Evaluation of Birthwork Midwifery Training, Luang Prabang

2020

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Executive Summary

The challenges faced by health workers in Laos People's Democratic Republic are significant. Limited facilities, low levels of funding, poor transport networks, and the prevalence of health problems that accompany poor nutrition and poverty are all factors that contribute to a maternal morbidity rate maternal mortality rate that remains among the highest in the region. Health workers bring considerable commitment and genuine interest and concern to provide the best care possible. Regional medical facilities rely on the skills and dedication of medical staff, but many have not received the training they need to support women well under challenging conditions.

Formal medical training tends to highlight the midwifery and nursing skills appropriate to a well resourced hospital setting. Clinics in rural Laos, however, are not well resourced. While these regional health workers are charged with providing medical support during pregnancy and childbirth, many have very limited background in maternal health and childbirth. At the same time, the option to be attended by Traditional Birth Attendants (TBAs) is not available in many communities. As a result there is not a strong presence of midwifery skills or ongoing training outside urban centres in the Province, whether sourced in traditional medicine or formal training in Western biomedicine.

The Birthwork training program aims to fill a gap in the skills and training available to health workers in remote districts of the Province. Training in emergency skills, birth physiology, and hands-on techniques for supporting normal birth aim to provide health workers with the skills they need to provide effective care in contexts with little medical infrastructure.

The program was developed in partnership between Australian-based team of midwives and doulas and Luang Prabang Department of Health staff, alongside maternal and child health personnel at Swiss Red Cross, Laos PDR. The program seeks to refresh and enhance, and fill the gaps in skills and knowledge of health workers in District Hospitals and Provincial Health Centres in Luang Prabang Province. Two training programs were run in Luang Prabang Province, in January-February 2019 and 2020. These followed the successful delivery of an initial program delivered under the auspices of the Swiss Red Cross in 2017.

Dr Katharine McKinnon was invited to join the 2019 Birthwork training in Luang Prabang province as an observer. As a social researcher at La Trobe University Dr McKinnon undertook to explore the impact and experience of participants, focusing on the following issues:

1. Efficacy of pedagogical approach among participants
2. Impacts of training for health workers
3. Suitability to the needs of stakeholders and community
4. Cross-cultural context of training and its importance

5. Potential to scale up/scale out the training so that it can benefit a wider group

1. Efficacy of the pedagogical approach

The delivery mode for the teaching is designed with the local context in mind. The program as a whole is built around an ethic of kindness as the foundation of respectful care. Acknowledging that Laos is not a literate culture, i.e. people do not tend to read for leisure, the teaching format emphasizes active learning, using storytelling, demonstration, practice via role play, and rote learning with physical actions that are rehearsed repeatedly throughout the training sessions.
The training that the Birthwork team provides is well suited to the needs of remote health workers and the groups respond very well to the hands on training style. The use of embodied learning techniques, song, and hands-on practice of technique was enjoyable for participants and allowed them opportunities to bring up and reflect on their own experiences.

Participants and the midwifery trainers from LP Dept of Health agree that the hands on learning style, the opportunity to do activities and practice on model babies and pelvis, to work with their own bodies, and to rehearse the emergency steps, were effective in helping them to understand the content of teaching, to absorb and be able to remember. Sharing stories and using the training sessions as an opportunity for health workers to debrief from difficult experiences, is also an opportunity to foster health workers confidence in their own skills and good judgement.

Weak points in the training related to areas that were not the focus on hands on learning and role play. The information that had not been retained so well between 2019 and 2020 training sessions was related to the knowledge and information that was not part of embodied learning techniques, such as delayed cord clamping.

2. Impacts of training for health workers

Health workers have been able to implement the skills they have learned, and have been able to work with increased confidence to provide women with opportunities to move around more during labour, for example. What health workers remembered most readily were the steps for emergency management (PPH, breech, shoulder dystocia) that were taught through a 'song' with actions. The gist of these steps had been mostly retained, although some participants had forgotten steps or had the order mixed up. While in 2019 booklets had been distributed to assist participants to revise their learning, in 2020, the additional distribution of posters with visual prompts for the correct steps offered participants more opportunities for revision between trainings.

