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Maternity connect: Evaluation of an education program for rural midwives and nurses

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ABSTRACT

Background: Rural and regional health services often find it difficult to maintain their maternity service and skills of their maternity workforce and enable women to give birth close to home. The Maternity Connect Program is a professional development initiative aimed at supporting and upskilling rural and regional maternity workforces to meet their maternity population care needs.
Aim: To evaluate the Maternity Connect Program from the perspectives and experiences of participating midwives/nurses and health services.
Methods: A retrospective audit of data routinely collected as part of the Maternity Connect Program: initial needs assessments (baseline survey), and one month and six months post-placement surveys completed by participants, placement health services and base health services. The main outcome measures were: participants' (midwives and health services) level of satisfaction with the Program; and changes in midwives'/nurses' perceived level of confidence in performing key midwifery skills after participating in the program.
Results: Respondents (n = 97 midwives/nurses; n = 23 base health services; n = 4 placement health services) were satisfied with the program and there was an increase in midwives/nurses' confidence when providing specific aspects of maternity care (birthing, neonatal and postnatal). Midwives/nurses report transferring skills learnt back to their base health service.
Conclusion: The Maternity Connect Program appears to be a successful educational model for maintaining and increasing clinician confidence in rural and regional areas.

Introduction

Many women in geographically large countries such as Australia and Canada live outside of major cities and express a desire to receive pregnancy care and give birth close to home. This is supported by professional bodies such as the Society of Obstetricians and Gynaecologists of Canada which recommended in its Joint Position Paper on Rural Maternity Care that women who reside in rural and remote communities should receive high-quality maternity care as close to home as possible [1,2]. Nevertheless, rural and remote health services may not always be able to meet the needs of pregnant women. Challenges faced by health services in rural and remote areas include limited clinical exposure for midwives as a result of small services, and difficulties in providing education and continuing professional development for midwives [3].

Currently more than one in five (21.7%) births in the state of Victoria, Australia are in rural and regional areas [4]. In 2017/18, of the 50 rural health services in Victoria, more than half (n = 26, 52.0%) reported fewer than 100 births per annum and 35 (70%) reported fewer than 300 births per annum [4]. Midwives working in small rural and regional maternity services, where the overall numbers of births are low, may not be regularly exposed to the full range of clinical situations. As a result, they may not always feel confident to work across the continuum of care required to enable women and their babies to receive safe care in their community. Consequently, in order to ensure best practice and clinical care, midwives and nurses working in rural areas require opportunities to develop and maintain their clinical midwifery knowledge and skills in managing a wide range of pregnancy, birth, neonatal and postnatal situations [1,2]. Accessing training and education in health services with higher birth numbers and acuity may help midwives to feel more confident and have the skills to provide comprehensive and safe maternity care. However, opportunities for midwives working in rural and remote communities to renew and update a broad range of clinical

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skills are rare [2,3].

The Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) statement on maternity services in remote and rural communities in Australia recommends that all maternity healthcare providers should have access to continuing education and continuing practice development activities in order to maintain a well skilled rural and regional maternity workforce [5]. However, midwives practicing in rural and regional areas often face specific barriers to accessing professional development including finding time and funding to leave their community [3,6].

Rural and regional maternity services also face challenges recruiting and retaining staff. Rural midwives and nurses tend to be older than those who work in metropolitan settings, are more likely to work part-time, and have fewer opportunities for professional development [7]. More than half (55.6%) of the registered midwives in Australia are aged 50 years and over, and remote areas have the greatest proportion of midwives aged 50 and over (68.4%) [8]. Although older midwives tend to have more clinical experience, they are also closer to retirement age. The impending retirement of a considerable proportion of the current rural midwifery workforce is likely to result in a decline in the number of registered and experienced midwives and workforce shortages [9].

The introduction of 'recency of practice' standards in Australia means that midwives must be actively working in midwifery to maintain their registration [10] and as a result, there has been a large decrease (21.2%) in the number of registered midwives between 2011 and 2015 [8]. The overall supply of midwives also varies by geographical area with fewer midwives in regional and remote areas compared to metropolitan areas [8]. Further, professional registration for midwives and nurses now mandates 20 h per year of formal continuing professional development directly relevant to the context of practice for each registration [11].

