RESEARCH ARTICLES

Identifying barriers and facilitators of full service nurse-led early medication abortion provision: qualitative findings from a Delphi study

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ABSTRACT

Objective: To explore factors that can influence implementation of a nurse-led model of care for early medication abortion provision in the primary healthcare setting of regional and rural Victoria, Australia.

Background: Global research indicates that an increased involvement of primary healthcare nurses in the delivery of early medication abortion provision has the potential to improve abortion access. In Victoria, access in regional and rural areas is restricted despite abortion being legal. A nurse-led early medication abortion provision model is feasible and can potentially improve the current situation.

Study design and methods: An online three-round classic Delphi method was used. This paper reports the qualitative findings. Non-probability sampling techniques were used to recruit a panel of professional experts. Data from the three questionnaires were collected and analysed using thematic analysis. Factors influencing model implementation were categorised into the Capability, Opportunity, Motivation-Behaviour framework.

Results: A total of 24 medical and other health professionals participated. They identified a range of factors that can hinder model implementation, including a lack of affordable medication abortion education, no remuneration for nurse-led early medication abortion provision, and concerns related to stigma and support.

Discussion and conclusion: Understanding and addressing barriers to model implementation may enable the development of primary healthcare nurses' role in the delivery of early medication abortion provision to improve abortion access.

Impact: To improve abortion access in Victoria's under-served regions, the potential of nurse-led early medication abortion provision was explored. Barriers to model implementation relate to a lack of medication abortion education and funding, professional support and stigma concerns. The study identified a range of support elements that would enable primary healthcare nurses to develop new roles and responsibilities in the delivery of medication abortion services.

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What is already known about the topic?

- Evidence indicates that appropriately trained primary healthcare nurses can provide early medication abortion and associated tasks as effectively, safely and satisfactorily as physicians.
- Nurse-led early medication abortion provision is a worldwide recognised strategy to overcome the shortage of early medication abortion providers and to improve equity in access to abortion services.
- The legal climate of Victoria allows qualified registered nurses to independently administer physician-prescribed early medication abortion drugs to women.

What this paper adds:

- The Delphi panellists of this study all endorsed nurse-led early medication abortion provision in regional and rural Victoria and beyond.
- The study provides a range of model implementation barriers, which are categorised into the components of the Capability, Opportunity, and Motivation Model of Behaviour. Those barriers need to be challenged and addressed to improve abortion access in underserved regions.

Key words: Nurse-led model, medication abortion, barriers, Delphi, general practice, Victoria

INTRODUCTION

A lack of skilled abortion providers, particularly in regional and rural areas, is globally one of the most critical barriers for women accessing safe abortion services.[1] Using medication rather than surgical abortion methods, the pool of abortion service providers can potentially be expanded, in particular within the primary healthcare (PHC) sector.[2] However, in Australia, where medication abortion has been available since 2012 for abortions up to 63 days' gestation, the uptake of medication abortion provision among regional and rural general practitioners (GP) remains low.[3]

BACKGROUND

In Australia, most abortions are costly and provided in metropolitan-located private practices, which limits the access to abortion services for women residing in regional and rural areas.[3] The provision of medication abortion in the PHC setting within the legal gestational timeframe of 63 days could improve this situation. The early medication abortion (EMA) process consists of a combination of mifepristone (200 mg) taken at a clinic, and misoprostol (800 mcg) taken 36–48 hours later at home. While EMA has been widely available in Australia since 2012, to date, only a small number of regional and rural GPs are certified prescribers.[3,4]

One acceptable and achievable solution for the delivery of safe EMA care in the PHC sector is the practice of task shifting and task sharing.[1] Increasing the tasks of associate health workers in the EMA provision process not only addresses the shortage of EMA providing GPs and the multi-phase, time-consuming aspect of the EMA process, but also removes the need for women to travel long distances to specialised abortion clinics.[1] This public health strategy is endorsed by the World Health Organization[1] and currently applied in a number of countries.[5,6] Evidence indicates that appropriately trained healthcare workers can provide EMA and associated tasks as effectively, safely and satisfactorily as physicians.[1,7]