Many staff were enthusiastic about sharing stories of births in which they had helped women to move into the position of their choice: kneeling, squatting, standing, using the bed frame, door frame or family member to help to give support. Less well retained were

techniques for manual pressure to relieve pain or ease the passage of a baby. Health workers wanted more training opportunities, and often asked for longer training sessions. More work needs to be done to assess uptake and impact. Systematic assessment of the impacts requires more time one-on-one time with health workers to understand how much of their previous trainings they have retained, which aspects of it they put into practice.

3. Suitability to the needs of stakeholders and community

Meeting needs of health workers providing childbirth support in areas with few resources and few options for seeking obstetric treatment was the focus of the training programs, and the program is well designed to meet this need. The training provided by the Birthwork team is focused on providing the kind of care that can optimize the chances of women delivering safely, focusing on making the most of the resources that all health workers will have available. This included foregrounding the importance of providing kind and respectful care which would maximise a woman's feelings of safety, and therefore support her body's capacity to relax and to birth naturally. The training encouraged the use of body position, touch, and commonly available tools such as a sarong or rebozo, a Pinard, and the presence of family members rather than on equipment that may not always work.

Visual materials were also vital for supporting the learning of participants. Using pictures and illustrations rather than text enable health workers to revise more readily. It also provided health workers with materials that could be used to assist in their communication with mothers, and support them to teach community members about pregnancy and danger signs.

The emphasis on kindness and gentle touch as foundations of good care reinforces relations of respect between health workers and mothers. More work is needed to better understand the perspectives and concerns of women in mountain communities, and thus to shape maternity care services that can fit their needs.

4. Cross-cultural issues

The cross-cultural context of the Birthwork training programs is multifaceted. In addition to the need for cross-cultural sensitivity in the partnership between Lao and Australian professionals, the program must traverse different institutional and bureaucratic cultures, different languages, and different educational norms between the trainers and the participants, and is also delivering a training program that needs to equip medical staff for their work in a rich multi-cultural environment.

In addition, previous research has shown that women in rural areas of Laos, and particularly women who are not of Lao Lum ethnicity, can be reluctant to attend clinics. Women's concerns include communication difficulties, fear of being bullied or not treated with respect, and concern that they cannot carry out important cultural practices.
The Birthwork program was designed and conducted in strong partnership with Lao partners, and the Australian team proved adept in operating with sensitivity and flexibility required for the context. The focus on protocols of respectful care provide a start to equipping medical staff with the skills they need to operate effectively in a multi-ethnic context, although this was not a focus of the program.

It is possible more could be done to build on this component of the training in order to assist participants learn how to provide greater cultural safety for women to counteract the reluctance of women from some ethnic communities to attend ANC or give birth in clinical settings. Translation during training sessions remains a challenge.

5. Scaling potential

The Birthwork program is at present a form of 'informal health development' taking place on an ad hoc basis, an intervention built on personal connections and relationships, nurtured by commitment and shared concerns. The teaching program is developed with a careful and considerate attention to the needs of health workers in context, the policy structures in which they work, and a commitment to an ethic of women centred care.

The program focuses on enhancing the abilities of health care workers, and building their capacity to provide safe care in situ, whether in clinics or in women's homes. It is a low cost, and potentially high impact approach, and if it could be conducted across other regions of Laos could make an even more significant contribution. In an informal way, a scaling out of the program is already in play as participants are strongly encouraged to share their learning with mothers and colleagues, posters are circulated which demonstrate a range of possible birth positions and educate viewers about the pathway of the baby through the pelvis.

This could be extended if the program were adapted in order to enhance the skills and capacities of community members who already provide care to birthing mothers, (such as the female elders in Hmong communities who attend women if the birth is difficult).