Without structured education and training programs, health professionals can find it difficult to remain up-to-date with knowledge and skills [12,13]. Other benefits for participants of such programs include increased confidence, enhanced career opportunities, a sense of achievement, and personal development, as well as the exchange of ideas and enhanced relationships with colleagues [12,14–16].

The Maternity Connect Program (MCP) is a government funded professional development program, which aims to upskill the rural and regional maternity workforce across Victoria. The Program was established in 2012 by the Victorian Government Department of Health and Human Services (DHHS) to address concerns relating to the sustainability of rural and regional maternity services and retention of their midwives, and support these services to effectively and innovatively meet their maternity population needs. The program complements a number of other government strategies that aim to ensure the maintenance of an experienced and skilled rural health workforce for local maternity services, in order to facilitate ongoing positive outcomes for mothers and babies in rural and regional Victoria. Western Health is a large metropolitan health service in Melbourne that currently operates the program on behalf of the DHHS.

A key role of the program is to assist midwives/nurses in rural and regional health services to develop and maintain their clinical skills, thus supporting the sustainability of the maternity services and enabling women to access these services close to home. The program provides rural and regional midwives with the opportunity to enhance their skills and confidence in maternity and neonatal care through exposure to, and placement, in services with higher birth numbers and acuity. The program uses a clinical placement approach to meet the learning objectives of the midwife/nurse and the health service; midwives/nurses are provided with the opportunity to undertake a supervised work placement in a health service, typically in a metropolitan area, which has higher birth numbers and acuity than the one they currently work in. A preceptorship model is used to supervise the placement, which is typically for a continuous period of 5–10 days, and assess the practice of the individual midwife/nurse. The program length for each individual midwife/nurse takes into account their learning objectives and the needs and preferences of their base and placement health services. The program provides midwives/nurses with the opportunity to develop and/or maintain the skills, confidence and competencies required to continue delivering quality maternity care locally. The placements where possible follow the referral pathway of the women that the service delivers care to.

The objective of this project was to evaluate the Maternity Connect Program from the perspectives and experiences of participating midwives/nurses and health services. The evaluation had two main aims:

1. To assess participant (midwife/nurse and health service) satisfaction with the program.
2. To determine the impact of the program on midwives/nurses' perceived level of confidence in providing maternity care.

Methods

Study design

A retrospective audit of data routinely collected as part of the Maternity Connect Program. Midwife/nurse participants completed an initial needs assessments (baseline survey), and one month and six months post-placement surveys assessing confidence and satisfaction; and placement health services (the health service where the midwife/nurse undertook her clinical placement) and base health services (the health service where the midwife/nurse usually works) completed one month post-placement surveys.

The program

MCP is a non-mandatory professional development program operated by Western Health. A program manager, based at a large, metropolitan health service in Melbourne, manages the Program. The MCP works with the 'placement' health services to identify the clinical placements available for the subsequent calendar year. MCP placement opportunities are advertised on the MCP webpage, with an online calendar allowing 'base' health services to manage the release of their maternity staff up to 12 months in advance. The MCP team organises payment of participants' wages, clinical facilitation fees, accommodation, and travel allowances. Midwives/nurses either volunteer to participate in the program or are encouraged to participate by their health service manager. The program provides placement opportunities in midwifery and special care nursery, including birthing, postnatal and neonatal care. All rural and regional midwives as well as nurses working in special care nurseries are eligible to participate.

Each participant attends the program on average for 40 h (5–10 days). The participant and the base health service work together to identify relevant learning objectives. Each participant is assigned a mentor and a midwifery educator at the placement health service who develop an individualised program for them and assist them to achieve their learning objectives. The placements are supernumerary so that participants can maximise their clinical experience and meet their learning objectives. Further details about the program are outlined in Fig. 1.

In Victoria each maternity service is assessed by the Department of Health and Human Services and assigned a capability level ranging from level 1 (non-birthing health service with maternity care aspects) to level 6 (tertiary health service). Most rural base health services that participate in the Maternity Connect Program have a capability level of between 2 and 4; on average they have 655 births per year. Participating regional base health services have on average 2,376 births per year and are assessed as having maternity capability level 5 [17,18].