In the last few decades, due to the ageing population and the growing burden of chronic and complex diseases, the workforce size, as well as the role of the Australian general practice nurse, has gradually evolved.[8,9] Australian PHC nurses have proven to be capable of making autonomous decisions and delivering equitable PHC services.[10] Therefore, moving towards nurse-led models, especially in service-poor areas, has the potential to improve health outcomes and increase access to PHC services.[1,11] Nurses working in Australian general practice are usually either 'enrolled nurses', trained for 18–24 months at certificate or diploma level, or 'registered nurses', with a three-year Bachelor degree.[12] While enrolled nurses are responsible and accountable for their own practice, they need to work under the direction and supervision of a registered nurse at all times.[13] The registered nurse can provide care independently and not solely on behalf of the GP.[13]

In this paper, we will use the overarching term 'primary healthcare registered nurse' (PHCRN), which refers to registered nurses working in any PHC setting, including general practice, and community/domiciliary/educational/occupational settings.[14] Across Australia, extended EMA provision roles of PHCRNs are restricted by jurisdictional legal requirements and regulations. Yet, within the context of Victoria, one of Australia's jurisdictions where abortion is legalised, appropriately trained PHCRNs are allowed to be independently involved with the EMA provision process.[13,15] Australian Government requirements, however, still dictate the personal attendance of a local GP for the prescription of the abortion medications and for pathology refund payments.[15,16]

EMA provision is a lengthy procedure and usually requires two or more visits to the health facility, although single consultations are also offered to Australian women who live long distances from a clinic or are close to the 63 days' gestational limit.[17–19] A previous paper reported on the

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development of a nurse-led model of EMA provision in the PHC sector of regional and rural Victoria using the Delphi methodology.[20] In this model, full-service EMA provision involves three consecutive phases: 1) Assessment of EMA eligibility; 2) Medication administration and management; and 3) Management abortion complications, process, and after-care.[1,20,21] Table 1 presents the three phases including all tasks involved in full-service nurse-led EMA provision.

TABLE 1: TASKS OF PHCRNS IN A FULL-SERVICE NURSE-LED EMA PROVISION MODEL†,20

1st phase: Assessment of EMA eligibility
Non-directive pregnancy counselling‡
Medical and physical assessment EMA eligibility
Provision of blood test and ultrasound referrals§ for pregnancy dating, assessment blood group, rhesus status and co-morbidities
2nd phase: Medication administration and management
Assessment of blood test and ultrasound
If eligible: prescription EMA§
Administration mifepristone
Provision of procedure instructions
Management prophylactic pain medication
Discussion contraception options
3rd phase: Management abortion complications, process, and after-care
Management non-life-threatening complications
Assessment completion abortion
Carry out contraception plan‡
Provision of emotional support‡

Note: †The different phases can be delivered in up to three face-to-face contacts with the abortion requesting person. ‡Provided only if required. §Currently, in Victoria, pathology referrals and EMA scripts need to be provided by GPs to allow women to receive healthcare rebates and to comply with current legal requirements.

To date there has been only one Australian study that has explored nurses' role in the provision of EMA in regional and rural Victoria, where abortion access, despite abortion reform, remains limited.[23] The present paper aimed to add to the literature by reporting the qualitative findings of a previous Delphi study,[22] which relate to the barriers and enablers of nurse-led EMA provision model implementation. To underpin the identified factors with a theoretical understanding, we used Michie, Van Stralen and West's Capability, Opportunity and Motivation-Behaviour (COM-B) model.[24] This model was developed to determine what behavioural patterns need to change and ultimately, what intervention strategies are required to implement evidence-based practice in healthcare settings effectively.

METHODS

AIM

This study aimed to explore Delphi panellists' views on the factors that can influence implementation of a nurse-led model of care for EMA provision in the PHC setting of regional and rural Victoria, Australia.

METHODOLOGY

We used a three-round Delphi study to build consensus among professional experts about the development and implementation of a nurse-led model of EMA provision in the PHC setting of regional and rural Victoria. Round one employed a qualitative design to acquire a broad range of opinions on the topic. The two subsequent rounds used a quantitative design to establish agreement levels in Round 1 generated statements, as well as open-ended questions to add depth to the information gained from the ratings.[25] Feedback on agreement levels was provided to the panellists between rounds, which allowed the panellists to acquire additional insight and to reconsider their initial opinions.[26] Consensus on a statement was reached when 75% or more of the panellists agreed.[27] This paper examines the study's qualitative findings relating to the barriers and facilitators of nurse-led EMA provision model implementation.