Conclusions

The Lao Birthwork training program is already making a meaningful contribution to the capacity of health workers to provide care at the district level. It is a low cost, and potentially high impact approach. The skills taught are designed to fit the local context, instilling confidence in communications and hands-on skills for health workers who are charged providing effective care in contexts with little medical infrastructure. The emphasis on kind and respectful care also provides a way to address the reluctance of some women to seek medical care in fear that they will be bullied or misunderstood.

If the program could be conducted in more locations it would make an even more significant contribution. The potential for expanding the program is there. The challenge in expanding the program would be to retain the sensitivity and ethical approach that defines the program as it is

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1. Introduction

The challenges faced by health workers in Laos People's Democratic Republic are significant. Limited facilities, low levels of funding, poor transport networks, and the prevalence of health problems that accompany poor nutrition and poverty are all factors that contribute to a maternal morbidity rate maternal mortality rate that remains among the highest in the region. The current solution to bringing down maternal morbidity focuses on getting more women to attend medical facilities for antenatal care (ANC) and birth. Regional medical facilities rely on the skills and dedication of medical staff, but many have not received the training they need to support women well under challenging conditions. Formal medical training tends to highlight the midwifery and nursing skills appropriate to a well resourced hospital setting. Clinics in rural Laos, however, are not well resourced. While these regional health workers are charged with providing medical support during pregnancy and childbirth, many have very limited background in maternal health and childbirth. At the same time, the option to be attended by Traditional Birth Attendants (TBAs) is not available in many communities. As a result there is not a strong presence of midwifery skills or ongoing training outside urban centres in the Province, whether sourced in traditional medicine or formal training in Western biomedicine. Unofficial recognition that a different (extended or more appropriate) set of skills is required in these contexts led to the ad hoc introduction of the Birthwork childbirth education programs in Luang Prabang Province. The program aims to fill a gap in the skills and training available to health workers in remote districts of the Province. The training program was conducted by midwifery education organisation Birthwork in partnerships with the Luang Prabang Department of Health, Laos PDR. Two training programs were run in Luang Prabang Province, in January-February 2019 and 2020. These followed the successful delivery of an initial program delivered under the auspices of the Swiss Red Cross in 2017.

Dr Katharine McKinnon was invited to join the 2019 Birthwork training in Luang Prabang province as an observer. As a social researcher at La Trobe University Dr McKinnon undertook to explore the impact and experience of participants, focusing on the following issues:

- Efficacy of the pedagogical approach among participants: how the participants responded to the style of teaching, where they encountered difficulties, where the challenges and frictions emerge, and what aspects they most enjoy and respond to (Section 5).

- Stakeholder views on the training and reflections on the impact of previous training sessions for communities and health workers (Section 6).
- Meeting community needs and aspirations: how well does the training build on existing community assets, whether it is filling identified gaps, and whether there are felt needs that are not being met (Section 7).
- Cross-cultural considerations in training, including the issues related to cross-cultural care and communication that ought to be considered in the overall context of future trainings. (Section 8)
- The potential to scale up/scale out the training so that it can benefit a wider group: exploring the potential to incorporate aspects into formal curricula, develop materials for dissemination, or develop knowledge sharing tools for peer-to-peer learning (Section 9).

This document outlines the background to the Birthwork training program, what it is seeking to achieve and why it is needed, and outlines the findings in relation to the key issues listed above. It also identifies key concerns for further research.

2. Participants and Approach

An ethnographic approach was taken to the evaluation of the training program, using participant observation during the 2-3 week training periods in 2019 and 2020, with informal and open-ended interviews conducted with key stakeholders invovled in delivery of maternity care in Luang Prabang Province. All observations were recorded using field notes and later analysed for emerging key themes. All data was anonymised to protect the identity of individuals.

Observations took place during formal training sessions held at Phoukhone and Phonthong District Hospitals in 2019 and 2020, and at Phonthong PHC (Phouxay District) in 2019. Participants in the workshops included District Hospital staff, Provincial Health Centre staff, and Village Health Workers, with a wide range of medical expertise and prior knowledge and experience in supporting women through childbirth (see Table 1).

