% of all referred women),12 men (44% of all referred men), and 30 CYP (68% of all directly referred CYP) were directly supported by the IRIS+ service. Those not supported by IRIS+ either declined the offer to receive support and/or were signposted to other services. In addition, many CYP have also received support indirectly via the referred parents (Table 2).

Most referrals were made either before or after the COVID-19 national lockdown periods (23 March to 23 June 2020). When comparing pre-pandemic (1 June 2019 to 22 March 2020) and pandemic (23 March 2020 to 31 December 2020) time periods of similar time lengths within the IRIS+ intervention, the latter period saw a one third reduction in IRIS+ referrals from study general practice teams, which corresponds to findings from other studies (31). We found no marked change in DVA identifications in the EMR comparing the pre-pandemic

and the pandemic intervention periods in the four GP practices supporting the EMR data collection. In the pre-pandemic period, however, DVA was more frequently identified in a patient consultation than through third party information from reports sent to general practice (107 versus 48). This was reversed in the pandemic period when DVA was identified more via third party documents than through patient consultations (86 versus 70). During the pandemic period there was also a nearly 80% increase in third party DVA identifications within the total number of identifications, such as from the police (53 DVA identifications versus 17), who subsequently notified general practice about DVA (Table 3.).

The reconfigured intervention enabled a more effective response to third-party information for the identification of patients experiencing/perpetrating DVA. One of the clinicians articulated the value of IRIS+ in supporting DVA identification, comparing IRIS+ to usual care:

> *We do get some police notices if there's a public protection order, or the police want to share information with us. That then gets sent onto our system and sent to the doctors who can then act on it […] having the reminder that the service is there and that we should be using it, and if certain stuff comes through to us and the information from other parties comes through to us that actually allows, than just kind of clicking and saying, "Yes, that's fine," it would be a bit more sort of, "Okay, what can we do about this?" Yes, it's the difference to this one, yes.* (GP4)

Whole team approach to identification and referral

General practitioners were the principal referrers of patients across all patient age groups and genders. Despite increased self-reported readiness to identify and refer adults and children among all primary health care clinicians, there was a discrepancy between the number of referrals being made by GPs compared to other clinicians: of the 300 referrals, 269 came from GPs, 14 from other clinicians, and 17 from self-referrals, following a GP visit.

Comparing levels of self-reported preparedness in different professional groups, we found that pre-training, GPs had better preparedness than other clinicians across the range of DVA response behaviours, and particularly regarding female survivors and information recording. Increase in knowledge and confidence to respond to DVA among other clinicians improved markedly after training, but did not translate into making DVA referrals by other clinicians.

Continuity of care was seen by clinicians as an important prerequisite for effective DVA response in general. GPs felt that because of their familiarity with a list of families, they are well placed to make DVA referrals:

> *It makes sense [GPs referring], because we work on a list. You have your list of patients who are under you generally, so it makes sense in terms of joining things up [for nurses] to go to the GP who might know that patient the best.* (GP6)

> *We don't have that continuity of care with patients. So we might see a patient once and then never again. I guess these things might be a bit more difficult to pick up on a quick popping-in to have their chest listened to or whatever it might be.* (Urgent care practitioner - UCP1)

Despite GPs being the primary referrers, clinicians emphasized that effective responses to DVA, including patient referrals, were enabled by a collaborative approach involving the primary care team as a whole. A substance abuse liaison worker (SALW) said that being able to *'spread the weight'* was one of the most helpful aspects of the intervention:

> *I know that I can go to my GP and have that conversation. […] So, there is a process, so, you know, with this sort of stuff, sometimes it feels really heavy […] and knowing that I can refer to IRIS+ is always great to know.* (SALW1)

Interview participants acknowledged the value of training primary care teams together and the importance of a supportive team environment enabling information exchange and peer-support:

> *The fact that the whole team were pulled together. That's quite a rare event for us, actually, to achieve that... I'll hear what others have to say and how others are comfortable to frame these questions and what seems to work well. […] That will then be more likely to come forward into my mind when I'm sat facing somebody who says something that might not be typical for my usual review about their diabetes condition as such.* (PN4)

The collective team approach supporting effective primary care pathways to IRIS+ support also involved non-clinical administrative support staff in the process of DVA identification and care. An IRIS+ AE described that, following training, the administrative team were:

> *really empowered that they can have a role […] I was saying to them, "You're the ears and you're the eyes of the surgery. You're seeing them [patients] for a longer period of time in the waiting room. " […] When I left, they were all like, "We're going to go out today and we're going to be the ears of the surgery."* (AE1)

Although all clinician groups felt enabled to and responsible for identifying patients affected by DVA, many non-GP clinicians regarded referral-making as being outside of their role boundaries. As an AE (AE2) noted, *'they [GPs and practice nurses] have that conversation,*

but the referrals themselves do tend to come from GPs'. '*Traditionally, referrals to all other sources would come from the GP',* described a GP *(*GP7). Other clinicians also acknowledged that although they see DVA care as within their competence, they would typically take their concerns about patients affected by DVA to a general practitioner and defer the actual act of referral to them:

> *I had a patient, an alcohol patient, who came to see me. […] She kind of opened up to me, not the doctor, and I discussed it with the doctor and, with an agreement, she went back to her doctor […] I thought coming from a GP [DVA referral] would probably hold more weight. (*SALW1)

> *I am very aware of what I need to do if I do feel someone is in trouble, to actually go and report it, talk to the doctors and see if they've already have thought about that with that patient before. (*health care assistant - HCA1)

Professionals both delivering and receiving the IRIS+ intervention recognised that '*nurses are not as used to making referrals'* (clinical lead, CL1). Differences in the nature of the GP and non-GP clinical encounters with patients were used to explain differences in referral-making.

