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Women's experiences of early pregnancy loss services during the pandemic: A qualitative investigation

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ABSTRACT

Problem: Early pregnancy losses [EPL] are common, varied, and require different courses of management and care.

Background: In the UK, women who suspect or suffer a pregnancy loss are usually provided specialist care in early pregnancy assessment units [EPAUs]. Their configuration has recently been evaluated, but recommendations for change in-line with best practice for optimum outcomes were unable to be implemented due to the COVID-19 pandemic health system shock.

Aim: To compare women's experiences of EPAUs during the pandemic to themes previously found in qualitative work undertaken with women who utilised EPAUs before the pandemic.

Methods: We conducted semi-structured virtual interviews, with women (N = 32) who suffered an early pregnancy loss during the pandemic; analysing transcripts using Template Analysis, based on findings about women's (pre-pandemic) experiences of EPAU from The VESPA Study.

Findings: We report on seven key themes: Barriers to Accessing Services; Communication & Information; Retention of Relational Care; Involvement in Care Decisions; Staffs' Attitude or Approach; Efficiency of Service Delivery; Sensitive Patient Management.

Discussion: Sensitive patient management and woman-staff interactions in EPAU settings remain a fundamental issue. Women also reported their experiences of EPAUs were comparatively worse during the pandemic.

Abbreviations: NHS, National Health Service; PPIE, Patient and Public Involvement and Engagement; SARS-CoV-2, Severe Acute Respiratory Syndrome Coronavirus 2 (a.k.a. COVID-19); UK, United Kingdom.

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Conclusions: Women valued the care provided by EPAUs and found services to be efficient, despite pandemic-related restrictions. However, psychological recognition surrounding EPL and appropriate, sensitive, relational care and support continue to be areas in need of improvement. Our recommendation is to implement the improvements suggested by VESPA as a priority to ameliorate present sub-optimal experiences and prevent further deterioration.

Statement of significance

Problem or issue

EPAUs differ in their organisation, staffing, and capacity. Recent recommendations for service delivery changes were difficult to implement, given the SARS-CoV-2 pandemic.

What is already known

EPAUs are valued reproductive health services, however, utilisation is not without issue, including: access difficulties, insensitive management, poor communication, insufficient information, and a lack of psychological support; negatively affecting women's experience.

What this paper adds

EPAUs remain essential, however much of the service provision requires significant improvement. To prevent undue harm, aspects of care – especially sensitive patient management – must improve in-line with evidence-based guidance.

1. Introduction

Early pregnancy losses are common and include: miscarriage, pregnancy of unknown location, ectopic pregnancy, molar pregnancy, and termination of pregnancy; each of which can present unique physical and psychological challenges and may require care from different parts of the healthcare system. In the United Kingdom, specialist care for women experiencing complications in early pregnancy including suspected early pregnancy loss, is usually provided by Early Pregnancy Assessment Units [EPAUs] within gynaecology services, with 212 currently established nationwide [1]. EPAUs are often run by a multi-disciplinary team comprising Gynaecologists, Midwives, Nurses, and Sonographers [2] and their organisation can differ by location, opening hours, and access to services [3]. EPAUs do not have routinely embedded within them psychological support or bereavement care services [4], despite the prevalence rates of early pregnancy loss being high (with miscarriage alone affecting one in ten women in their lifetime), and psychological consequences repeatedly reported as significant [5]. Recently, an investigation of the configuration and outcomes of EPAUs across the UK was undertaken [2,3]. A qualitative study of women's experiences of EPAUs was conducted [6], which made recommendations for their improvement, such as separating EPAUs from general maternity units; ensuring women are provided with accurate, understandable information about early pregnancy complications and losses; automatically cancelling appointments following pregnancy loss; ensuring information is transferred to women's General Practitioners in primary care; and providing aftercare for women requiring psychological support.

Since then, the novel coronavirus, SARS-CoV-2, or 'COVID-19′ pandemic has presented a significant disruption of all healthcare provision. Antenatal, intrapartum, and postnatal healthcare services were particularly affected [7], with many services providing reduction in care, increased use of telehealth, and the removal of consented birthing partners from maternity care settings [8]. Furthermore, the advice on the risk of COVID-19 to pregnant women changed frequently contributing to multiple iterations of guidance on how to best deliver safe maternity care [9]. As part of ongoing efforts into understanding the impact of the pandemic on maternity care settings, The PUDDLES Study was developed to investigate the impact on perinatal bereavement care and the experiences of those who lost a pregnancy or whose baby died during the pandemic.

This paper presents a qualitative analysis of interview data focused on experiences of care by women who suffered early pregnancy losses during the pandemic, in comparison to the findings from The VESPA Study which investigated women's experiences of early pregnancy care in a pre-pandemic context.

2. Participants, ethics, and methods

2.1. Patient and public involvement and engagement

To ensure sensitivity and appropriateness of recruitment materials and interview schedules, and to aid recruitment, The PUDDLES Study team originally worked with the International Stillbirth Alliance, Tommy's Charity, and Sands; and subsequently with Petals: The Baby Loss Counselling Charity and The Ectopic Pregnancy Trust for the PUDDLES – Early Pregnancy Loss project. Through these engagements and others (see Declarations section for full description), we received feedback on recruitment, study design, and interpretation on findings from lay and expert stakeholders, including members of the public, those with lived experience, health and social care professionals, researchers, and policy makers.