Table 1: Training Workshops and participants

Locations	Village Health Worker	Medical assistant	Nurse	Midwife	Doctor	Lab technician	TOTAL number of participants

Phoukhone District Hospital, 2019	4	-	-	8	4	-	16
Phuokhone District Hospital, 2020	3	1	11	2	1	-	18
Phonthong PHC (Phouxay District) 2019	-	-	2	2	2	-	6
Phonthong District Hospital, 2019	5	5	9	8	1	1	29
Phonthong District Hospital, 2020	3	11	11	3	-	1	30

In addition the team visited Provincial Health Centres in the Province. During these visits we were able to observe the facilities and equipment available, speak informally to PHC staff about their day to day work and challenges, and meet community members visiting the PHC.

Ethics permissions were granted by the La Trobe University Human Ethics Committee (HEC18447).

3. Context: Assets and challenges for maternity care in Laos

While providing health care in rural Laos can be challenging, health workers we met during the course of the training programs brought considerable commitment and dedication to their work. The team witnessed health staff doing amazing work under isolated and difficult circumstances. Many had an obvious and genuine desire to care as best they could with what they had, and demonstrated dedication to supporting their communities and country. Their motivation and hunger to learn and also to share their experiences and difficulties was sincere.

The Birthwork program aimed to make the most of these assets. The training sought to instill confidence in communication and hands-on skills and help to boost morale by acknowledging that working with birth can be scary and challenging, as well as rewarding. When working in isolation, feelings of fear and disempowerment can easily come to the fore. Thus the program sought to foster confidence alongside the skills to act, enabling health workers to do what is necessary to act in the interests of mother and baby.

The challenges faced by health workers and the mothers they care for were amply illustrated by the stories shared by midwives during 2019 and 2020 trainings. Many of these stories were shared during training sessions as participants debriefed about their experiences with breech delivery, PPH (postpartum haemorrhage) or other emergencies. The senior Luang Prabang Health Department staff who accompanied the team also shared their stories. During conversations over the long drives to district hospitals and health centres, and over meals shared outside of the training sessions, these senior Mother and Child Health officials also used the opportunity to debrief, sharing stories of when things had gone wrong. Lack of knowledge about how to deal with emergency situations, alongside the remoteness of many of the clinics, were central features of these stories. PPH is the primary cause of maternal morbidity and in these cases it was often the distance away from medical care that was the biggest concern. These stories, recorded in my field notes, exemplifies a common challenge:

> *Boukaeo told us the story of a woman who had birthed at a Health Centre but suffered PPH following breech delivery. The mother was transported by boat to Nambak, where there is a large district hospital. The journey by boat took 4 hours, and staff had called ahead to make sure that blood was available for transfusion when they arrived. Boukaeo received a call at home to ask if she could help them find the right blood type to send up to Nambak from Luang Prabang as they had none available. It would take 2.5 hours to get the blood up to the hospital, but none was available in Luang Prabang either. The woman died on the way to Nambak, but the baby survived. In another case, a woman had a retained placenta following birth at a health centre and had to travel for 10 hours: by two boats and then a 2 hour road journey to get to Nambak hospital, and from there transferred again 2.5 hours to Luang Prabang for surgery. She survived.*

In our preliminary research in the province of Luang Prabang we could see that clinics nor the hospitals are necessarily well equipped to help women birth safely, or able to accommodate all the women who might need them, and for many communities travelling to clinics is extremely difficult. In addition, many women do not want to come to clinics or hospitals for antenatal care or childbirth. Relatively low rates of Lao women attend antenatal care, and this tendency is stronger amongst rural women. Our participants also reported that it is rare for women to come to more than one antenatal visit, and in the majority of cases would not come to clinic unless something was going wrong with the pregnancy or the birth. Having

women attend regular ANC can help to predict some complications such as an unusual or difficult presentation of the baby or an unwell mother becoming more seriously compromised over time. But it is also important that staff know how to deal with unpredictable situations and emergencies on the spot. This is part of the knowledge that the Birthwork program aimed to provide.