> *They [nurses] are seeing them [patients] for an intervention usually rather than us seeing them for a problem. I could see how GPs may refer more because we have a slightly different consultation kind of objective, so you pick up different things.* (GP4)

> *When you're going in to see a nurse, you're going in because you're having a blood test, you're having a smear test or you're having something very specific done. Whereas with GPs, there's that element more of having the chat, even though it's a very brief one. "How are things?" I wonder if that's got something to do with it. (*IRIS+ AE - AE2)

The wide inclusion of clinicians affiliated with local primary care teams enabled the identification and referral of female, male and child patients using a collaborative whole team approach. Although the reconfigured IRIS+ intervention generated a high number of referrals across all patient groups, most referrals came from GPs.

Reaching men

Impact of IRIS+ on clinical responses to men

Primary care clinicians' increased awareness of DVA affecting men and their confidence to use the direct DVA referral pathway to the IRIS+ service led to the identification and referral

of male patients affected by DVA. Most referrals (23) were made for male survivors and a small number (6) were made for perpetrators. All of the 28 men referred to IRIS+ by a clinician were referred by their GPs. Only one man (survivor) self-referred, indicating the effectiveness of active referral compared to signposting. Referrals for men were made in both previously IRIS-trained and non-IRIS-trained general practices, but most referrals (19) came from IRIS-trained practices.

Clinicians explained that the availability of a quick direct referral pathway for both male survivors and perpetrators and the responsiveness of the IRIS+ service simplified the referral process:

> *Being able to refer men was helpful. […] There are men who are affected and I have seen, you know, as I say, I had a patient who was really looking for some help previously. And that was a, sort of, female violence towards him, the male partner.* (GP3)

Another GP explained that knowing that there was a service that would support *people that she was 'worried about, or they were worried about their own actions, was a really good thing'.* Expanding on her experience of referring, she said:

> *I did make a referral for somebody, a gentleman, who was worried about the way that he was treating his family and the way that they were scared of him. I was able to actually implement what I learned which was really nice.* (GP4)

Not having to label survivors or perpetrators on the referral form and the availability of ongoing support for clinicians from the AEs facilitated the process. It also enhanced clinicians' confidence to talk to men about their experiences of abuse:

> *There are just so many different referral systems, and so many different ways to do things, because I was like, "Okay, cool, that's really easy. I can put that in my phone or in my notes, and then if I've got any worries, I can just talk to [AE]," so that's really good.* (GP2)

Clinicians agreed that it takes time to embed learning about DVA in practice, and the development of skills to routinely ask difficult questions and refer patients requires repeated efforts and practice. The lack of 'practice' and ease asking men about their potentially abusive behaviour was reflected in the small number of referrals for perpetrators.

> *With the perpetrators you just don't come across them as often. So, you're not really getting the practice of learning how to broach the topic, and it's such a sensitive topic as well.* (GP6)

Another GP described different challenges of asking men about their behaviour compared to asking survivors:

> *It [training] has reminded me that men can be victims too. But the times I've had… I find it very difficult to ask the perpetrators. The gentleman that I did refer, he kind of came to me saying he was worried about his behaviour, rather than me starting that conversation. That's still something that I think I struggle a little bit with, but certainly asking victims and asking them in the right way, I feel much more confident about*. (GP4)

Male survivors' experiences of identification and referral

Male survivors supported by the IRIS+ service and participating in the interview study were all referred to IRIS+ during or following a face-to-face GP visit. They spoke positively about their experiences of disclosure and referral to IRIS+:

> *She [GP] was great. I sort of just went through a few things with her and then said how I feel, what's been going on. […] And she referred me to IRIS+ and said, "I feel that you have got the right credentials, for what's been going on." Because, again, it's not something that's ever really crossed my mind.* (male adult patient 2)

> *I've been feeling down the last couple of years really. And that's what took me to the doctor's. I've had some dark thoughts. I have thought about ending my life. Yes, so the doctor's been quite good. […] She said, "I can see you're down; I can see you're low." She put me in contact with [AE].* (male adult patient 3)

As one of the AEs supporting male survivors recounted:

> *He [male client] was so appreciative of the GP, he was like, "That GP just knew, and they asked that question. As soon as that GP asked that question, I was then able to say what happened. But if it wasn't for that GP asking that direct question, I would probably still be stuck now."* (AE1)

Similarly, another participant recalled the 'turning point' when he had decided to seek help from general practice in relation to chronic mental health difficulties which, in turn, led to DVA identification and IRIS+ referral:

Because I speak out and that's what saved me today, because if I keep it inside me, I would be a dead person. (male adult patient 4)

Overcoming barriers to male DVA identification and referral

The interviews with patients and clinicians also shed light on specific barriers to identifying and referring men to the IRIS+ hub. The two most frequently discussed barriers to overcome during the process of disclosure included the erosion of continuity of care and the strong societal perceptions about masculinity. Although they influenced patient engagement in different ways, they were both weakening or undermining opportunities for disclosure and identification for men in the primary health care setting.

Continuity of care for male survivors participating in the study was typified by an ongoing trusting doctor-patient relationship with the same general practitioner. It meant the time needed to develop rapport with a clinician and build trust and courage to disclose:

Dr [GP name] has helped me with this [anxiety and depression] previously before, a few years back. […] I finally picked up the courage to say, "Look, I'm not sleeping very well. I think things are starting to go downhill. This is why." Because it's hard to tell people. (male adult patient 6)

I'd always arrange with my GP to have the last appointment of the day and he'd stay half an hour, forty minutes longer. You know, after obviously the patients have finished, I'd always be the last one because he knew that I needed to talk. So, thirty minutes, forty minutes in his own time just to talk and chat about these things, which was good. It helped me a lot because I felt quite low. (male adult patient 7)

Whenever I make an appointment, I'd get an appointment with him […] It's definitely a big help to see the same doctor. (male adult patient 8)

Male adult patient 7 also explained how he insisted on not wanting to change general practice despite the surgery being at a major distance from his new, safe address that he had been offered through support from IRIS+:

I'm not within their area, but they've kept me on their book, so I can still use the same doctor […] otherwise, it means changing my doctor to where I am at the moment, and I don't think I could have dealt with another person with the trust.

For clinicians, the increasing lack of continuity of care meant the difficulty of building a cumulative picture of concern, in terms of both the relational and the informational components of care. According to a practice nurse *(*PN4), '*That close relationship of knowing your regular patients is quite threatened by the whole push towards larger and larger*

practices'. Clinicians felt that the inability to establish an ongoing patient-clinician relationship may largely contribute to possible under-detection.