PARTICIPANTS

Ideally, a Delphi panel consists of a range of professionals who have knowledge of and experience with the specific topic, and the motivation and time to participate.[28] The professionals in our study needed to be either: physicians (GPs or gynaecologists/obstetricians); registered nurses working in general practice, community- or sexual/reproductive health, academia or for a professional organisation; or 'others', including academics, politicians and health promotion officers without a medical background. This study used non-probability sampling, including snowballing techniques, to recruit the panel of professional 'experts'. Potential panellists were located and invited via internet searches and via expressions of interest from a prior study.[22] Additional invitations to participate were published on the social media platforms of professional nursing organisations, women's health agencies, and regionally and rurally located Primary Health Networks.

INSTRUMENT AND DATA COLLECTION

The Round One Delphi questionnaire consisted of demographic characteristics and seven open-ended questions, which were developed by the researcher, informed by a literature review.[30,31] Questions related to the current and future involvement of GPs and PHCRNs in the provision of EMA in regional/rural Victoria, and the barriers and solutions of nurse-led EMA provision in this setting. The responses to the open-ended questions were transformed into statements

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and rated for agreement in the following rounds to establish consensus. At the same time, panellists were able to provide explanatory remarks.

To minimise researcher bias and comprehension errors, the first-round questionnaire was pre-tested with a convenience sample of seven experts. They were asked to provide feedback on the language and phrasing of the items, on the instructions provided, and on any encountered technical problem.[32] The Delphi instruments of Round Two and Three were checked for grammar, sentence structure and technical issues by a small group of known contacts of the research team with research process and editing experience. Data were collected using the web-based software Qualtrics.[33]

ETHICAL CONSIDERATIONS

The study was approved by the Human Research Ethics Committee of Deakin University (nr: 2015–314). In line with Deakin University's ethical conditions, informed consent was obtained from all panellists and data privacy and confidentiality were maintained throughout the study.

Data analysis

This paper focuses on the qualitative data obtained from the Delphi panel responses to the seven open-ended questions of Round One and the open-ended questions of Round Two and Three. The first author read the responses multiple times to familiarise with the data and to identify the reported wide range of barriers and facilitators to nurse-led model implementation. Next, in continuous consultation with the other authors, deductive thematic analysis was used to categorise identified factors into the three main components of Michie et al.'s theoretical model: Capability (psychological and physical): the knowledge, skills and self-efficacy to engage in the behaviour (EMA provision); Opportunity: the outside factors that make the behaviour possible (environmental and social); and Motivation: the brain processes that direct our decisions (automatic and reflective).[24, 34] The categorised data were imported into NVIVO 12 and assessed for similar content to allow further amalgamation into subthemes.[35] Representative verbatim quotations within each component of the model were identified and anonymised, and assigned with a unique code in brackets, relating to expert group, panellist number and Delphi Round.

RESULTS

Twenty-four panellists participated in the three-round Delphi study, consisting of 10 (44%) nurses, seven (30%) physicians, and seven (26%) professionals belonging to the 'other' group. Most (n=17; 74%) panellists worked in a regional or rural location. Three panel members only participated in Round One, two only in Round One and Two, one panel member skipped Round Two, and one entered the study in Round Two (Figure 1).

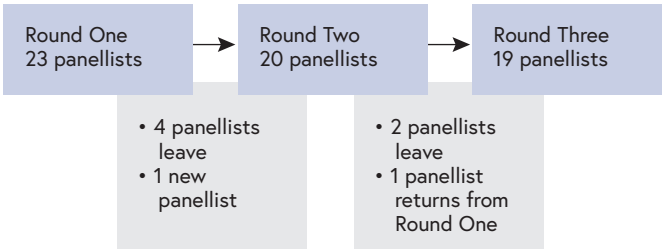

FIGURE 1: PANELLIST ATTRITION OVER THREE DELPHI ROUNDS

Figure 2 shows the results of the deductive content analysis applied to the qualitative data. Responses related to the barriers and facilitators of nurse-led EMA model implementation were categorised into each of the three main components of the COM-B framework. They are discussed in the following sections.