Sample and recruitment

From January 2018 to February 2019, 97 midwives/nurses from 29

Time Period	Program activity
Pre-program	• Midwife/nurse applies to participate in program in consultation with their manager at their base health service. • Midwife/nurse completes pre-placement paperwork/arrangements. • Midwife/nurse identifies personal learning objectives. • Midwife/nurse completes baseline evaluation survey.
Day 1-5 of program	• Midwife/nurse meets with midwifery educator at placement health service and receives a brief ward and health service orientation. • Midwife/nurse undertakes clinical placement in identified area working under the supervision of a senior mentor. • Program participants work within their full scope of practice whilst on placement. They may undertake tasks/skills that they have not performed before or recently. • Program participants may engage in local education activities that are provided to other midwives at the placement health service.
Post-program	• Midwife/nurse returns to base health service. • Midwife/nurse implements program learnings where appropriate/possible. • Midwife/nurse completes post-placement evaluation surveys (1 and 6 months post-placement).

Fig. 1. The maternity connect program.

base health services in Victoria, Australia, participated in the Maternity Connect Program and completed a placement. Five metropolitan health services and six regional health services provided placement opportunities.

Inclusion criteria: All midwives/nurses, placement and base health services who participated in the Maternity Connect Program between January 2018 and February 2019 were invited to complete the baseline and evaluation surveys.

Measures

Data were collected by pre-post online surveys hosted on SurveyMonkey, an online software survey tool. Quantitative and qualitative data were collected prior to participation to assess midwife/nurse self-reported current levels of confidence in specialized maternity care skills such as antenatal/birthing, postnatal and neonatal care. Data were then collected at one and six months post placement to assess improvement in confidence levels, satisfaction with the program, and process and learning outcomes. Representatives of base health services (usually a midwifery educator or manager) completed a survey at one month post placement to determine if changes had been made at a system level. Placement health services (training providers) were surveyed at one month post participation in the program to report on their experiences. Base and placement health services were asked to respond to the survey in relation to the midwives/nurses who had participated in the program in the previous 3 months (base and placement health services did not complete an individual survey for each midwife/nurse who participated).

The main outcome measures were: participants' (midwives and health services) level of satisfaction with the Program; and midwives' perceived level of confidence in performing key midwifery skills after participating in the program.

All survey items were developed by the Program manager in consultation with midwifery experts such as clinical midwives, midwifery educators, research midwives and academic midwives.

Health services surveys

The base health services (from which the midwives/nurses originate) survey assessed:

- The extent to which participating midwives/nurses had a positive experience, and used and shared what they had learnt on their return.
- The extent to which the placement was beneficial in improving relationships in their region; provided the right skills for their health service; improved midwives'/nurses' skills, knowledge and confidence and was perceived to facilitate a sustainable workforce for the future.

The placement health services survey (in which the nurses/midwives undertook their placements) assessed the extent to which:

- Midwives/nurses were perceived as prepared for their clinical placement, enthusiastic and willing to learn and appropriately skilled for their level.
- The appropriate orientation and support was provided for nurses and midwives throughout the placement.
- The health service perceived that they understood what was required of them and that the clinical support partnership was working effectively.

Health services (both base and placement) rated their level of agreement to the survey items using a 4-point Likert scale ('strongly disagree' to 'strongly agree').

Space was provided in the surveys for respondents to make free text comments.

Midwives/nurses surveys

The midwife/nurse baseline survey assessed current work role, hours worked, qualifications; topics on which participants had attended training in the past two years; and preferences for areas in which to upskill.

The one-month post-participation survey assessed:

- the extent to which midwives/nurses had felt prepared for, and/or apprehensive about, placement;
- their experiences of orientation and support received while on placement;
- the extent to which they felt they had achieved their learning objectives, experienced any challenges during placement; and had the opportunity to practice their skills on return to their health services;
- participants' perceived confidence in transferring antenatal, birthing or postnatal women to the health service where they attended clinical placement.

All surveys (baseline, one and six month) assessed confidence in: performing specific aspects of pregnancy care; applying specific skills during labour and birth situations and assisting medical staff with specific procedures in these situations; and providing aspects of postnatal and neonatal care, and assessment and advice at discharge. Midwives/nurses rated their confidence in these various skills on a 4-point Likert scale ('not confident' to 'very confident). The surveys are available as supplementary material.

Data management and analysis

Descriptive statistics were used to describe and summarise all study variables including base and placement health services' and midwives'/nurses' perceptions, experiences and satisfaction with the Maternity Connect Program.