A GP working in a GP cluster described the difficulty of fragmented care in terms of DVA detection in a multi-site setting:

> *We're not exclusively based in one [site] all the time, so sometimes you'll go a long time between seeing people. I must admit, probably previously, I hadn't necessarily been aware of what was going on […] it kind of happened, those lightbulb moments, in regards to that explains some of it, you know, chronic health seeking behaviours.* (GP7)

A shift to remote consulting and triage, which has remained part of primary care since the pandemic, further challenged continuity of care, patient access and opportunities of detection according to both clinicians and male patients:

> *I do worry that things aren't being picked up […] when we have to do so much virtually.* (GP4)

In relation to receiving support from his GP during the pandemic, a male survivor noted that he was '*not really keen on phones*'.

> *I prefer face to face because I like to tell from their [GP's] facial expressions how things are going.* (male adult patient 6)

Men's fear of disclosure was closely associated with external and internal pressures dictated by stereotypes and expectations related to masculinity. '*Things like this, men don't talk about'*, said one of the male participants (male adult patient 4). *'Because you're a man, you're supposed to be strong*', noted another, adding: '*Physically, I'm strong…'* (male adult patient 7). Challenges to masculinity diminished men's confidence to acknowledge and express their feelings about their experiences of abuse. The stigma of being a male victim of DVA, the fear of not being believed, and being falsely accused of perpetration of DVA made them reluctant to seek support:

> *Because you're a man, you don't realise you're being abused. So, yes, it's quite hard. Because you are a man, you don't want to be…I suppose you don't want to be less of a person.* (male adult patient 2)

Masculine identity as a barrier to acknowledging abuse or a victim status both in terms of male participants' personal sense of and their societal interpretations of masculinity was highlighted by IRIS+ professionals supporting male survivors. *'It often takes a lot for a man*

to go to a GP or to seek medical help', mentioned a social worker IRIS+ trainer (SW1). An IRIS+ support service manager overseeing service implementation noticed that:

> *For the males they just took that little bit longer before they opened up. I think that's probably going back, especially the male victims who are slightly older, that men shouldn't show their emotions. Certainly, when they got to know and trust her [AE], then they were happy to open up and have that emotional support as well.* (SM1)

This was echoed by one of the AEs supporting men who said:

> *Giving them that encouragement and that empowerment, that they've actually come forward to do this'.* She recalled: *'A lot of them felt embarrassed maybe, or not masculine, because it was happening to them. And for some, it was the first time they'd ever spoken about it to anybody. […] It takes a lot of courage and a lot of guts to open up and actually ask for help.* (AE1)

IRIS+ support offered for male survivors and perpetrators

Male survivors were supported by the IRIS+ intervention for an average of 14 weeks, similar to the average time of support provided for women, although some men were supported by IRIS+ for up to six months. Following an initial meeting and risk assessment with the AE, male perpetrators were offered onward referral to a local male perpetrator programme. Male survivors were offered trauma-informed, needs-led emotional and practical one-to-one support on a regular (usually weekly) basis. Pre-pandemic support was predominantly face-to-face, which shifted to a combination of face-to-face, telephone and online meetings during the pandemic period depending on the nature of COVID-19 related restrictions and support needs.

Support included risk assessment, safety planning, emotional support, housing support, legal advice, financial advice, child contact advice, benefits advice, mental health support, and immigration support.

> *I try to move on from the past and [AE] has given me a lot of support that way, with the housing side of things.* (male adult patient 3)

Eight of the 29 men (including six survivors and two perpetrators) received parenting and/or child contact related, and/or dedicated support for their children. According to one of the CYPWs:

> *We do get children referred to us whose main carer is their dad, and their dad is the victim. […] There are those men that are affected by it and they do have children and*

they do have families. So, for them to access the right support, I think, is really useful for them, in the same way, as it's quite possible for mothers. (CYPW1)

A small number of referrals were made for couples post-separation or still living in a relationship. The IRIS+ hubs had systems in place to safely and effectively support these individuals. As one of the IRIS+ support service managers explains:

We had the one case where we'd had both partners referred in and were accusing each other. Obviously, we dealt with that by giving them completely separate workers and locking the case down so each other [the two AEs] couldn't read their case notes. (SM1)

The whole team approach to delivering care for men experiencing DVA extended to close collaboration between the primary care team and the IRIS+ service support team. Ongoing communication between the clinicians supporting affected patients and the AE enabled effective DVA care:

My GP was very supportive. He and [AE] had a couple of meetings together as well, so with the support of both of them, the medical side and the counselling side, together they were both very supportive for me, so that's played a big part in getting me a bit more confident to do what I needed to do to get here, you know? (male adult patient 7)

Impact of IRIS+ support on male survivors

Men participating in the study described how the lack of provisions for male survivors in general was a major barrier in the process of help-seeking. The unavailability of formal support pre-IRIS+ diminished their confidence and contributed to their persistent despondency. For all interviewed men, IRIS+ was the first service that they were able to access for DVA support:

You're a bloke, you're cast aside. And it's almost like, everyone says, "It's alright for me to talk, you need to talk about it, about abuse and things like that," but who can you turn to, who will believe you? […] If it wasn't for IRIS+, what is there? – asked a male survivor. (male adult patient 2)

Another man described a long ordeal he had gone through before being referred to IRIS+:

> *I tried several agencies […] they really couldn't give me any support. Either I was out of area or they hadn't had the funding or they just dealt with women. […] They'd say, "We've only got support for women. We don't know how to deal with men." And I'm thinking, "Well, it's the same difference." […] I was getting panic attacks and I was feeling lonely and just nowhere to turn. You know, just a dark hole. There was no-one I could speak to apart from the GP, but he can only do so much. […] If it wasn't for my GP I don't know where I'd be now.* (male adult patient 7)

Professionals delivering the intervention felt that they had '*achieved some really good outcomes for those males*' for example, *'get [them] rehoused and into counselling'* (SM1). According to one of the AEs, IRIS+ was