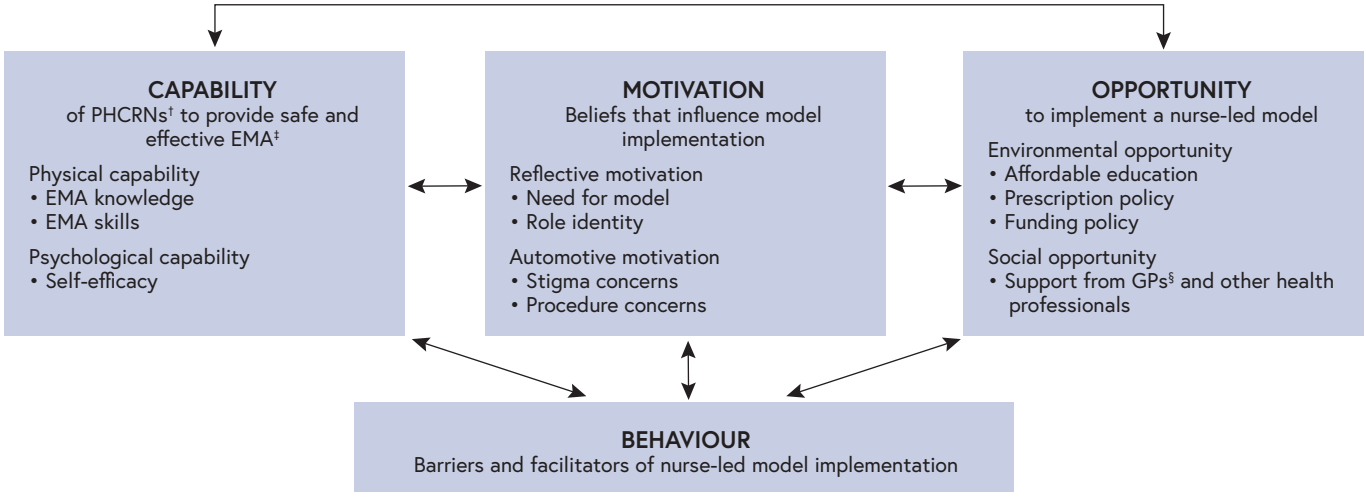

FIGURE 2: COM-B FRAMEWORK APPLIED TO THE BARRIERS AND FACILITATORS ASSOCIATED WITH NURSE-LED EMA MODEL IMPLEMENTATION

Source: Michie, Van Stralen, West[24]. Note: † Primary healthcare Registered Nurses; ‡ Early medication abortion; § General Practitioners

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CAPABILITY

The physical and psychological capability of PHCRNs to engage in EMA provision is the first of the three components of the COM-B framework that may influence model implementation.[24] Physical capability relates to EMA knowledge and to the skills required for safe and effective EMA provision. Overall, panellists indicated that many PHCRNs lack in medication abortion knowledge and that they perceived PHCRN's interest in EMA provision training as low. However, it was believed that PHCRNs are extremely well placed to develop professional relationships with women visiting general practice. These views are illustrated in the following quote:

> *PHCNs* [primary healthcare nurses] *have excellent skills generally in having challenging conversations about difficult topics, have more time to discuss the wellbeing of the patient and provide a more empathetic ear to listen to a woman's concern. We also know patients are more likely to disclose sensitive issues to a nurse than a doctor… PHCNs are also very well connected and aware of the resources/clinics/supports available locally to refer the woman to.* (Nurse 6, Round 1)

Further, PHCRNs were regarded as being able to independently provide, if required, non-directive pregnancy support counselling and to rule out EMA contra-indications with the use of a patient history, a physical examination, the assessment of comorbidities, and pathology tests. Additionally, panellists believed that PHCRNs can autonomously handle the tasks involved in the second and third phase of the EMA provision process, including the interpretation of ultrasounds and blood test results; the administration of mifepristone; the assessment of abortion completion; and, when required, the management of post-abortion contraception:

> *Nurses can be trained to provide all steps of MTOP* [medical termination of pregnancy] *independently.* (Physician 7, Round 3)

> *If there is trust between the GP and the nurse, full control shouldn't be an issue.* (Other 2, Round 3)

Panellists, however, had varied views about the PHCRN's capability to be responsible for non-life-threatening EMA complications. It was suggested by some that complications should be discussed with a physician:

> *All of these* [tasks] *can be done by a nurse, but if it were me I'd like to be able to confer with a Dr, especially re infections/ haemorrhage.* (Nurse 8, Round 3)

Others advised that, if appropriately trained, PHCRNs should be able to manage non-life-threatening complications alone, for instance with the help of 'protocols' (Physician 7, Round 3), and that only if required, a consultation or referral needs to be organised. Panellists considered, though, that in more isolated rural areas independent management of post-abortion complications by PHCRNs could be problematic.