Childbirth for Lao women has become considerably safer over the last two decades with the maternal morbidity ratio dropping from 544 to 185 per 100,000 live births between 2000-2018. The WHO, UNICEF. WHO and UNICEF Joint Skilled Birth Attendant (SBA) database also shows that there has been a dramatic increase in the proportion of births attended by a Skilled Birth Attendant, rising from 13% in 2000 to 67% in 2017 (World Health Organization 2019). Among minority ethno-linguistic groups the rate is far less than national figures show, at only 1 in 5 (Durham et al. 2016). It is also important to note that the regional statistics are not necessarily reliable. The quality of record keeping in Lao PDR is variable and in more remote communities many births still go unrecorded.

3.1. Resourcing

Overall, the health system in Laos remains considerably underfunded. Urban Lao who have a high enough income will often seek medical care across the border in Thailand, or travel to Vietnam. Ordinary Lao who cannot afford to travel to seek medical care rely upon a generally under-resourced health care system. The provision of maternity care in Luang Prabang Province is shared across district Health Centres located in regional towns and villages, District Hospitals (DH) that service a number of Provincial Health Centres (PHC) and villages, and the central Provincial Hospital located in Luang Prabang city.

Luang Prabang Provincial Hospital, and Nambak District Hospital are the only two facilities in the Province that can carry out surgical procedures. In Luang Prabang there are 2 operating theatres shared across the whole hospital. The hospital has approximately 100 births per month and the maternity ward is staffed by 8 midwives, with 2 maternity nurses and 3 obstetricians. In 2020, two out of the three obstetricians were undertaking several months of further study in Vientiane. Luang Prabang Provincial hospital maintains a blood bank, and Nambak keeps a limited supply for transfusion. At times Nambak must call down to Luang Prabang for the urgent supply of a particular blood type, typically a 2.5 – 3 hour journey by road.

Provincial Health Centres (PHC) provide basic health care, and while they are meant to have on staff at least one trained midwife in practice this is not the case. Equipment and medications available at health centres is limited. The basic equipment available at most clinics the team visited in the Province included oxygen, adult bag and mask for resuscitation, refrigeration for medicines, suturing equipment, scales, and Pinard. Many Centres had supplies of Mizoprostil and Syntocinon available. Infant bag and mask were often lacking, and the Birthwork team were able to distribute supplies of these during the 2020 training sessions. Not all centres have an electricity supply, and some also lack running water. If a labour becomes complex staff call to the District Hospital for advice, and in cases of emergency women usually need to be transferred.

At the **District Hospitals** (DH) options for treatment are also limited. In addition to the basic equipment available at most Health Centres, the district hospitals visited in 2019 and 2020 also had handheld dopplers and CTG available. All did have trained midwives and doctors on staff, however electricity supply was unreliable and in one case, the newly built hospital building did not have a reliable supply of running water. If a caesarean section is required women have to be transferred again to either Luang Prabang Provincial Hospital or to Nambak. The travel times involved can stretch up to 8 hours or more, and in the rainy season some roads become impassable.

In Luang Prabang Province, the delivery of health services is supported by assistance from **International Non-Government Organisations (INGO)** Swiss Red Cross, Save The Children, and KOIKA. Each INGO is responsible for supporting a set of Districts, and negotiates the conditions of that support separately through a Memorandum of Understanding (MOU) that is approved by the central Ministry of Health.

3.2. Staffing

From our discussions with Department of Health staff, obstetricians and midwives in the province we understood that the number of trained midwives and obstetricians remains far fewer than are needed to service the population, midwives often receive limited training (sometimes only 9 weeks on top of their nursing training). Participants in the training sessions included: Village Health Workers (VHWs who received 6 months training in Luang Prabang and offer basic health care in their home communities), nurses, midwives, doctors and medical assistants and nursing

assistants: (those who have completed a proportion of the requirements for a nursing or medical degree, but have further study to complete.)