2.2. Ethics

Ethical approvals were granted by the King's College London Health Faculties Research Ethics Subcommittee (ref:-HR/DP-21/22–28808). All participants provided consent to participate prior to the beginning of their interviews. Given the sensitivity of the focus of the study, all researchers were sure to follow best-practice guidelines for undertaking sensitive, challenging, and difficult research topics, this ensuring appropriate precautions were taken to reduce psychological harm and/or potential (re)traumatisation during the interviews for both the participants and the researchers [10].

2.3. Design

We adopted a qualitative research design, using semi-structured interviews with women who had experienced one or more early pregnancy losses during the COVID-19 pandemic. The work was designed to be comparative – taking thematic results from qualitative work undertaken with women who had suffered an early pregnancy loss and utilised EPAU services before the pandemic health system shock (The VESPA Study) [6], and using those findings as a template for our analysis of women's EPAU utilisation during the pandemic health system shock (The PUDDLES Study). This was important to do, to allow comparison of experiences, and ultimately decide whether EPAU services had managed to successfully implement the best practice recommendations for optimal outcomes which had been previously suggested [2,6], or whether the pandemic stood as a barrier to fidelitous implementation.

Our work was rooted in a post-positivist research paradigm, adopting ontological critical realism and epistemological objectivism. This theoretical perspective makes allowances for participants' falsification in knowledge creation, whereby recounted events (i.e., interviews) reflect the 'lived realities' of a person and not necessarily the exact recording of an event; but in acquiring even false knowledge, we are moving closer to understanding the reality of an experienced phenomenon.

2.4. Recruitment and data collection

Women (N = 32) were recruited between March and June 2022 using an opportunity sample via on-line and social media platforms, through our charitable partners and their networks, and via word-of-mouth snowballing. Women had to be at least 18 years of age and had experienced at least one early pregnancy loss during the SARS-CoV-2 pandemic (i.e., since 30 January 2020) to take part. Women ranged in age from 25–45 years (M_{Age}=35 years) and were predominantly: of English, Welsh, Scottish, Northern Irish, or British ethnicity (n = 26, 81.3%); married or co-habiting (n = 29, 90.6%); multigravida (n = 17, 53.1%) having planned their pregnancy (n = 23, 71.9%); and reported having had COVID-19 infection previously (n = 21, 65.6%). Details of the participants' pregnancy losses can be found in Table 1.

Semi-structured interviews [11] were employed to allow for similar questions across all participants, but enough flexibility to follow-up on pertinent points made by participants (see *Appendix 1* for Interview Schedule). Interviews were conducted by one of two authors [FEK-N; SAS], using video-conferencing [12] to adhere to Government-mandated 'lockdowns' and physical-distancing restrictions. Interviews lasted 36–159 min (M_{Time}=71 min) and were transcribed verbatim by a professional transcription company.

2.5. Data analysis

We utilised a Template Analysis [13] – a philosophically flexible methodology [14] – which engages with critical reflexivity to ensure rigour throughout a methodical approach to iterative analysis [15] (see Fig. 1).

Two authors [RG-C; MM] coded the data, with a third [SAS] finalising and approving the coding. Data from The PUDDLES – Early Pregnancy Loss Study were uploaded into NVivo and coded into a template of themes derived from the original findings from the qualitative arm of The VESPA Study [6], which investigated women's experiences of early pregnancy care in a pre-pandemic context.

3. Findings

Themes remained similar, but were augmented to better encapsulate the content of the data or to provide a more explicit theme name (as per Template Analysis methodology [14]; see Table 2). Themes are supported by the most illustrative quotations, with supplementary

Table 1
Participants' Perinatal Bereavements and Dates.

Participant Pseudonym	Pregnancy Losses	Date of Pregnancy Loss	Participant Pseudonym	Pregnancy Losses	Date of Pregnancy Loss
P-EPL-001	Early Miscarriage	November 2021	P-EPL-017	Miscarriage with Ovarian Ectopic Pregnancy (Suspected Twin Pregnancy)	September 2021
P-EPL-002	Ectopic Pregnancy	January 2021	P-EPL-018	Early Miscarriage	April 2021
	Early Miscarriage	March 2021		Ectopic Pregnancy	November 2021
P-EPL-003	Early Miscarriage	June 2020	P-EPL-019	Early Miscarriage	November 2020
	Early Miscarriage	January 2021		Pregnancy of Unknown Location	February 2021
	Early Miscarriage	January 2022		Chemical Pregnancy	July 2021
P-EPL-004	Ectopic Pregnancy	September 2020	P-EPL-020	Ectopic Pregnancy	January 2021
P-EPL-005	Early Miscarriage	July 2021	P-EPL-021	Early Miscarriage	March 2022
P-EPL-006	Early Miscarriage	March 2022	P-EPL-022	Chemical Pregnancy	December 2020
				Ectopic Pregnancy	April 2021
				Ectopic Pregnancy	July/August 2021
P-EPL-007	Early Miscarriage	June 2020	P-EPL-023	Ectopic Pregnancy	December 2020
	Early Miscarriage	August 2021		Early Miscarriage	November 2021
				Ectopic Pregnancy	April 2022
P-EPL-008	Early Miscarriage	August 2020	P-EPL-024	Ectopic Pregnancy	February 2021
	Early Miscarriage	May 2021			
P-EPL-009	Ectopic Pregnancy	July 2020	P-EPL-025	Ectopic Pregnancy	August 2020
				Early Miscarriage	January 2021
				Early Miscarriage	April 2021
				Ectopic Pregnancy	August 2021
P-EPL-010	Ectopic Pregnancy	February 2021	P-EPL-026	Termination of Pregnancy	June 2021
	Chemical Pregnancy	July 2021		Early Miscarriage	January 2022
P-EPL-011	Early Miscarriage	March 2020	P-EPL-027	Ectopic Pregnancy	November 2021
	Termination of Pregnancy	September 2020			
	Pregnancy of Unknown Location	March 2021			
	Early Miscarriage	August/September 2021			
P-EPL-012	Ectopic Pregnancy	November 2020	P-EPL-028	Molar Pregnancy	August 2020
P-EPL-013	Early Miscarriage	July 2020	P-EPL-029	Ectopic Pregnancy	September 2020
	Early Miscarriage	January/February 2021			
P-EPL-014	Early Miscarriage	May 2020	P-EPL-030	Ectopic Pregnancy	July 2021
	Early Miscarriage	June 2020			
	Early Miscarriage	September 2020			
	Early Miscarriage	March/April 2021			
P-EPL-015	Early Miscarriage	October 2020	P-EPL-031	Early Miscarriage	March 2020
	Early Miscarriage	March 2022		Early Miscarriage	June 2020
				Chemical Pregnancy	November 2020
				Molar Pregnancy	April 2021
P-EPL-016	Ectopic Pregnancy	February 2022	P-EPL-032	Ectopic Pregnancy	February 2022