Overall, it was reported that more evidence-based practice research is required to demonstrate the quality, effectiveness and safety of nurse-led EMA provision, as highlighted in the following quotes:

> *Continue to challenge traditional nursing duty 'norms' and ensure stringent use of evidence, best practice and regulation as boundaries to practice scope are shifted.* (Nurse 7, Round 2)

> *Having a quality aspect to data collection, such as that used by VCS* [Victorian Cytology Service] *for nurse led cervical screening, is vital to ensure a good service.* (Nurse 1, Round 2)

While panellists approved and supported the fact that PHCRNs have the physical capacity to deliver MA, different views were expressed regarding PHCRNs' psychological capability, including their self-efficacy. Self-efficacy is regarded as an important factor for the improvement of nurses' practice behaviour, as without a full understanding of their possibilities and skills and the belief that they are competent to execute those skills, nurses may not work to their full potential.[36] All panellists therefore highlighted the importance of additional professional development and training to improve PHCRNs' confidence regarding most of the tasks involved with EMA provision. Currently, however, EMA training options for PHCRNs seem to be limited, as illustrated in the following quote:

> *There is very limited training available for nurses re. providing MTOP, all the clinical training up to date is for GPs.* (Nurse 4, Round 2)

Although all the essential clinical competencies to provide EMA are embedded in the scope of PHCRNs' practice, panellists considered that besides appropriate education to develop knowledge and skills, initial guidance from a practice GP will be essential:

> *In the first little while after training, there may need to be more GP assistance, however after a while this should be just up to the nurse.* (Other 2, Round 2)

Panellists additionally commented on the importance of empowerment and endorsement for the development of the PHCRN's self-efficacy beliefs. Empowerment and endorsement is not only required from other health practitioners, but also from their colleagues:

> *… nurses are resourceful, connected, caring individuals who operate naturally within an interdisciplinary team. They are often unaware of their potential role and scope though and self-limit their professional development unnecessarily. Leadership, mentors and encouragement is needed. 'Endorsement' by their medical colleagues is vital too…* (Nurse 6, Round 1)

MOTIVATION

Motivation, the next component of the COM-B framework, is another key factor in the implementation of nurse-led EMA provision. Motivation, influenced by beliefs and concerns, is,

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according to the panellists, closely related to the capability of PHCRNs and the opportunities offered through support systems and funding. In terms of reflective motivation, all panellists believed in the need for nurse-led EMA provision to improve abortion access for women residing in regional and rural Victoria.

> *Appropriately trained PHC nurse-led provision of MA* [EMA], *including authority to prescribe, is the preferred model to significantly improve access to non-directive pregnancy choices counselling AND abortion services in rural areas.* (Other 3, Round 2)

However, panellists indicated that the current role identity of PHCRNs in general practice as EMA providers was still limited, and that to motivate them, more affordable and accessible professional education was essential in combination with financial incentives, as discussed in the opportunity component section.

Often mentioned automatic motivational barriers to EMA provision in regional and rural communities were the anticipation of abortion stigma and the fear of moral judgement and harassment. Panellists' concerns related to the opinions of colleagues, family, friends, and members of conservative communities as well as the fear of negative publicity and personal vilification if PHCRNs were to provide EMA services. These concerns are illustrated in the following quotes:

> *Small town mentality – some nurses would be afraid of community backlash.* (Nurse 5, Round 1)

> *While there is some concern about colleagues' response and judgement, I think it's more about community backlash and how friends and family might view them.* (Physician 7, Round 3)

Panellists reported that the motivation for nurse-led EMA provision was also influenced by procedure concerns regarding the potential lack of after-hours care and local access to surgical back-up in the case of EMA complications for women who go through a medication abortion in service poor areas. One panellist summarised these automatic motivational concerns as follows:

> *Think while time and workload are an issue, not as big as fear of stigma and uncertainty about management of complications.* (Physician 7, Round 1)

OPPORTUNITY

Implementation of a nurse-led EMA model not only depends on the capability and motivation of PHCRNs, but also on opportunity, established by environmental and social support factors that lie outside the control of the individual.[24] One major element of environmental opportunity relates to the current funding arrangement of nurse-led EMA provision. There is no specific remuneration for the time that PHCRNs spend on EMA-related services, and GP involvement therefore remains necessary to enable payment for the delivery of this service, as illustrated below:

> *Funding* [is required] – *either direct funding for nurses to provide the service or for the primary health clinics to enable the employment of nurses.* (Other 4, Round 1)

> *Unless there are financial incentives for the clinic it is hard to imagine how the service will be implemented.* (Nurse 4, Round 2)

An additional environmental opportunity factor to model implementation is to make affordable EMA education and training available for PHCRNs, either through specific funding programs or in the form of scholarships. Panellists also believed that general practices need to "be remunerated for the time when nurses attend the education" (Nurse 5, Round 1). These considerations are reflected in the following two quotes:

> *We know that a significant limitation for nurses expanding their scope is the cost of education – so if education is to be made available for them, there has to be financial support for the nurses to attend (e.g. scholarships).* (Nurse 6, Round 1)

> *Incentives for rural and regional private and community healthcare providers to up skill primary healthcare nurses to assist in the provision of medication abortion.* (Other 3, Round 2)

Some panellists favoured a scenario in which PHCRNs become fully responsible for the EMA process. This scenario, however, requires another environmental opportunity, namely that the current prescription policy in Australia needs to be addressed, as encapsulated in the quote below:

> *If nurses were able to prescribe they could be trained to provide the treatment autonomously.* (Physician 7, Round 3)

A key social opportunity factor, as reported by the panellists, is the cooperation and support of GPs for PHCRNs that want to become involved with the provision of EMA services. Indeed, GPs without an interest in women's health are not likely to engage in EMA provision, and would therefore not approve of their PHCRNs providing this service:

> *… if doctors aren't interested in providing MTOP services and the nurses in the practice have little influence on the services that are provided then…it is hard to imagine how the service will be implemented into those clinics.* (Nurse 4, Round 2)

> *As nurses are employed by GPs and are required to work within their job descriptions and practice protocols, nurses could only provide this service with approval. Nurses can be dismissed easily from a small business and you cannot insist a GP in private practice allows his employees to provide certain services.* (Nurse 5, Round 2)

Some panellists raised concerns about the lack of support from other health professionals and professional bodies, influenced by religious, ethical and personal principles. This

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concern, potentially affecting opportunity, was expressed by one participant as follows:

> *Conscientious objection to abortion by individual GPs, board members or other allied health professionals working in rural and regional healthcare settings can greatly hinder provision of the service in the first place.* (Other 3, Round 1)

DISCUSSION

Over the last few decades, facilitated by government funded incentive programs, the number of nurses working in Australian general practice has increased and their role has gradually evolved.[37] Currently, the involvement of PHCRNs in care functions such as chronic disease management and smoking cessation interventions is a nation-wide accepted and supported public health strategy to improve health outcomes.[38–40] PHCRNs are also particularly well placed to deliver EMA, especially in Victoria where abortion is legalised but abortion access in underserved regions is still limited.[15] In this qualitative paper, which is part of a larger study,[40] we used the COM-B framework for a comprehensive behavioural analysis of the barriers and facilitators influencing nurse-led EMA provision implementation in the PHC setting of regional and rural Victoria. The framework helped to recognise the factors that need to change and the interventions that are most likely to be effective.

All panellist groups considered the lack of nurse EMA training, funding, support and stigma concerns to be most influential. These findings are in line with research from the US and Australia, and have been shown to be the main reason for the shortage of abortion providers in settings where abortion is legal.[2,3] A lack of EMA training options affecting the physical capability of PHCRNs to provide EMA is related to an online training model; which, although compulsory in Australia, is available to physicians only.[3] While there are multiple additional training programs and guidelines available for GPs, only a few are also accessible and suitable for PHCRNs.[42,43] Training, though, is critical, as it not only prepares health professionals for new roles, but also builds self-efficacy beliefs.[1] Effective interventions, established for example via the Victorian State Government in partnership with PHC networks, should therefore focus on the provision of affordable and accessible EMA development and training programs for PHCRNs working in regional and rural Victoria.[40] To considerably improve PHCRN uptake of EMA provision, it is additionally recommended to incorporate EMA provision training into the curricula of nurses, as well as in all other sexual and reproductive health courses for PHCRNs (and GPs).[44] Early education and exposure with abortion care will most likely result in accepting abortion provision as being part of the PHCRNs' scope of practice.[6]