While there has been a push to increase the numbers of trained midwives in Laos since 2010, and efforts to locate midwives in regional health centres, there are still not enough midwives available to staff regional clinics. At health centres we visited during the training program, health workers and midwives were often working in a volunteer capacity while they waited for the central Laos Ministry of Health to release the 'quota' for new paid positions to become available.

3.3. Clinical Settings

The design of the PHCs is a complex of rooms at ground level that looks welcoming and user friendly, with an outdoor kitchen and ablution for visiting patients and family members. All kinds of health care are conducted at the Health Centres, and there is usually one side of the building (or 2 rooms) dedicated to birthing and recovery. Many of the District Hospitals are an extended version of this design, but some of the more recent funding for building has deviated from this and built more clinical and less welcoming double story buildings.

The care settings in both DH and PHC's tend to be sparse. Rooms are often fairly bare, with cold tile surfaces and little in the way of comfort. At the centre of the birthing rooms is usually a bed with plastic coverings and lithotomy stirrups. Often these rooms open on to a recovery room through an open doorway (usually covered with a thin curtain) where there may be 2-3 beds for women to stay following birth. The birth space is often quite small and without any obvious options to enable the woman to choose her birth position, although in some health centres staff demonstrated how they might be able accommodate that. Some had also made an effort to find curtains to cover windows and provide blankets for the bed making the room softer. During the 2020 visits the health centre carried supplies of blankets, mattresses and curtains to give to PHCs that needed them.

Sychareun and colleagues (Sychareun et al. 2012) explored why rural women do not to attend clinics for antenatal care or birth. They found that one significant reason was that the women in their study felt clinics were uncomfortable, not allowing freedom of movement or providing space for family members to support women. Another concern was the need to travel significant distances to reach PHCs. Medical staff agreed that for very many women travel to clinics and district hospitals was a

major challenge. Villages are sometimes a great distance from PHCs, not all families have access to motorised transport, and some villages may only be reached on foot. In addition, when it rains unpaved roads in the mountains become dangerously slippery or outright impassable.

Cost was an additional barrier. While maternity care is meant to be free for all Lao women, in practice many families in rural areas strugle to cover the costs of travel and of providing food for the mother while she's in hospital (Marsden 2011; Sychareun et al. 2016),[1] on top of missed earning while family members remain at the hospital.

3.4. Language

Finally, many women that do attend regional clinics do not speak Lao language and so it is difficult for health workers to communicate unless they come with a family member who can help with translation. Sychareun et al (2012) noted in their study that one reason women were reluctant to go to clinics was because they were unable to communicate with health staff due to language barriers. At every hospital and clinic the team visited in 2019 and 2020, staff reported that they often needed to care for women with whom they did not share a common language. In these cases they would call on health workers who did speak the language (usually Hmong or Khmu), but more often communicated through family members who spoke Lao. Family were often in attendance at birth in the health centres, but it was not common for women to have family support while in the District hospital (likely due to the distance from home village and inability of family members to be away from farms and child care obligations, or inability to support the costs of travel, accommodation and food while away).

4. The Birthwork program

The Birthwork Lao program grew out of the recognition of a skills gap for health workers in more remote regions of Luang Prabang Province. Birthwork is the name of a small collective of midwives based in Australia and New Zealand who offer training programs worldwide in gentle techniques for supporting physical wellbeing through pregnancy and natural birth (https://birthwork.com/). The training program offered in Luang Prabang is designed to make the most of what the Birthwork team

[1] Family members must supply meals to patients admitted to district hospitals and clinics.

can offer to address the most urgent needs of maternity care providers in Luang Prabang.