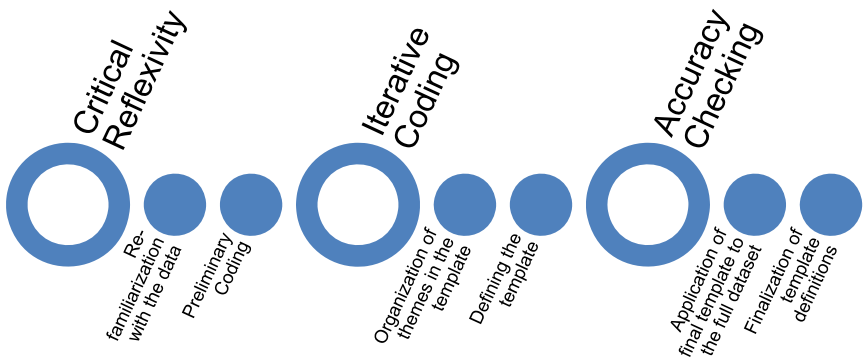

Fig. 1. The Template Analysis Methodology, adapted from [15]

quotations presented in Table 3.

3.1. Barriers to accessing services

Barriers to accessing EPAU services were generally around the opening times, with emphasis again being on the lack of weekend opening:

> *We talked through what my options were in terms of any support and medical support on offer and essentially, she said 'you're welcome to ring EPU any time'. And obviously it's only really open, I think nine until seven weekdays. They're not open weekends. And when you ring [laughs], no-one answers you for ten hours, so not massively helpful.* (P-EPL-005).

Many women also commented on how they felt the 'office hours' opening times on offer were inappropriate and not useful for most women, especially those who were working:

> *I don't understand why early pregnancy units open at ten and close at four. I mean, pregnancy doesn't stop. The rest of the hospital doesn't stop. So why does that unit close at four o'clock? Especially when they're scanning women for twelve-week scans after that time. Because surely, I can't have been the only person who had a scan at five o'clock, or whatever it was. And then, I should have been sent immediately to the EP unit to be told what was going to happen next. And I should have been sat down with somebody face-to-face.* (P-EPL-019).

Other women discussed the distance between home and EPAU as being a prohibitive factor for accessing services. This became especially prevalent during the pandemic, with restrictions on who could accompany appointments, and women often reporting they could not drive themselves due to their physical pain:

> *I wasn't prepared for how painful and how much blood there would be, how long it would last. They did say, if you are experiencing pain, ring up and let us know, but I live 45 minutes away from the hospital, so I don't know what they could have done. I wouldn't have been in the position to get myself there, just how I was feeling. So, I just had to deal with it myself, really.* (P-EPL-014).

Table 2
Comparison of Theme Names.

Original Theme Names from The VESPA Study[6]	New Theme Names from The PUDDLES-EPL Study
Barriers	Barriers to Accessing Services
Communication & Information	Communication & Information
Continuity of Care	Retention of Relational Care
Involvement in Care Decisions	Involvement in Care Decisions
Staffs' Attitude or Approach	Staffs' Attitude or Approach
Efficiency	Efficiency of Service Delivery
Sensitive Patient Management	Sensitive Patient Management

3.2. Efficiency of service delivery

Although there were some reports of delays in transferring care between departments (e.g., A&E to EPAUs, etc.), many women reported EPAU services as readily accessible within short time-frames from their initial contact, despite the pandemic restrictions to services:

> *So found out in January and had a few weeks of excitement and then I started bleeding, and I had cramps on one side of my body, on my right-hand side, so phoned the Early Pregnancy Unit. I hadn't seen a midwife or anything before this point and they were concerned about an ectopic pregnancy because of the one-sided pain, so they got me in for a scan immediately. I phoned up at 9 o'clock and got a scan at 12 o'clock, which was very impressive.* (P-EPL-006).

This also sometimes extended to bereavement counselling:

> *I did get a follow-up from the bereavement officer and then she referred me to Petals charity for bereavement counselling. And that was really quite a quick turnaround.* (P-EPL-003).