> *Very beneficial for men as well. People have left partners, people have been rehoused, there have been legal things put in place. People have gone on to do counselling and built on their self-esteem*. (AE1)

Men supported by IRIS+ spoke about the positive impact of support. Men participating in the study reported improved feelings of safety, and a reduction in abusive behaviours experienced. They also reported improved physical and mental health, wellbeing and confidence. They felt that the emotional and practical support received from the AE had made them feel more confident, more assertive and less alone:

> *[AE] was fantastic, to be honest, she'll talk you through how I'm feeling and why I'm feeling that way. […] And I think [AE] helped me understand the situation really, and understand the system*. (male adult patient 2)

> *She [AE] gave me confidence, and now I am better and I go back to work as well a little bit. A little relaxed. And I sleep as well now a little bit better than before. Not a little bit – much better.* (male adult patient 9)

Reaching children and young people

Impact of IRIS+ on clinical responses to CYP

Of the 44 CYP referred directly to IRIS+, there were 26 referrals made by general practitioners and four were made by other clinicians, including health visitors. There were also 14 self-referrals for either young people wishing to engage with the service or self-referrals made together with (or following) the self-referral of parent survivor. Additionally, there were a large number (213) of CYP listed on the adults' referral forms as potentially exposed to parental DVA, many of whom have received IRIS+ support indirectly via the referred parents. All general practices referred CYP.

The questionnaire with clinicians indicated that the IRIS+ training had led to significant improvements in skills, confidence and knowledge in identifying asking, responding, referring, recording and supporting CYP and their parents affected by DVA. Clinicians' preparedness improved in all domains of DVA care for CYP. These included increased awareness about how DVA may impact on CYP's health and confidence to ask about DVA (Table 1.).

> *It just really makes you completely aware to watch for little signs and symptoms, especially with people coming in with children, whether the children are a little bit vulnerable and needy. It just makes you look at people in a different light, I think, really* (HCA1)

Clinicians understood that, with IRIS+ service in place, they could now convert their improved skills and self-efficacy to recognise that CYP might benefit from the service. As one GP explained:

> *I felt that we were quite privileged as a practice to have the IRIS+, because it just sounded like a really good service. NHS services are so stretched generally, it's really nice to actually have a good service […] for children who are affected by domestic violence, so if you recognise that a child might be, then there was someone who I can ring. Or perhaps not even ring, just do a referral for, and that they would be seen quickly. […] My role is just to maybe recognise that someone might need that service. I found that helpful.* (GP6)

Filling a service gap for CYP

Clinicians and service providers thought that IRIS+ had filled a service gap. They believed that it was a particularly valuable resource in identifying CYP who fell below child protection service referral thresholds. Participants thought that it usefully enabled different types of referrals for CYP, including referral with parents, with other family members, or in their own right:

> *There is very little support for children who have been living with parents when there's been domestic abuse. […] I think for them to have their own worker, someone they can do some work with. They know it's safe for them to talk to that worker. I think it's really beneficial for the children.* (SM1)

Children are now recognised as victims of domestic abuse for the first time through the Domestic Abuse Act (32). The increased recognition of harm strengthens the case for prevention and effective interventions to support CYP affected by DVA directly or indirectly

(33). Current service provisions are, however, according to one of the interview participants working directly with children, '*just focusing on the mum*':

> *Children are now recognised as survivors in their own right […] but they don't have any funding in their own right. So they're just an add-on.* (CYPW2)

Given the pressures services for CYP are under, resulting in high referral thresholds and long waiting lists, clinicians valued the availability of a low threshold direct referral pathway to the IRIS+ service, enabling early intervention for affected CYP:

> *I'm really glad to have IRIS+ training […] so if we can pick up the domestic violence earlier and provide support earlier.* (GP4)

These thoughts were echoed by an IRIS+ support service manager (SM1) who noted that, '*we do need to do the work with the children now, not later on in life*.'

Professionals delivering the IRIS+ support for CYP felt that the single referral entry for all family members affected by DVA opened opportunities of support for CYP that otherwise would have been missed:

> *Just having that, kind of, one point of entry, I guess, into the IRIS+ service, rather than having multiple ways of referring, I think that's worked really well. […] GP was able to offer a service [to CYP], I think that's really helpful because I think sometimes, particularly around mental health or emotional difficulties, it can sometimes feel like there isn't anywhere to go with it.* (CYPW1)

Reflecting on his experience of being referred to IRIS+ by his GP, a young person who sought help for anger issues (resulting from exposure to historic family violence) spoke about the general unavailability of support for young people who have relationship difficulties.

> *You've got that gap between 16 to 18 where nobody can really help you out with relationships or with your feelings'* – he explained. *'The doctor that I saw, he was new and he said there's hardly anything he can do because I'm neither an adult or a child. So, there's really not that much help that he can do for me, but he'll try and look for someone to help me with my anger and he found [name of IRIS+ hub], and I've been doing it ever since. (*CYP4, male, 16)

Overcoming barriers to identifying CYP in their own right

Professionals working with CYP recognised that, although many children received IRIS+ support in their own right around DVA, entrenched barriers to identifying CYP via primary

care were difficult to overcome. This resulted in missed opportunities for supporting more CYP directly. As a social worker IRIS+ trainer explained:

> *I think there are real fears of mothers, particularly, about being referred to professional services and that'll act as a huge barrier, an understandable barrier, to bring in social services.* (SW1)

According to clinicians and IRIS+ support workers, fear of professional intervention is common among mothers seeking help for their children through primary care. Many might be concerned that an intervention around DVA for them or for their children might result in their children being removed from their care. A CYPW addressed these fears early on in the support process to reassure parents:

> *We're not a statutory organisation. So we're not raising those anxieties and fears for them. […] If we were social services, for example, then I think it might raise their anxiety a little bit in thinking that they're not doing something right. I think usually because we're a charity and we're domestic abuse services and, you know, we kind of explain all of that when I phone and I think they're usually willing to engage.* (CYPW2)