Agreement ratings from health services were recoded to binary variables: 'disagree' (strongly disagree and disagree) versus 'agree' (strongly agree and agree).

Nurses'/midwives' confidence ratings were recoded to binary responses: 'not confident' (not confident and some confidence) versus 'confident' (confident and very confident). Data were compared across the three time points: baseline, 1-month and 6-month post-placement.

Quantitative data analysis was conducted using IBM SPSS Statistics v25.

Content (conceptual) analysis was conducted for the free-text comments [19] in order to analyse the presence and meanings of certain themes or concepts identified in the free-text comments. The findings have been used to complement the quantitative data [20] and quotes have been used in the text to illustrate the findings.

Ethics

The study was approved by the Western Health LOW RISK ethics panel (QA2019.51) and Western Health LOW RISK ethics panel (2019–48). This was a quality assurance project and data were collected routinely. Completion of the evaluation surveys was taken as implied consent.

Results

Base health services

There were 27 responses from 23 base health services to the survey sent one month after midwives/nurses had completed their placement (four health services completed more than one survey due to multiple placements over the study time period).

The base health services described mostly positive experiences of midwives/nurses participating in the program. However, difficulties with rostering and covering the shifts of the participating midwives/nurses were reported. These difficulties were easier to overcome when only one midwife/nurse participated in the program at a time, and when the health services reported that the program funding assisted with 'backfilling' the roster with casual/agency/bank staff.

> *"It was hard to cover the shifts and that is the only drawback with sending staff on this program. Other staff did extra shifts to cover the roster."*
> *"It helped that there was only one nurse on placement at a time. This made it easier to roster around the missing nurse."*

Most base health services reported that the program was beneficial as the participating midwives/nurses reported positive experiences (n = 26, 96.3%); consolidated and expanded their practice (n = 26, 96.3%); and shared their new skills and knowledge with others on their return to their health service (n = 25, 92.6%).

The base health services identified a number of benefits of the program including: improved relationships and clinical referral pathways within their region (n = 26, 96.3%); increased clinician confidence (n = 27, 100%); retention of staff who may have otherwise left the health service (n = 25, 92.6%); upskilling of staff in certain clinical areas (n = 27, 100%); and providing a viable option for further supported learning after postgraduate studies.

> *"Invaluable training opportunities for rural midwives."*
> *"This [program] has had a fantastic impact on our service. Not only has it assisted with up skilling midwives, but it has opened their minds to different ways of working within our profession for midwives that have possibly not worked anywhere else."*

Placement health services

Of the 11 placement health services, four responded to the survey sent one month after the midwife/nurse had completed their placement.

Overall, the placement health services reported that the program participants were enthusiastic and appreciated the learning opportunities. Midwife/nurse orientation in the placement health services was provided by educators (n = 2), clinical support partner (n = 1), or midwives/nurses (n = 1). An educator met with most midwives/nurses (n = 3) every shift to ensure that their learning needs were being achieved.

> *"[Participant] was very enthusiastic and grateful for all learning opportunities provided to her throughout her placement."*

Most placement health services (n = 3) reported that the clinical support partnership worked effectively. The placement health services stated that they discussed the participants' learning needs with them and made appropriate roster changes if required. The placement health services reported that the participating midwives/nurses: had formulated their learning objectives (n = 3, 75.0%); had read the orientation information that had been sent prior to placement (n = 3, 75.0%); understood their role as a midwife/nurse in a different organisation (n = 3, 75.0%); were enthusiastic and willing to learn (n = 3, 75.0%); achieved their learning objectives (n = 3, 75.0%); performed at a competent level for their years of experience (n = 4, 100%); required considerable time to feel comfortable with the new environment (n = 3, 75.0%); and understood the requirements for clinical placement prior, during and following their placement (n = 3, 75.0%).

Midwife/nurse participants

Of the 97 midwives/nurses who participated in the Maternity Connect program from January 2018 to February 2019, all completed the initial survey before their placement. Of these, less than half completed the one month (n = 37, 38.1%) and 6 month (n = 28, 28.9%) evaluation surveys.

The midwives/nurses who responded to the baseline survey were from 23 different rural/regional health services/hospitals in Victoria. Most were midwives (n = 62, 63.9%) or nurses (n = 15, 15.5%); 20 (20.6%) respondents did not specify their discipline. Almost two-thirds worked full-time (n = 61, 62.9%). Almost half of the respondents (n = 42, 43.3%) had post-graduate qualifications in midwifery or nursing. The respondents had been practicing midwifery/nursing on average for 19.2 years.