However, the speed at which women reported they were seen was often attributed to the fact they had a history of pregnancy loss which enabled them to bypass contacting their doctor's surgery first:

> *I don't know whether it's a silver lining, but if you've had a miscarriage or an ectopic, you've kind of got a direct line through to the Early Pregnancy Unit, so I just phoned them directly rather than having to go through my GP.* (P-EPL-002).

3.3. Communication and information

Most women reported the information they received as being poor and the communication of verbal information being sub-optimal and/or ineffective, especially if conveyed at a time of medical emergency:

> *I just think overall it was very poor communication and very poor experience on information giving.* (P-EPL-012).

> *I appreciate that before the surgery they couldn't really go into depth about things because they needed to get me in, I get that. But I think afterwards, even if they sat with, it would only take a couple of minutes, just spoken to me about it and maybe had some kind of leaflet or something that said, this is ectopic pregnancy, these are the support groups that you can reach out to and things. Even something that's small, that you can take away and read up and understand.* (P-EPL-004).

Women were also critical of how information about their loss was conveyed across different areas of the healthcare services:

> *Even if they ask for your NHS number and they pull up your portfolio, it's like they don't see what it says there. Maybe they don't. Because I don't feel like the systems are very well connected. So, they might not have the*

Table 3
Supplementary Quotations.

Barriers to Accessing Services	Efficiency of Service Delivery	Communication & Information	Involvement in Care Decisions	Retention of Relational Care	Staffs' Attitude or Approach	Sensitive Patient Management
I am fortunate that I speak fluent English because if I did not, this whole thing would be completely different because not only are you by yourself, bleeding internally and really confused, but if then you have got any other barriers, that is going to be really, really tough. (P-EPL-025) *I phoned an out-of-hours service one night because I was more concerned than I had been because I was passing more clots, felt a bit dizzy. They said, "Right, come over to the primary care," which was probably 45 min from where we live. We don't have a local primary care where we are. We have an A&E, but not a primary care.* (P-EPL-032)	*I was really impressed with the <Hospital Name> in terms of how quickly I was seen in A&E, because, yes, I hardly hard to wait at all, not too many in the waiting room and once I had been triaged, just sent directly to where I to go. I think that was great practice compared to the <Hospital Name> . So, I think if you can be triaged really quickly and a priority in A&E then that goes a long way to then get you to the correct area where you need to be seen.* (P-EPL-001) *Again, I would have liked, when I went into A&E, for them to have offered me an ultrasound on the spot, rather than making me wait.* (P-EPL-003)	*I was quite shocked they'd taken my ovary as well because that hadn't been discussed before the surgery.* (P-EPL-002) *All I was given really after the first miscarriage was a leaflet and that's just not enough. Given the trauma I went through, I just think it's ridiculous, it's awful.* (P-EPL-007) *I've sought counselling privately. I was never offered it. It was never spoken about. I wasn't even signposted to any of the charities, and I don't know if that's because the staff are burnt out and see it day in day out and just don't think or whether they are just there to do their shift and go, because I do believe it depends on whether you have agency, some agency staff or ward-based employed staff.* (P-EPL-012) *The one nurse that I came across who was understanding and sympathetic was very stressed and did talk to me a little bit about how it was just a nightmare because there was no staff, and she was doing everything. She was running bloods, she was checking people in, dealing with the phone calls because, obviously, there was such… it was such an early stage in my pregnancy, all of the treatment was through the early pregnancy unit because it was so early on. But yeah, I mean, they lost my bloods. That was a good one. They lost my bloods. Yeah, they lost my bloods.* (P-EPL-017) *So, I had to go through all the forms and paperwork for that while they're prepping me for the operation. So I had an anaesthetist come and visit me and talk to me about that and I had a bit of time with him privately to talk about things, but then I had nurses dropping bits and pieces off and other distractions. And then another lady came in, and obviously there were different-coloured forms, I can't remember really, but one was a form for this and one was a form for that, and one was what to do*	*But I think, just a bit more understanding of what each treatment involves, understanding what it was going to be like to miscarry at home, and not feeling as if I was kind of being encouraged to go with management at home, because I did kind of feel as if they were me in that direction. And as I say, looking back, I wish I had just had the removal because I think it would have been much easier.* (P-EPL-002)	*It was always a different person; there was no continuity at all.* (P-EPL-006) *I was really surprised that my GP wasn't involved at all. The local support wasn't there.* (P-EPL-006) *So, I've got that continuity of someone looking after me and I think that should be from as soon as you lose a baby.* (P-EPL-007) *Every time I went, they did not know what I was there for. 'What are we doing your bloods for? Why are we doing your bloods?'* (P-EPL-017) *I think the doctor when I got sent in to the hospital from the GP, when I eventually saw him in the evening, he was a nice doctor. And actually, it was funny, because I remember him, because he was the doctor, when I was rushed into hospital, just having had <Son's Name> , he was the doctor who I saw. So that was kind of nice, because I'd met him before. Not that I think he remembered me, but I remembered his face.* (P-EPL-019) *But obviously there's this thing, isn't there, where you never see the same doctor, because they're always on shifts. No continuity.* (P-EPL-019)	*The GP was fantastic, but the hospital was quite 'your baby has gone, well, your pregnancy sac has gone, we are done with you, we don't need to see you anymore, do the pregnancy test and if it's a positive result, phone us, otherwise don't worry about it, just carry on'.* (P-EPL-006) *I genuinely think there has to be a change in the medical profession's attitude towards it because no doubt you have spoken to hundreds, if not thousands of women this has happened to, it happens all the time and it's just totally dismissed as a 'oh well 1 in 3 doesn't work out', 'oh well, it's just a statistic', 'oh well'. Do you know what I mean?* (P-EPL-008) *And eventually, the gynaecologist came in, and she was not great. She just kind of said to me, she was like, "Well, you're having a miscarriage. Miscarriages are painful, I'm afraid. You should just go home with a hot water bottle. You don't need to be here."* (P-EPL-010) *I don't feel like there is a lot of compassion for loss, really.* (P-EPL-015) *With the ectopic pregnancy, I do feel that there was the support nurse, like I said, and she contacted me when I was back home twice, and she also gave me information on The Ectopic Pregnancy Trust. So, I kind of knew where that was as well. Even to this day, she said, "If you ever try again, we will support you through that. Or if you're thinking of trying again, you just contact us again." Whereas with the miscarriages, there was nothing. It was just, kind of, "Oh, you've got a*	*…they readmitted me, gave me some stronger pain relief, put me in a bay with people that were pregnant that wanted to talk about pregnancy. I just kept my headphones on, and I did turn around. I felt terrible but I just got fed up of people asking how far pregnant I was and have I got severe morning sickness and I just said, "My baby has been taken away from me," and I rolled over and went to sleep. I didn't go to sleep, I just rolled over and closed my eyes.* (P-EPL-012) *I was just on a general ward as well, so I do not think… I think that was quite difficult because they did not understand perhaps what I had gone through…* (P-EPL-020) *I was in a four-person ward, with another lady who was old. And I think she just thought I was still having the baby. She didn't understand why I was so upset. And she kept saying, "Don't cry, your baby will be with you soon, and you'll get your baby soon, and once your baby's here."* (P-EPL-022) *the hardest thing about being in the hospital was not my recovery or what had happened, but it was the fact that I was on a mixed ward, so obviously, lack of sleep, being surrounded by geriatric patients who were lovely, but it was just disconcerting and really tough to recover when geriatric patients have fallen down the stairs and they are in the bed next to me, so the hardest thing was that…* (P-EPL-024) *I would have not left me for four weeks waiting for an evacuation. That's not fair at all. Speaking to other women who've been this, when I went for my chemo, they were in within days. So, leaving somebody like that for that length of time is not acceptable.* (P-EPL-028) *They took me through to a little bay in A&E, where the curtain was open. It was right by the nurses' station and the doctor was very lovely. I think he was quite junior, but he came to me and said, "Oh, you're*