4.1. Based in relationships

The seeds of the Birthwork Luang Prabang training program were planted with an encounter between Jenny Blyth and Dr. Vannaly Boupha at the offices of the Swiss Red Cross (SRC) in 2005. Jenny had some second-hand clothes to donate and a friend recommended she take them to the SRC. There she met Vannaly and discovered they had a shared interest in birth. At the time Jenny was collecting the stories of Traditional Birth Attendants (for her film, *A World of Birthworkers*). Vannaly invited her to join SRC visits to communities in the Districts SRC was responsible for supporting at that time and helped her get permissions to interview TBA's in villages. Jenny also got to see the poor state of one of the main District Hospitals which was completely refurbished by 2010.

When Jenny returned to Luang Prabang 5 years later, she visited another District Hospital in a poor area close to Luang Prabang. During that time Jenny was disturbed by what she witnessed. The modern equipment available in the clinic was broken, and at the same time the midwife lacked the skills to listen for the baby or feel for position without it. There was an unnecessary use of precious resources such as IV fluids, and an ambulance in poor repair. Discussing the case with Vannaly it became apparent that this was a widespread problem, and Vannaly invited Jenny to return to teach the kind of skills that midwives could use.

4.2. Designed through dialogue

On returning to Australia Jenny brought together a team of midwives, midwife trainers, and birth educators (Steffi, Clare and Fiona), who eventually returned to run the first training in January 2017. The teaching program that was trialled first in 2017 had been put together through a collaborative approach between Jenny and Vannaly, based on how to match the greatest needs in terms of training that also matched the skills of the team that Jenny could bring together. The program took shape with reference to the protocols that the Swiss Red Cross had recently developed for midwifery skills training, and separate protocols developed by Save the Children. Through this dialogue with existing capacities and resources, a program was designed that simplifies essential elements of emergency skills needed and is appropriate to the circumstances under which these health staff are

operating in villages, District Hospitals and Provincial Health Centres. In these settings staff are used to a rules-based health system, in which following protocols is emphasized. While staff are working in clinics and hospitals, they have very limited equipment and limited obstetric knowledge. In effect, many medical birth attendants in these circumstances are delivering babies under homebirth conditions.

4.3. Delivered in partnership

The first training took place in Luang Prabang in January 2017, with 30 midwives and health workers from nearby Chomphet and Phonesay Districts travelling to the provincial capital to take part. A follow up training was run in December of 2017, this time being held for 4 days in each of the District Hospitals. Initially unsure of how the training would be set up, Vannaly arranged for the team to undertake the training as volunteers working with the SRC. Because of this the team did not have to set up an independent MOU with the Lao Ministry of Health. SRC staff accompanied them on training sessions, assisted with translation, and contributed to the teaching.

In 2019 the team came at the invitation of the Luang Prabang Department of Health, again working as volunteers with the approval of the Director of the Provincial Health Department, and again they were able to undertake the work without the official MoU that is usually required of external agencies operating in Laos. A Health Department official notes that one of the great benefits of the approach is that this modest approach allow the program to be focused on people, what they feel they need and what skills they already have.

The first training sessions in 2017 revealed that program content needed to be made even simpler and more systematic. The program was then revised for 2019 workshops. In 2019 the team undertook training sessions at the District Hospitals of two new provinces, some distance from the capital, Phoukhone and Phonthong. Both hospitals service 5 Health Centres, with a population that has significant numbers of ethnic Khmu and Hmong. The Health Centres are located up to 1 day travelling time away, and more than half the villages serviced are isolated (for instance, located a further 60kms away from the PHC, accessible by walking track only, or passable in dry season only).

These two training sessions were accompanied by staff from the Provincial Department of Health, and midwife trainers from LP Hospital. The team also re-visited SRC Health Clinics in Phouxay and Chomphet Districts to run refresher training sessions, with SRC midwife and maternal health program coordinator Ms. Pianut. In 2020 the team ran refresher sessions at Phoukhone and Phonthong, again accompanied by Provincial department of health staff. Additional changes were made to the 2020 program, this time producing illustrated posters and booklets summarizing key teaching points, and the basic emergency steps so that health workers could easily revise emergency steps by glancing at a poster on the wall.