Another frequently discussed barrier to overcome during the process of direct DVA referral for CYP included the limited opportunities for detection in the primary health care setting, including *'having that conversation with mum and kid together, and also the time factor'* – said one of the IRIS+ AEs (AE2). Another professional delivering work for CYP pointed out that, *'children aren't necessarily going to a doctor with the things that would maybe signpost to domestic abuse.'* She explained that due to time pressures, the *'priority is getting that person [adult] the right help for their specific needs, and not necessarily thinking about everybody else within that family, unless there's, like, a safeguarding issue.'* (CYPW1)

Identification of CYP affected by DVA was more common in face-to-face appointments built on pre-existing relationships with families. Although clinicians effectively used information received from third parties about CYP DVA exposure, they were concerned about the invisibility of CYP affected by DVA in remote consultations*. 'We're not seeing children, we're not seeing whether they're scruffy, unkempt, bruised'* - explained a GP, who felt that remote consultations compromised clinicians' ability to recognise DVA in families:

> *All the cues that you would have got before, you're not getting. It's reliant on us remembering which of our patients had some issues, and we often have things like confidential data that flashes up, or a vulnerable child and family or something like that that makes me think, "Oh, I've got to be really a bit more aware," but because*

> *you're so busy and you're so…It's a different way of practising now, you're not using your eyes. If it's new stuff, then, it's only if patients are going to present something, isn't it?* (GP8)

'*You just can't build that same therapeutic relationship with somebody over the phone'*, expressed a health visitor (HV1). An urgent care practitioner (UCP1) noted that in face-to-face consultations, they *could 'say to mum, "could you step out for a minute?", and I will just have a chat with the child'.* Remote consultations reduced opportunities to speak to children alone. *'Lots of children tend to not want to speak over the telephone anyway and I end up speaking with their parents'*, she explained.

Impact of IRIS+ support on CYP

Support received by CYP included regular (usually weekly) one-to-one support sessions offering emotional and practical support. It might have also included onward referral to specialist support including mental health support, play therapy, or group programme on healthy relationships. Parents, predominantly women, in addition to a range of specialised, trauma-informed needs-led one-to-one and practical support, also accessed emotional support and advice around parenting and childcare, referral to parent/child activity sessions or parenting courses, legal advice around child contact and resident arrangements, and support with access to safe accommodation.

> *The input she [mother] got from IRIS+ was really good and quite comprehensive, because some of the children were also offered support and stuff which wasn't what I had necessarily been expecting. […] I must admit, I was impressed with the level of input that was offered to this lady and her family.* (GP7)

A young person described the activities as 'fun', and recalled how during a session with the CYPW, they: *'did a piece of work that singles out what's my triggers for these situations'.* He added that, *'every time we do work, we have a joke and a laugh, and our other work, we have a lot of fun. So, it's quite nice.'* (CYP4, male 16)

According to a CYPW, CYP who have received direct support '*seem more assertive, they seem more confident, […] they appear to be calmer, more in control of themselves.*' In addition, parents supported by IRIS+ *'have really felt that they've learnt a lot from the support. They noticed things like the communication between them and their child, but also recognising improvement in their child as well'* (CYPW1). Reflecting on the interruptions to service delivery caused by the pandemic, an IRIS+ support service manager (SM1) noted that although they have *'achieved some good outcomes for the children'*, children *'would have maybe benefited from more face-to-face support in that ideal world.'*

In line with our previously reported findings on the benefits of IRIS+ support on CYP (17), the direct and indirect support improved family relationships and led to improved mental health, wellbeing and confidence for CYP. *'It makes me calmer. It makes me feel like I can just talk to her [CYPW] about anything, really* […] *She's helped a lot with it'*, said a boy who received dedicated one-to-one support for six months (CYP3, male 12). Another child noted that following the sessions with the CYPW, he becomes *'a little bit less annoying'* for his brothers. (CYP2, male, 11).

CYP voiced their appreciation for the support they had been given. As one young person summed up his experience with the intervention:

> *I'm a lot happier now. I'm coping. Even my family said that the work I'm doing is really, really helping me. […] I used to have, like, a really heavy load on myself. […] I've now begun coming out of my bedroom and started talking to my mum more, and started to leave the house more now, and starting to make friends again. Yes, so it's been a pretty good thing.* (CYP4, male 16)

DISCUSSION

Summary: Identifications and referrals

We tested the acceptability and feasibility of IRIS+, an adapted multi-sectoral IRIS programme. The IRIS+ intervention tested in this study was based on evidence from our previous study (16) which has informed the reconfiguration of the intervention to better respond to the diverse needs of adult (female and male) and child patients living with DVA and/or experiencing it first-hand.

We found that the intervention led to improvements in all related areas of clinical practice. Completion of clinical training and working within the IRIS+ referral and support structure improved clinicians' self-reported preparedness to respond to the needs of all patient groups, including female and male survivors, perpetrators, CYP and their parents. Consistent with previously reported findings (16, 17), the IRIS+ training and support programme was highly valued by clinicians, service provider professionals and patients participating in the study. The popularity of the intervention translated to good clinician and patient engagement with IRIS+ and to high rates of referrals for all patient groups, including men (mostly survivors) and CYP. The identification of patients through external (third party) reports about DVA incidents facilitated the referral work, particularly through the pandemic period, which saw a one third reduction in all IRIS+ referrals.

During intervention development, a potential unintended consequence considered was that engagement with men and CYP in IRIS+ could lead to a reduction in referrals of women DVA survivors. However, conversely, the added intervention components on men and CYP increased the referral rate for women. This might have been due to clinicians' heightened awareness for DVA as result of training and a generally lowered threshold for identifying and responding to women. Comparing referral numbers in IRIS+ to the original IRIS Programme, while IRIS+ also received referrals for men (11% of all referrals) and direct referrals for CYP (15% of all referrals), the referral rate for women was more than double than that of the original IRIS trial (9). In addition to direct CYP referrals, there were a very large number of CYP identified and referred together with their parents due to potential DVA exposure. Over two-thirds of referred women and CYP and almost half of all referred men (all survivors) were directly supported by the IRIS+ service. The small number of male perpetrators (2% of all referrals) were offered referral to perpetrator group programmes. Many CYP also received IRIS+ support indirectly, via the referred parents.