(continued on next page)

Table 3 (*continued*)

Barriers to Accessing Services	Efficiency of Service Delivery	Communication & Information	Involvement in Care Decisions	Retention of Relational Care	Staffs' Attitude or Approach	Sensitive Patient Management
		with the remains and all of this. I had that at one end by my feet, I had the person trying to get me signed in and put that on because they'd messed up. It was awful. Just everybody came at once and I didn't know which way was up. I didn't get enough time to process what those bits of information were. So I made a decision based in that moment. Now, I wonder. [Tearful] I might have changed my mind if I'd had time to think about it. But it was all very rushed. (P-EPL-018)			*miscarriage. We'll give you a sick note for a couple of weeks and that's it." That is it. There is no support at all.* (P-EPL-029) *Some of the doctors that I've seen I think really need a bit more empathy. [Pause] I don't really think you have to have that much empathy to realise that somebody doesn't want to be half-naked and have somebody walking in and out of the room; [laughs] I don't know what to say about that, that's just shocking to me.* (P-EPL-031)	*pregnant, by the way, congratulations." And I didn't expect that. And congratulations didn't seem the right word because I knew then something wasn't right. But I'm sure he was trying to be nice…* (P-EPL-029)

information and then… I really wish they did, so you don't have to go through the whole of this history every time we talk to them. (P-EPL-023).

I finally got a call back from the GP surgery about my six weeks' check from the staff. 'Who's told you you need to have this?' That was my first conversation. I was like 'The maternity staff.' 'Well how old is baby?' 'Well, actually the baby's not here, which obviously is available on my record to everybody.' And she must have known because she was discussing my urine analysis with me. 'Well what treatment did you have?' Again, it comes back to that terminology. It's not a treatment. It wasn't a treatment, far from it. I wasn't at a day spa. I delivered my baby that I was never going to bring home. (P-EPL-026).

This was especially true for women who were looking for support for future reproductive healthcare:

I think that was the main concern while I was in hospital, the question that I wanted to get to the bottom of was how is it going to affect me in the future and there was nobody really to answer those questions, you got a brief answer from the consultant and that was it, there was no sort of guidance on future fertility and anybody who you could talk to about what if you want to try again, do you just go for it or is there anything that I need to know about? None of that. And still really don't know. (P-EPL-032).

Aftercare, I don't feel really exists, from a healthcare professional point of view. I was under the Rainbows team this time around, because although my losses weren't [consecutive], they have said, because it is so many, they would take me under. I had e-mailed out to them, mainly about getting my results back from the genetics. I had also said I was really struggling. I have not heard back from that e-mail. (P-EPL-015).

Finally, the communication of information about aftercare and psychological support was regarded as insufficient if it was indeed received at all:

I think, at the time I was seen in the pregnancy assessment unit, they were very focused on, 'These are how you will physically manage things,' but I don't recall anybody ever mentioning to me, 'At any point further down the line, should you feel the need to speak to anybody about what has happened, these are the services, or this is where you can get that support. Particularly, this has happened four times now. Maybe you feel a need to speak to somebody.' That didn't really happen. (P-EPL-014).