To increase environmental opportunities, panellists suggested that incentives (such as scholarships) and remuneration for practices with PHCRNs attending EMA courses need to be offered. As in similar studies,[39,45] the current lack of appropriate funding for nurse-led EMA provision was recognised as a major barrier for model implementation. PHCRNs are not encouraged to autonomously provide specific services as practice remuneration will only occur if patients are seen by a GP.[46] Moreover, the private small business model of Australian general practices, with the GP being the PHCRN's employer, dictates that the nurse is required to work according to the GPs personal preferences and to generate a sustainable income.[38,46] This barrier implicates that alternative funding models should be considered to facilitate independent reimbursement for EMA services delivered by PHCRNs and to improve workplace collaboration. Legislation change, to allow abortion medication prescription by trained registered nurses, also linked to the environmental opportunity component, is required for the implementation of a fully autonomous nurse-led EMA provision model. Alternative solutions, such as the onsite storage of abortion medication, which allows PHCRNs to solitarily handle the medication according to physician's instructions, or the development of shared care models with telemedicine providers, will also give PHCRNs a more autonomous role in the EMA provision process. Another option is to grant PHCRNs a designated prescriber status, which allows them to prescribe independently, albeit under the supervision of a GP.[47,48]

Findings in relation to social opportunities indicate that successful implementation of a nurse-led EMA model not only depends on the unconditional support and approval of practice GPs, whose involvement with EMA provision is currently a prerequisite for nurse-led EMA provision, but also on the support of all involved key stakeholders on the supply-side of the service, which include educational and professional peak bodies and the Government. In the absence of an EMA-supportive GP, the PHCRN can potentially autonomously arrange, if required, eligibility-assessing pathology tests and ultrasound scans, and adequate referral to an offsite EMA provider. This practice would not only speed up the EMA process but also bypass any obstructions to referrals.[20] Support can also improve with the help of a growing body of evidence-based research on nurse-led EMA provision, evaluating effectiveness and validating the role of PHCRNs.

Consistent with previous research,[3,29] this study suggests that the ongoing stigma that surrounds abortion provision, as well as practice restrictions imposed by ideologically opposed colleagues, do influence health practitioners in their decision to provide abortion care. These factors, affecting automatic motivation and social opportunity, are specifically evident in Australia's rural and regional communities where sexual and reproductive health, including abortion, is still a highly contentious topic.[49] While negative opinions around abortion, influenced by religious and ethical beliefs, may never totally disappear, educational interventions to build

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community and professional abortion knowledge can potentially decrease negative attitudes towards abortion.[50] Likewise, mechanisms need to be put in place to guarantee ongoing support and protection for EMA providers against community backlash, harassment and legal actions.

STRENGTHS AND LIMITATIONS

Discussions around the rigour of Delphi studies and the influence of bias are ongoing, especially since there is no guarantee that similar results will be obtained by a different panel of experts.[25] However, all steps were taken to ensure the results were as reliable and valid as possible given the limitations of the Delphi technique. Two characteristics of the classic Delphi approach enhanced the reliability of this study. The first relates to the anonymity of the panellists, which reduces disadvantages associated with other group communication methods, such as manipulation or intimidation to approve a particular standpoint.[26] The second characteristic is the provision of controlled feedback on agreement levels and on the results of previous rounds in the form of a structured summary. This process minimises group pressure toward conformity and allows for more comprehensively formulated individual responses.[26] The validity of the Delphi questionnaires was improved not only by conducting pre-tests prior to data collection to identify content ambiguities and technical problems, but also by ensuring a sufficiently large enough sample of a heterogeneous group of abortion experts.[51] The rigour of the deductive content analysis of the qualitative data mapped to the COM-B framework was further enhanced by the ongoing discussions among the research team.[52]

While the selection of panellists was undertaken with considerable care and the sample size was considered adequate for a Delphi study,[26] it cannot be assumed that the views of the participating experts involved resembled the views of those not participating. Furthermore, the study was undertaken in only one jurisdiction of Australia, which may limit the transferability and applicability of the findings to other settings.

CONCLUSION

A nurse-led model of EMA provision is a feasible way to improve access to equitable, affordable and safe abortion services for women residing in underserved areas. This study, however, identified that the lack of funding, affordable training opportunities, the lack of support and endorsement from other health professionals, and concerns about stigma, may deter PHCRNs from taking up EMA provision. It is only by addressing these barriers that PHCRNs can develop newly defined autonomous roles and take on new responsibilities.

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