Comparison with existing literature

A pre-existing relationship between the clinician and the patient, and the face-to-face consultation were seen by both patients and clinicians as key enablers of DVA disclosure. Our study extends previous findings about continuity of care as a key component of effective DVA management and support in primary care (34, 35).

The study also widens our current understanding about the value and dynamics of collaboration within the primary care team in the context of DVA care (36-38). The wide inclusion of clinicians affiliated with local primary care teams enabled the identification and referral of female, male and child patients using a collaborative whole team approach. This extended to collaboration between the primary care team and the IRIS+ service support team. Ongoing communication between clinicians supporting affected patients and the link with named AEs contributed to safe DVA care. Effective whole team working, as found by Dixon et al (38), and the proactive use of external DVA information helped to mitigate reduced opportunities for disclosure of DVA caused by the erosion of continuity of care and the shift to remote care. Although primary care teams, by training together and sharing information, generated a high number of referrals, most referrals still came from GPs.

Male survivors supported by IRIS+ spoke positively about their experiences of disclosure and referral. Consistent with previous research about both the initial and longer-term benefits of the IRIS style referral in relation to women (21), men participating in the study also reported positive impact of support, including improved physical and mental health, wellbeing and confidence.

Our interviews with clinicians and male survivors contribute to our understanding of common barriers which are difficult to overcome during the process of DVA disclosure. The most frequently discussed barriers that reduced opportunities for disclosure and identification for men in our study included the weakening of continuity of care and strong societal perceptions about masculinity. Our study confirms previously identified barriers to men seeking help (39) and to clinicians providing support for men affected by DVA (16, 28, 40). Structural barriers to male DVA disclosure and uncertainty about how to phrase questions to men about potential abusive behaviour during consultations (despite clinicians' increased self-reported preparedness to respond to this patient group) were reflected in the small number of referrals for male perpetrators.

Clinicians and service providers thought that IRIS+ had filled a service gap and was a particularly valuable resource in identifying CYP who fell below child protection service referral thresholds. In line with previous evidence (17, 41), CYP valued having their experiences validated and being listened to in the context of a trusting relationship with professionals. CYP receiving IRIS+ support from the CYPW reported improved mental health outcomes and improved confidence. Clinicians were concerned about the invisibility of CYP affected by DVA in remote consultations. Structural barriers to direct identification of CYP via primary care were difficult to overcome, particularly in the pandemic period. This resulted in missed opportunities for supporting more CYP directly during the study period.

Strengths and limitations

A key strength of our study is the multi-agency and multi-professional collaborative approach taken during the intervention reconfiguration, delivery, and feasibility work. Another strength relates to the active involvement of two service user expert groups with lived experience of DVA. Throughout the study they have provided valuable insights into the perspectives and experiences of survivors. The study also benefited from including a variety of participant perspectives, including those of primary care clinicians in diverse roles, as well as the perspectives of diverse groups of patients, including the voices of CYP.

We explored aspects of feasibility throughout the whole care journey from seeking help through primary care to receiving specialist DVA support. The combination and comparison of quantitative and qualitative data to explore dimensions of feasibility and acceptability helped to strengthen the interpretation of findings (42).

As the study was testing the feasibility and acceptability of the intervention, it included only a small number of general practices. We tried to ensure the diversity of study practices in terms of size, location, and population, as well as the diversity of research participants.

Another limitation is potential participation bias: the views of clinicians and patients participating in the study might reflect the perspectives of those individuals who may have had specific interests or expertise in DVA care or may have been more favourably disposed to the intervention. Moreover, the lack of male perpetrator participants limited the interpretation of findings. Although the study articulated some of the barriers that might prevent survivors of DVA and other family members disclosing DVA in general practice, the study did not explore why some people experiencing or perpetrating DVA do not seek or accept professional support. Further research is required to explore the perspectives of unidentified and/or unsupported primary care patients affected by DVA.

The study started before the emergence of the COVID-19 and covered a period of disruption caused by the pandemic. The pandemic led to important changes in working practices within primary care and changes to patient access. Data collection took place in a period of unprecedented pressures on primary care and extreme uncertainty for patients affected by DVA. Adaptations to data collection focus and methods were required, and lower follow-up response rates among both clinicians and patients were inevitable.

Implications for feasibility

The IRIS+ training and support intervention was acceptable to clinicians, service providers and patients, and was feasible to implement in English and Welsh urban areas in both IRIS-trained and non-IRIS trained general practices. The study also highlights the feasibility of research engagement with and data collection from general practice, DVA agencies and a vulnerable patient population of female and male survivors and CYP within the IRIS+ intervention setting.

The study shows that the intervention extended the healthcare response beyond female survivors of DVA to the identification and referral of men and the *direct* identification and referral of CYP. Confirming the steps of change outlined in our logic model (Figure 2.), our findings indicated changes in short-term outcomes for clinicians and patients, including (i) *increase in clinician's confidence and preparedness to identify and respond to women, men and CYP affected by DVA*; (ii) *clinicians' feeling of being supported in delivering DVA work for all patients;* (iii) *increase in DVA enquiry, disclosure, referral for women, men and CYP*; (iv) *enhanced recording of DVA*; and *women, men and CYP access specialist support*. (Figure 2). Our findings on the strengthened clinician and patient engagement in relation to the wide range of short-term outcome domains provide strong evidence for the feasibility of the intervention to respond to the needs of female and male survivors and CYP living with DVA and/or experiencing it first-hand. The low number of male perpetrator referrals also suggests that previously reported barriers to referring perpetrators from primary care to

specialist DVA support (16, 28, 40) proved to be difficult to surmount during the study period, despite increased preparedness and confidence reported by clinicians after training in this complex area of practice.

Although the testing of medium and long-term patient outcomes was outside the scope of the feasibility study, interviews with female, male and child patients supported by IRIS+, indicated (i) *improved mental and physical health outcomes*; (ii) *increased safety outcomes*; (iii) *improved quality of life*; and *strengthened multi-sectoral prevention response to DVA.* Given that it was beyond the aims of the current study to examine longer term implementation, there remains uncertainty about the scalability and sustainability of the intervention (Figure 2).