Most midwives/nurses (n = 91, 93.8%) reported that they felt prepared for their clinical placement, and that they had achieved all or some of their learning objectives during their placement.

> *"[It was great to] see things I would never see at my workplace, and different ways of doing things."*

Most midwives/nurses reported that they had been able to practice at least some of what they had learnt when they returned to their base health service. Those who were unable to practice what they had learnt stated that this was mostly due to a lack of opportunity.

> *"Obviously we don't have a lot of babies requiring invasive ventilation. But I have felt an increased confidence in working within the SCN at my workplace, from the skills I have obtained from my placement."*
> *"[I have been able to] share new ideas and make changes where l already work."*

Most midwives/nurses reported an increase in their level of confidence transferring women who were experiencing complications during labour and birth to their placement health service after they had completed the program.

> *"I have found that through the placement experience I am now able to prepare families better for what they will possibly experience antenatally also with the unwell neonate."*
> *"This placement was an excellent learning opportunity for me to consolidate the skills I had learned at my health service and improve my confidence and understanding of caring for acutely unwell infants. Such infants are often only in my home SCN for limited periods of time before transfer to a tertiary centre so extended time caring for them was extremely beneficial."*

The data from the initial, one-month and six months post-placement surveys indicate an increase in the confidence of midwives/nurses in managing or providing care in a range of birth (Table 1), neonatal (Table 2) and postnatal (Table 3) situations.

Generally, the feedback from the midwives/nurses about the Maternity Connect Program was positive.

> *"The experience of working in a centre that is a referral centre for our Facility just increased my confidence. I saw a lot of births in my time there and learnt a few new ways of doing things, I have taken them back with me."*
> *"MCP is an amazing opportunity to gain further skills, and appreciate what services and skill set our colleagues in the metropolitan hospitals have. I would no longer feel intimidated by the retrieval service when they provide care to a baby within my service.*

Discussion

The aim of this study was to evaluate a professional development program for rural midwives/nurses, the Maternity Connect Program, from the perspectives and experiences of participating midwives/nurses and health services. The findings indicate that the program has been effective in increasing the self-reported confidence of rural and regional midwives/nurses in providing birthing, neonatal and postnatal care; midwives/nurses and base and placement health services are mostly engaged and satisfied with the program; and midwives/nurses report transferring the skills they have learnt back to their base health services.

Table 1
Midwife/nurse confidence - birthing situations.

	Confident		
	Baseline (n = 97)	**1 month** (n = 37)	**6 months** (n = 28)
Pregnancy care skills			
Identify relevant medical, obstetric & psychosocial risk factors	70 (97.2%)	29 (96.7%)	13 (92.9%)
Perform routine pregnancy assessment & examination	69 (95.8%)	28 (96.6%)	14 (100.0%)
Perform speculum examination to identify ruptured membranes	15 (22.1%)	10 (40.0%)	4 (36.4%)
Perform amnisure swab to confirm ruptured membranes	31 (43.1%)	21 (72.4%)	7 (50.0%)
Collect fetal fibronectin swab	27 (38.0%)	14 (50.0%)	5 (50.0%)
Intrapartum care			
Vaginal examination during labour	41 (54.7%)	25 (71.4%)	11 (73.3%)
Caring for a woman having a normal pregnancy & labour	53 (70.7%)	31 (88.6%)	14 (93.3%)
Perform artificial rupture of membranes	22 (29.7%)	16 (45.7%)	9 (60.0%)
Syntocinon infusion management	49 (65.3%)	27 (77.1%)	13 (86.7%)
Labour and birth situations			
Fetal distress	41 (56.2%)	23 (76.7%)	9 (64.3%)
Shoulder dystocia	34 (47.2%)	19 (63.3%)	7 (50.0%)
Postpartum haemorrhage	45 (61.6%)	24 (80.0%)	10 (71.4%)
Resuscitation of the newborn	52 (69.3%)	27 (87.1%)	11 (78.6%)
Assisting medical staff			
Use of vacuum equipment	39 (55.7%)	19 (65.5%)	9 (81.8%)
Use of obstetric forceps	33 (47.1%)	18 (62.1%)	9 (81.8%)
Assist with newborn receival at caesarean section	65 (86.7%)	8 (80.0%)	8 (100.0%)

Note: individual item denominators may not equal the total n for the relevant time point due to missing data.