There was obviously no follow-up from the EPU because that's not how the EPU works. (P-EPL-005).

3.4. Involvement in care decisions

Some women discussed their ability to discuss their clinical care and the management of their pregnancy loss:

I never felt pressured to choose a particular way of managing things. It was all up to me. I felt very supported in whatever decision I made. (P-EPL-014).

However, this was often caveated by time being an additional pressure on their ability to make decisions:

That is why I chose surgical management, because I didn't want to wait at home. I didn't want to deliver. I didn't want to go home and do it. I live 45 minutes away from the hospital as well. To come home, knowing that both my other pregnancies, I have bled a lot, one needing iron, I just didn't want to be… Knowing ambulances are how they are, I didn't want that, but that wasn't given as an option. (P-EPL-015).

There were some occasions where women reported medical staff took a very paternalistic, and sometimes callous view of care, dictating the course of treatment and making women feel they had no choice but to consent:

Some of the nurses were really kind, really gentle, really compassionate. But I remember the consultant coming in and she just had absolutely no empathy, no bedside manner. It was like it was just a tick sheet: 'You need surgery, you need it right now, we need your signature here, here, and here.' I was just taken aback by it all, having just been told I've lost my baby, this is not going to be viable, and 'You need surgery to save your life essentially.' So, it was quite scary, surreal [laughs] like I said, and just very isolating. I felt like things were being done to me rather than I was consenting or having a conversation about certain things. (P-EPL-027).

3.5. Retention of relational care

Relational care was often discussed by women in terms of having healthcare professionals demonstrate knowledge about their condition and loss, and in doing so, making women feel like they were an individual and they were being cared for as such:

So, when I was wheeled into the room, again it was someone I recognised, albeit from like 15 minutes before, and he was really, really lovely and he was like, 'Right, this lady's been through the wars this weekend', and he put me at ease, it was so lovely. (P-EPL-010).

Often, having the same healthcare professional throughout their time in EPAU services or throughout the duration of the pregnancy loss was reported as something which reduced women's anxiety about the loss and any surgical care they required:

I think one of the things that was really helpful was in the first loss was that I had a designated person. One of the nurses was designated to me to come and check-in on me, was the person who decided to come down to the scan with me and to hold my hand. I think that the designated person and the continuum of that person was really essential to the fact that I got through, despite quite a lot of trauma in the first pregnancy loss. (P-EPL-022).

One thing that made me feel better was she actually was performing the operation herself with another consultant, so that made me feel a lot better because I had met the person who was going to be it, which was strange, but it just put my mind at ease a little bit. (P-EPL-020).

Women described other areas of the healthcare system – especially specialist recurrent pregnancy loss services and private clinics – at being better at maintaining a level of relational care than EPAUs themselves:

I would say certainly that the last loss, so where I was under the care of the Recurrent Miscarriage Clinic and being checked, I would say, although the outcome wasn't great, in terms of experience, that was much better, and that's because I was being cared for and monitored and looked after. (P-EPL-008).

I think so. It [private scan] just felt a little bit more slower and he explained, 'There might be a moment I'm quiet, but I'm looking at things, and I will let you know once I know'. It was just being guided through it a lot more, and being shown things, having the opportunity to see it, because he said, 'Would you like?' so I could have said no, but he gave me that opportunity to understand it and see it and kind of get what was going on, whereas the last time it just, I didn't know really what was going on. So, yeah, it was a difference. (P-EPL-018).

3.6. Staffs' attitude or approach

Largely, women described staffs' attitudes as being dismissive or cold when discussing their pregnancy loss:

They are used to perhaps giving this information and this advice and having to share this news and perhaps sometimes if somebody has been around for a long time there could be the danger of it just becoming second nature, but what they need to remember in that moment is that it's the end of hopes and dreams for that couple or for that woman who is going through it and I think that can be forgotten. (P-EPL-001).

I have to say, that conversation I found quite difficult really because the attitude of the… I mean, she was very nice and very practical. The attitude was sort of, 'Oh well, it hasn't worked out this time'. And it kind of felt..... a little bit trivialised. (P-EPL-002).

Women recognised this matter-of-fact approach was sometimes a product of the time-pressures healthcare professionals were facing, but often mentioned it was particular individuals or certain phrases they said which had the most profound negative effects on them:

Eventually the gynaecologist came back in. It was almost 3 o'clock in the morning and I thought, 'Oh, finally I'm going to be scanned'. And she said to me, 'I've got your notes from when you had the scan at seven weeks.' I said, 'Okay? I don't know what took five hours there but okay.' And she said, 'When you ovulated last, that egg came from your left-hand ovary. But your pain is being described on your right side, so it can't be ectopic'. And I was like, 'Okay'. And she said, 'So you're just having a miscarriage, I think'. She said, 'You're not in dire straits'. That quote [sic] will live with me for the rest of my life. (P-EPL-010).

I was at the Recurrent Miscarriage Clinic at the <Hospital Name> and he literally discharged me with the words 'Just try again and one will stick eventually', and there's no empathy in that, there's no sense that you're talking to an actual human being, and that each of those losses has a real impact. I can't just keep trying again indefinitely. (P-EPL-031).

On the other hand, when particular individuals showed warmth and kindness, despite their busy schedules, women discussed the feeling of safety, being held, and as if they were not alone:

The nurses were really nice. They were really supportive. One of them came and sat down and he gave me a hug [laughs]. So, they were lovely. The actual nurses and the healthcare and stuff, they were fabulous. And the porters, everyone that was on the shop floor was brilliant. It was just the actual medical care wasn't great. (P-EPL-004).