Conclusion: Implications for research and practice

Our testing of the reconfigured IRIS+ intervention has demonstrated acceptability and feasibility for female and male survivors and CYP. This study did not test effectiveness or cost-effectiveness, and whether, if implemented on a larger scale, it would reach a wide range of professionals and patients, particularly male perpetrators. Future research should explore reasons for the increase in female referrals in the context of whole-family DVA interventions.

Building on current evidence of feasibility, the next step should be to fully evaluate the implementation scalability, effectiveness, cost-effectiveness and impact of IRIS+ in different contexts to ensure generalisability. Rigorous testing of IRIS+ will provide key evidence about benefits through targeting secondary prevention and reduced healthcare service use. Improved identification, referral and health outcomes, and downstream benefit for survivors and CYP demonstrated through cost-effectiveness modelling would form a strong basis for commissioning. It would also inform policy and practice by generating evidence about the extent to which local variations in implementation contexts facilitate or impede intervention effectiveness and reach.

LIST OF ABBREVIATIONS

AE- advocate educator
CL – clinical lead
CRN - Clinical Research Network
CYP – children/young people
CYPW - children and young persons' worker
DVA – domestic violence and abuse
EMR - electronic medical record
GP – general practitioner
HCA - health care assistant
HV – health visitor
IRIS - Identification and Referral to Improve Safety
IRIS+ - Enhanced Identification and Referral to Improve Safety
MARAC – multi-agency risk assessment conference
PIM - PROVIDE Intervention Measure
PN – practice nurse
REPROVIDE - Reaching Everyone Programme of Research On Violence in diverse Domestic Environments
SALW - substance abuse liaison worker
SM – service manager
SW – social worker
UCP – urgent care practitioner

DECLARATIONS

Ethics approval and consent to participate

The study was given favourable ethical approval by London - Hampstead Research Ethics Committee (REC reference: 19/LO/1132) and the Health Research Authority (HRA) and Health and Care Research Wales (HCRW).

Participants were sent a copy of the participant information sheet and consent form in advance, had the opportunity to discuss the study and answer questions prior to consenting to participate, and gave informed written or audio-recorded verbal consent to take part in the study.

Consent for publication

Not applicable

Availability of data and materials

Anonymised transcript and questionnaire data will be stored on the University of Bristol's Research Data Service Facility. Bona fide researchers will be able to access non-identifiable data upon reasonable request. Access will be subject to a data access agreement and following approval from the REPROVIDE Chief Investigator and the University of Bristol Data Access Committee.

Competing interests

EW is a regional manager for IRISi interventions since May 2022. ECB worked part-time as a data scientist for IRISi between June 2019 and March 2022 responsible for collecting and analysing IRIS data at national level. Feder is a non-executive (unpaid) IRISi board member. All other authors have declared no competing interests.

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Authors' contributions

ES and GF designed the study, CC and ES conducted the surveys, interviews and collected agency data. CC, EE, ES and EW collected data from EMR. ES, CC and EE analysed the data. ES drafted the manuscript. All authors were involved in the interpretation of the data, revised the drafts and contributed to the final version of the manuscript.

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TABLES

Table 1. Change in clinicians' self-reported preparedness to respond to DVA

PIM+ questionnaire domains	n	T1 mean score	T2 mean score	Median change	95% CI	Wilcoxon signed-rank test P-value
Ask about DVA						
Female victims	31	3.2	4.1	1.0	[0.5, 1.5]	0.0003
Female perpetrators	31	2.0	3.3	1.5	[1.0, 2.0]	0.0000
Male victims	31	2.6	3.8	1.0	[1.0, 1.5]	0.0000
Male perpetrators	31	2.1	3.5	1.5	[1.0, 2.0]	0.0000
Parents	31	2.7	3.8	1.0	[0.5, 1.5]	0.0001
Children and young people	31	2.7	3.7	1.0	[0.5, 1.5]	0.0005
Identify signs and symptoms of DVA						
Female victims	31	3.3	4.1	1.0	[0.5, 1.0]	0.0002
Female perpetrators	31	2.1	3.3	1.0	[1.0, 1.5]	0.0000
Male victims	31	2.7	3.8	1.0	[1.0, 1.5]	0.0000
Male perpetrators	31	2.3	3.5	1.0	[0.5, 1.5]	0.0001
Parents	31	3.0	3.7	0.5	[0.5, 1.0]	0.0003
Children and young people	31	3.0	3.9	1.0	[0.5, 1.0]	0.0001
Respond to initial disclosure of DVA						
Female victims	31	3.2	4.3	1.0	[0.5, 1.5]	0.0000
Female perpetrators	31	2.0	3.8	2.0	[1.5, 2.5]	0.0000
Male victims	31	2.7	4.1	1.5	[1.0, 2.0]	0.0000
Male perpetrators	31	2.2	3.9	1.5	[1.0, 2.0]	0.0000
Parents	31	2.9	4.1	1.0	[1.0, 1.5]	0.0000
Children and young people	31	2.9	4.1	1.0	[1.0, 1.5]	0.0000
Refer						
Female victims	31	3.3	4.4	1.0	[0.5, 1.5]	0.0001
Female perpetrators	31	1.8	4.0	2.5	[2.0, 2.5]	0.0000
Male victims	31	2.6	4.3	1.5	[1.0, 2.0]	0.0000
Male perpetrators	31	2.1	4.1	2.0	[1.5, 2.5]	0.0000
Parents	31	2.7	4.2	1.5	[1.0, 2.0]	0.0000
Children and young people	31	2.9	4.2	1.0	[1.0, 2.0]	0.0000
Record information about DVA						
Female victims	31	3.3	4.2	1.0	[0.5, 1.0]	0.0001
Female perpetrators	31	2.7	4.0	1.5	[1.0, 1.5]	0.0001
Male victims	31	3.1	4.1	1.0	[0.5, 1.5]	0.0001
Male perpetrators	31	2.7	4.0	1.5	[1.0, 1.5]	0.0001
Parents	31	3.1	4.0	1.0	[0.5, 1.5]	0.0002
Children and young people	31	3.1	4.1	1.0	[0.5, 1.5]	0.0000
Provide ongoing support						
Female victims	31	3.1	4.0	1.0	[0.5, 1.5]	0.0002
Female perpetrators	31	1.9	3.5	1.5	[1.5, 2.0]	0.0000
Male victims	31	2.7	3.8	1.0	[1.0, 1.5]	0.0000
Male perpetrators	31	2.0	3.5	1.5	[1.0, 2.0]	0.0000
Parents	31	2.7	3.7	1.0	[1.0, 1.5]	0.0000
Children and young people	31	2.8	3.9	1.0	[1.0, 1.5]	0.0000