Table 2
Midwife/nurse confidence – Neonatal situations.

	Confident		
	Baseline (n = 97)	**1 month** (n = 37)	**6 months** (n = 28)
Neonatal care			
Initial admission and care of the unwell or preterm neonate	24 (32.0%)	14 (66.7%)	10 (66.7%)
Stabilisation and transfer of a sick neonate	23 (30.7%)	11 (52.4%)	7 (46.7%)
Oxygen therapy - isolette	33 (44.6%)	6 (30.0%)	8 (80.0%)
Set up bubble CPAP and care of the neonate receiving CPAP	11 (15.3%)	5 (25.0%)	6 (40.0%)
Nasogastric tube insertion and feeding of the neonate	46 (80.7%)	18 (85.7%)	16 (100.0%)
Facilitation of developmental care	36 (50.0%)	19 (90.5%)	13 (86.7%)
Facilitation of breastfeeding for the sick or preterm neonate	34 (46.6%)	18 (85.7%)	13 (86.7%)

Note: individual item denominators may not equal the total n for the relevant time point due to missing data.

The findings suggest that the participating midwives/nurses experienced increased confidence managing various aspects of care following their clinical exposure placement with the Maternity Connect Program. Overall, there tended to be an increase in midwives'/nurses' confidence at one month post-placement compared to baseline, and then a slight decrease in confidence at 6 months post-placement. This is to be expected given midwives/nurses may have reduced opportunities to practise their new skills once they have returned to their base health service.

The desire to retain confidence in skills has been identified as an important factor in health care providers' decisions to participate in professional development programs [12]. This is particularly true for

Table 3
Midwife/nurse confidence – postnatal situations.

	Confident		
	Baseline (n = 97)	**1 month** (n = 37)	**6 months** (n = 28)
Postnatal care			
Perform a routine postnatal examination on mother and baby	54 (72.0%)	15 (83.3%)	6 (85.7%)
Care of the perineum following birth	60 (80.0%)	17 (94.4%)	6 (85.7%)
Collection of neonatal blood sample for NST or SBR	68 (91.9%)	19 (100.0%)	7 (100.0%)
Discharge neonatal (Baby Check)	30 (40.0%)	N/A	1 (50.0%)
Caring for a woman following a caesarean	75 (100.0%)	N/A	2 (100.0%)
Preparing a woman for discharge	75 (100.0%)	N/A	2 (100.0%)
Infant feeding			
Facilitation of ongoing skin to skin care	69 (92.0%)	21 (95.5%)	7 (100.0%)
Teaching positioning and attachment – hands off technique	61 (81.3%)	21 (95.5%)	7 (100.0%)
Management of full breasts	62 (82.7%)	22 (100.0%)	7 (100.0%)
Education on use of breast pumps	63 (84.0%)	21 (95.5%)	6 (85.7%)
Discharge assessment and advice			
Jaundice	65 (86.7%)	21 (100.0%)	7 (100.0%)
Recognition of unwell infant	65 (86.7%)	21 (100.0%)	6 (85.7%)
Safe sleeping	70 (93.3%)	21 (100.0%)	7 (100.0%)

Note: individual item denominators may not equal the total n for the relevant time point due to missing data.

midwives practicing in remote locations who wish to remain competent and have the skills to manage emergencies, given support from other health care providers may be limited in their area [12]. A qualitative Australian study exploring the experiences and perceptions of rural midwives about continuing professional development found that midwives valued development opportunities in order to remain up to date with their knowledge and skills and enable them to provide quality care for women who were pregnant or giving birth [12].

The MCP evaluation identified strong themes of positive engagement and collaboration, strengthening intra-regional relationships and supporting pathways of care delivery in rural maternity services. The majority of participants reported that they were able to translate skills learnt on placement back to the workforce and practice what they had learnt on return to their base health service.