I think the thing that stands out to me is when the midwife doing the scan said to me 'I'm really sorry but you have had a miscarriage' and then she paused and she took the time, and she put her hand on mine and said, 'look I'm really sorry'. And that was the standout moment for me, thinking that somebody actually does care here. (P-EPL-005).

3.7. Sensitive patient management

Women spoke of how healthcare professionals interacted with them when breaking the news of the pregnancy loss, and how insensitive sometimes they were:

…she started scanning and she went, 'Oh, my God, that's massive!'. That was the first thing she said. And I was like, 'What?' And she's like, 'Look, it's a massive molar pregnancy'. I was like, 'Oh, okay'. And I just thought, 'God, if I was anybody else, if I was a normal patient who didn't have any medical background, I can't imagine how somebody would have coped with that'. I just went, 'Oh, okay'. And she went, 'Oh, my God. It's massive'. I was like, 'Thanks a lot'. (P-EPL-028).

Women did comment on the fact that pregnancy loss management even prior to the pandemic had not been delivered in a particularly sensitive way, suggesting a systemic issue within the service itself, rather than as a result of the ongoing health system shock:

I don't know if COVID *impacted in terms of doctors were just so busy that they didn't have the time, but I dealt with some pretty shocking doctors before* COVID *anyway, so I think it's a miscarriage thing, not just a* COVID *thing. Anything that was…? No, and that's really sad, really, really sad that across four miscarriages, that I can't tell you that there was anything that was particularly good in that care.* (P-EPL-031).

Many women discussed the difficulty of being around antenatal and maternity wards whilst they were receiving care having lost their baby:

You can tell that a bloke has been behind designing these services. Honestly because you have got all your natal stuff, and I get it because a bloke has gone, 'Well, what we will do is we will put all of the pregnancy services together because that makes sense.' Do you know what I mean? So, not even contemplating… and I am sure you must hear this over and over again, but having to walk past people who are coming out of hospital with their brand-new babies, who are coming in clearly in labour. I cannot… it is not rocket science to separate those two types of people. I cannot believe in this day and age that is still even a thing, that people think that is fine to be in the same situation. It is literally… every day was like being retraumatised, retraumatised, retraumatised. (P-EPL-017).

Whilst many women understood the logistics of hospitals and the need for obstetric, gynaecology, and midwifery colleagues to be in a close vicinity to one another, this did not make for a very comfortable time during care:

This is a really hard one to fix but the layout of the hospital meant that we had to walk past other maternity areas, so after being told we lost our

baby we had to walk past with very, very heavily pregnant women and newborn babies, which is [laughs] not exactly what you want to do straightaway, so I don't know if… It could be something simple like if there wasn't a backroom, they could just highlight that, 'It's a more convoluted way but if you go up three floors and then along and then down three floors you will avoid all of that bit in the middle'. Maybe not for everyone. Or it might not be completely possible at all in some hospitals. But yes, that was the only thing that stuck out. (P-EPL-006).

And I think also at that time when I was in the maternity hospital waiting with what I thought was the foetus or just waiting for treatment and being surrounded by the sound of crying babies, that has really negatively affected my recovery and my ability to recover. So, I think if there was any way to really designate areas. I always think perhaps pregnant people are deified in terms of healthcare situations. And the minute you're not pregnant, you feel like you're less important. (P-EPL-022).

When thoughtful care was provided, women reported much better care experience outcomes:

They put me in a room away from any mums having live babies. So, we were in our own private room. We had our own midwife looking after us. They were so lovely. (P-EPL-011).

4. Discussion

This study builds on the work undertaken in The VESPA Study [6], evaluating EPAU services, but in the specific context of the COVID-19 pandemic health system shock. Our study demonstrates the valued and necessary services EPAUs continue to provide in our healthcare system; though service provision requires improvement. Not only did the COVID-19 pandemic prevent the implementation of the recommendations from The VESPA study – particularly around sensitive patient management and interactions between EPAU staff and women, but our findings also demonstrate women's experiences of EPAUs deteriorated during this period of health system shock. This echoed similar research undertaken during the pandemic [16,17] and speaks to the recent publication of the Pregnancy Loss Review [18], which highlighted many of the implementation issues as seen in our study. Whilst some of these deteriorations could be linked to restrictions imposed by the pandemic, a number of women acknowledged they had experienced similar issues during previous, pre-pandemic early pregnancy losses.

The women interviewed were generally very sympathetic to the extraordinary circumstances, particularly with regards to staff and resources being overstretched. Nevertheless, numerous examples were given during the interviews of instances where they felt a lack of empathy from the healthcare professionals for their early pregnancy loss, including not being given a private space after being told the diagnosis [6,17]. Dedicated gynaecology wards have increasingly been disappearing over the years being turned into more general wards as part of measures for hospitals to cut costs and cope with increasingly frequent bed crises [19]. During the pandemic, many hospitals saw dedicated wards being requisitioned as COVID-19 wards, only to remain as a more general or mixed ward afterwards [7,20,21]. The experiences of the women interviewed who were not admitted to a dedicated ward were overwhelmingly negative, describing inappropriate and unsympathetic care, lack of appropriate resources on the ward, and trying to come to terms with their loss, whilst being around patients admitted for completely different, medical reasons.