This table reports the number of paired observations; mean preparedness score [range 1-5] at time points 1 and 2; the Hodges-Lehmann estimate of the median change and its 95% confidence interval (CI); and the Wilcoxon Signed Ranks Test of the change (T2-T1) in median score.

Table 2. Referral and IRIS+ support

	Referred by GP				**Supported by IRIS+**		
	Adult		CYP		Adult		CYP
	Female	Male	Direct referral for CYP or self-referral	Listed on adults' referral form	Female	Male	
Total	227	29	44	213	157	12	30

Total number of DVA patient referrals from IRIS+ general practices to DVA services for the period 20/06/2019 to 31/12/2020 and total number of referred patients supported by the IRIS+ hubs

Table 3. Identification and referral in pre-pandemic and pandemic periods

	Pre-pandemic period	Pandemic period
Total number of DVA identifications by general practice recorded in EMR	161	169
Identifications via patient consultations	107	70
Identifications via reports received from third parties	48	86
Police	17	53
Other (A&E, children's social care services, MARAC, etc.)	31	33
IRIS+ referrals recorded in EMR	66	43

DVA identifications and referrals in pre-pandemic (1 June 2019 to 22 March 2020) and pandemic (23 March 2020 to 31 December 2020) periods in four GP practices

FIGURES

Figure 1. IRIS+ Intervention flow diagram

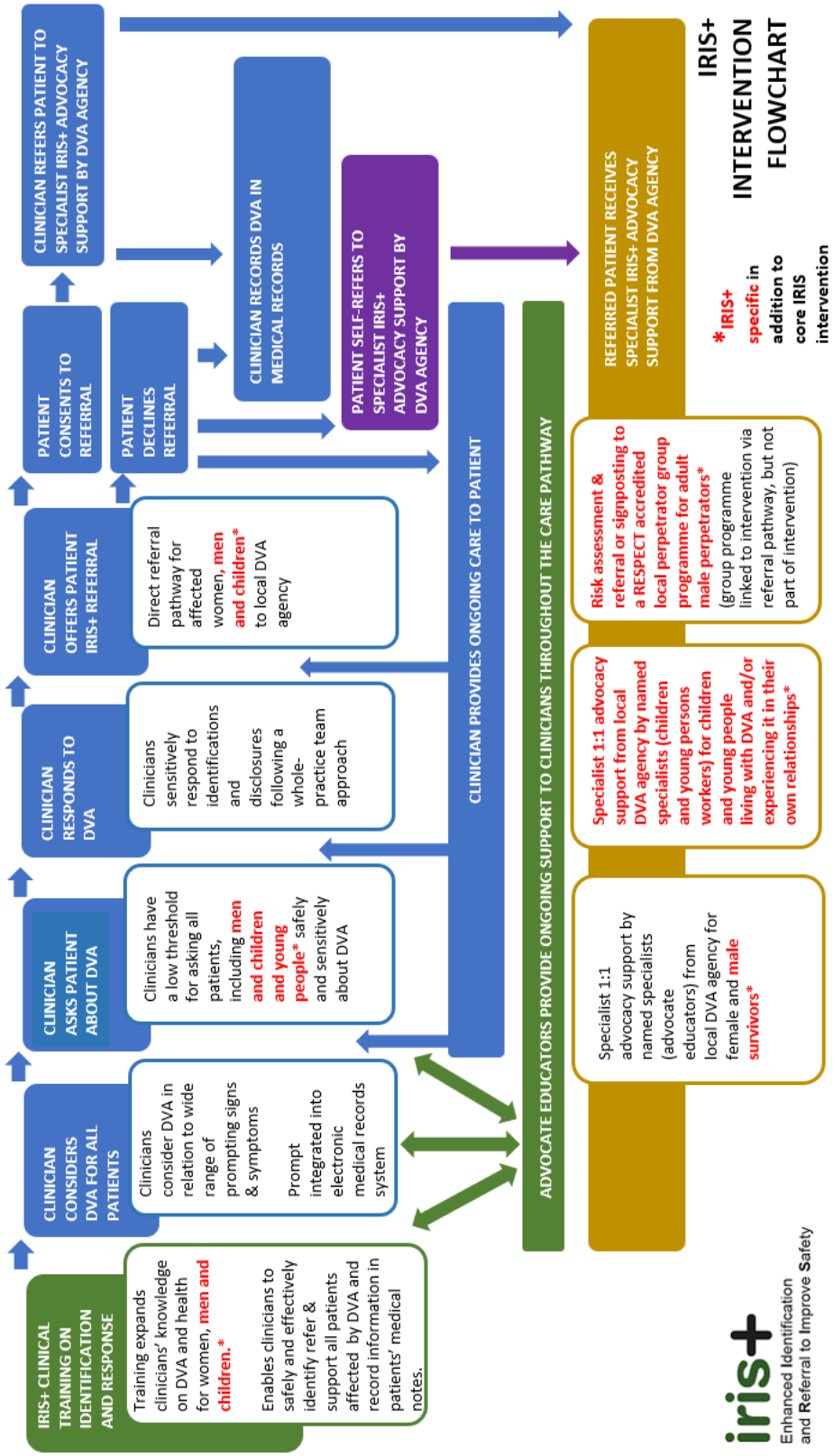

Figure 2. IRIS+ logic model