Education, recruitment and retention of health professionals in rural areas is a challenge both in Australia and internationally [21]. Most of the placement health services in this study stated the clinical support partnership worked effectively and that they endeavored to help participants achieve their learning objectives. The main benefits of the program identified by the base health services were: providing a viable option for further supported learning for midwives after postgraduate studies, increasing clinician confidence, retaining staff who otherwise may have left the health service, and upskilling staff in specific maternity areas. The majority of base health services indicated that the Maternity Connect program had improved their ability to maintain a sustainable workforce for the future. In addition, most stated that the program has directly improved relationships and pathways within their region.

Similarly, a study conducted in Arctic Norway found that nurses were motivated to attend continuing education programs and such programs provided nurses with opportunities to interact with other nurses, maintain professional networks and enhance skills and competencies. These all supported the retention of health care providers in rural Arctic areas and increased the range of services provided [21].

Access to continuing education and up-to-date information is important for midwives/nurses so they can continue to provide high quality and safe patient care [22]. Professional development programs for midwives and nurses exist in other parts of Australia but to our knowledge none offer exposure to a full range of midwifery care including birthing, neonatal and postnatal care. We are aware of two other similar programs currently operating in Australia. In Queensland, the 'Nursing and Midwifery Exchange Program' which commenced in 2017 provides midwives and nurses the opportunity to experience different working environments and enables midwives and nurses from rural and regional areas the opportunity to enhance their clinical skills and experience, and develop their professional networks. As part of the program, a midwife or nurse from a metropolitan or regional area changes places with a peer located in a rural or remote area for 12 weeks. Preliminary findings suggest that participating midwives and nurses have experienced an increase in their professional confidence and skills [23,24]. In New South Wales, the 'Remote Rural Education Program' provides midwives from rural health services the opportunity to develop their clinical knowledge and skills in managing obstetric and neonatal emergencies and gain experience in a larger metropolitan hospital [25].

Limitations and strengths of the study

This study assessed the perceptions, experiences and changes in confidence levels of midwives/nurses from a wide range of rural and regional health services in Victoria who participated in an innovative professional development program, Maternity Connect. However, a limitation of this study is that not all midwives/nurses who participated in the program completed all the evaluation surveys. The characteristics of midwives/nurses who did not respond to the surveys are not known. Therefore, it is difficult to determine if the findings reflect those of all participants. The small sample size of midwives/nurses who completed the evaluation surveys meant that the study was not sufficiently powered to conduct sub-group analyses and test for statistical significance between time points, and it is also not possible to generalise the results. Another limitation of the study is that we only assessed participants' perceptions of changes in their skills and competence; these were not formally evaluated back in their work places. Despite repeated attempts to invite the participants to complete the surveys at all time points, we were most successful at one month post-placement as participants received their certificate of completion once they had responded. We have also become aware that many of the survey email invitations were unknowingly delivered to their junk email folder. We are working to rectify this for future surveys.

Implications for clinical practice and policy

The Maternity Connect program appears to be an innovative and effective model for enhancing the confidence of midwives and nurses working in rural and regional Victoria. Enhancing confidence in practice enables regional and rural midwives and nurses to remain in the workforce and assists in alleviating workforce shortages in these areas. The program also indirectly supports women who live in regional and rural Victoria to give birth safely closer to home.

Based on the findings of this evaluation, it appears feasible that the program could be implemented in other regions and states, and integrated into standard practice. However, further evaluation of the program with a larger sample size would be required to determine if this is the case.

The program is also aligned with a range of state and national policy frameworks that provide guidance to health services on the principles underpinning maternity and newborn care such as The National Maternity Services Plan ((NMSP) (2010–2012) [26], The Victorian Health Priorities Framework (2012–2022) [27] and Safer Care Victoria 2017–2020 Strategic Plan [28].

Conclusion

Providing maternity services in rural and regional areas and enabling women to give birth close to home poses considerable challenges including the retention and professional development of the maternity workforce. This evaluation provides preliminary evidence that the Maternity Connect Program appears to be successful in increasing the confidence of rural and regional midwives and nurses in providing key aspects of maternity clinical care, sustaining workforce capability and developing partnerships for rural and regional midwives.

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Author contributions

All authors contributed to the study design. KM contributed to participant recruitment and surveys. SH and KW conducted the data analysis and interpretation of results. KM and SH drafted the manuscript and managed the study. All authors contributed to revisions of the manuscript, and read and approved the final manuscript.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Appendix A. Supplementary material

Supplementary data to this article can be found online at https://doi.org/10.1016/j.srhc.2020.100558.

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