Interestingly, among women in this study who had experienced both miscarriage and ectopic pregnancy, some found the psychological recovery from the latter easier. The lack of any offer of follow-up care, information or support to seek further counselling, however, remains an urgent issue. Furthermore, the disparate nature of medical records between different healthcare services and Trusts is poorly understood by patients and was a source of frustration for the women in this study, as has been noted previously [6]. Women found having to explain everything afresh with each new encounter understandably difficult, and they valued relational care which helped build trust and reduce anxiety, making them feel like they were being cared for as known individuals.

The research benefitted from the national sampling, with women who had experienced a variety of early pregnancy complications, management, and losses; at various points during the pandemic. However, we recognise, despite efforts to recruit a more diverse population, the study is limited by the sample being predominantly White and British. Future studies should make concerted efforts to recruit from within minority ethnic communities and other communities for whom healthcare is hard to access. Women who had suffered molar pregnancy or PUL were less common in this study, although reflective of the population-based diagnoses; but the study had a higher-than-average sample of women who had suffered ectopic pregnancy. The views of partners remain an under-researched area and should be considered for future research.

5. Conclusion

In answer to our comparative aim of pre-pandemic experiences of EPAU services and the experiences of EPAU services by women who suffered an early pregnancy loss during the pandemic, we found many of the same issues with the provision of EPAU care. It is therefore evidenced that the pandemic health system shock stood as a key implementation barrier against the best practice recommendations which were put forward by The VESPA Study, and must be revisited with urgency, ensuring high-fidelity, wide-reach, and faithfully efficacious roll-out, implementation, and embedding into UK EPAU services.

Overall, women valued the medical and surgical care provided by EPAUs during the pandemic. They found the service provided efficient care, despite the wider restrictions imposed on healthcare services. However, appropriate psychological recognition and support are lacking, making women feel their early pregnancy loss is less valued than later pregnancy losses and leaving them to seek sources of support on their own. The pandemic imposed unparalleled limitations on the healthcare system and the long-term impact of these is still not yet fully known. Prioritising the implementation of recent research, government, and regulatory recommendations is crucial in ensuring women experiencing early pregnancy loss are being cared for appropriately. This should be conducted alongside those recommendations extant within The VESPA study findings, which should be realised as a priority – though may require national co-ordination and associated funding. Women suffering a pregnancy loss must receive care with due respect, and we must ensure women's experiences of early pregnancy loss services neither continues to deteriorate in the aftermath of the pandemic, nor stagnate at this all-to-often sub-optimal level.

Ethical approval and consent to participate

Ethical approvals were sought from and granted by the King's College London Health Faculties Research Ethics Sub-committee (ref:- HR/DP-21/22–28808).

Detailed patient and public involvement and engagement

This work was formed as a sub-study of The PUDDLES Study, which has looked at the experiences of late-miscarriage, stillbirth, neonatal death, and associated care during the SARS-CoV-2 Pandemic. PUDDLES is one of many UK-based studies which feeds directly into PIVOT-AL. At a meeting of PIVOT-AL in November 2021, two areas of research were identified as being unaddressed by current or ongoing pandemic-related portfolios of research: early pregnancy loss and early elective abortion care. This study was therefore devised in response to a call from PIVOT-AL for researchers to plug this lacuna.

The PUDDLES programme of work has been discussed with members

of the NIHR ARC South London Patient and Public Involvement and Engagement [PPIE] meeting for Maternity and Perinatal Mental Health Research (July 2020; June 2021), which has a focus on co-morbidities, inequalities, and maternal ethnicity; a meeting with the Chief Midwifery Officer and the Maternity Transformation Team of NHS England and NHS Improvement (July 2020), at a meeting focused on multi-morbidities and maternity safety; and an NIHR ARC South London Work in Progress Meeting (October 2020), focusing on maternity and perinatal mental health research. This work has also been discussed at PIVOT-AL national collaborative meetings (November 2021; April 2022; September 2022), a research collaborative which is leading on the national response for policy makers during the pandemic; and to NHS England and Improvement's Chief Midwifery Office (December 2021), which focused on early insights from new research on maternity services to inform service COVID-19 recovery. Further input was received PPIE members at King's College London's Department of Women & Children's Health Maternal and Perinatal Mental Health Systems & Policy Research Group Meeting (October 2021) and the Department's PPIE Group for Perinatal Bereavement, Trauma, & Loss (March, June, & October 2022).

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CRediT authorship contribution statement

Rhiannon George-Carey: Methodology, Software, Formal analysis, Investigation, Data curation, Writing – original draft, Visualization. **Maria Memtsa:** Conceptualization, Formal analysis,Investigation, Writing – original draft, Supervision. **Flora E. Kent-Nye:** Conceptualization, Data curation, Writing – review & editing, Project administration. **Laura A. Magee:** Validation, Investigation, Writing – review & editing. **Munira Oza:** Resources, Writing – review & editing. **Karen Burgess:** Resources, Writing – review & editing. **Davor Jurković:** Validation, Investigation, Writing – review & editing. **Sergio A. Silverio:** Conceptualization, Methodology, Software, Validation, Formal analysis, Investigation, Resources, Data curation, Writing – original draft, Visualization, Supervision, Project administration.

Declaration of Competing Interest

None of the authors have any competing interests to declare.

Data Availability

The datasets generated and/or analysed during this study are not publicly available due to the sensitive nature of the interviews, but a de-identified dataset may be available from the corresponding author upon reasonable request.

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Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at doi:10.1016/j.wombi.2023.12.004.

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