Supporting the work of the Birthwork team are two Australian based non-profits, both of which are ultimately aiming to reduce the rates of maternal and infant mortality. *Send Hope Not Flowers* is an Australian based charity that aims to help mothers survive childbirth in the developing world in the Asia -Pacific region. The organisation has provided funding to support the Birthwork team to deliver training in Laos. In addition, the Australian based volunteer group *Days for Girls* contributes washable cloth menstrual kits for the Birthwork team to distribute to mothers and women in the villages. The kits are sewn by volunteers in Australia, and donated for distribution by the Birthwork team. During the 2019 and 2020 training sessions kits were distributed to participants, prioritising health workers who work in more remote health centres. Kits were also distributed to women in communities during visits to health clinics.

5. Efficacy of the Birthwork pedagogy

The delivery mode for the teaching is designed with the local context in mind. In Laos the education system is focused on rote learning, and although all participants are literate, the culture of Laos is not a literate culture, i.e. people do not tend to read for leisure. Thus offering lengthy written materials to support teaching is unlikely to be effective. With this in mind the teaching format emphasizes active learning, using storytelling, demonstration, practice via role play, and rote learning with physical actions that are rehearsed repeatedly throughout the training sessions. Sharing stories and using the training sessions as an opportunity for health workers to debrief from difficult experiences, is also an opportunity to foster health workers confidence in their own skills and good judgement. Finally, the program as a whole is built around an ethic of kindness as the foundation of respectful care.

5.1 Kindness

The recent World Health Organisation (2018a) recommendations on intrapartum care list respectful care and effective communication as the first two most important recommendations, highlighting that 'high quality care' should encompass both service delivery and the woman's experience (Similela 2018). The Birthwork program places respectful care at the centre of their teaching by placing the concept of practicing with kindness at the foundation of all that they do. Each workshop begins with a discussion of the importance of kind words and kind actions, and this is reinforced throughout the program. Participants are introduced to the idea that they have a pivotal role to play in their communities and that their ability to practice with kindness is crucial in building the trust of the people they work with. Their presence, the way they use their hands, the way they speak with people are all important in the practice of good care. Good care comes with the practice of '3 kindnesses'. The first is to be kind by sharing knowledge with others, being open with explanations about what is happening, what carers are doing, and seeking to increase everyone's understanding. Being kind to community in this way is in part an encouragement towards improving health literacy for communities that often have very little encounters with biomedical knowledge of the body and health, but framed as it is within the concept of 'kindness' is also an encouragement towards humility in the delivery of care:

> *If a mother comes to a suk sala or you are visiting her in her village and you are making records and helping to assess the wellbeing of mother and baby you can speak out loud to her and to her family about what you are doing and what you are finding. If the language is difficult them perhaps your expression and manners can help to tell them how much you appreciate everyone supporting the mother. When you are a health professional it is easy to be very proud, but we can remember to use simple words, good manners and a kind heart.* (Jenny, Phou Khoun 28 Jan 2020)

The message of the first kindness is to be kind to the communities health workers are caring for though humility, respect and the sharing of knowledge.

The second kindness is to be kind to mothers and their families by treating them with respect, treating the mother always as a 'dear sister' even when the care relation is difficult. During the workshop there is explicit recognition given to the deep emotional impacts of childbirth experiences. In the Lao context, where many women still do not seek the support of health workers during pregnancy or childbirth, the message is that women who receive kind and gentle care are more

likely to return, and more likely to share their good experience with others in their community:

> *Always be kind to the pregnant and birthing mother. Your job is important but her job is more important than yours. Her job is more difficult than yours. Even if you have some problem with the woman or some judgement about her try to treat her as a dear sister. And she will always remember your kindness, and she will be less afraid.* (Jenny, Phou Khoun 28 Jan 2020)

The third kindness is about being kind to yourself. Being well rested, having enough to eat, and knowing that everything is in place should you need to call to the hospital for assistance or transport a woman to a larger clinic, helps the health worker to be relaxed to focus on their job of caring for the birthing women:

> *Take kind care of yourself so that you can do a good job. This means things like: always have your phone charged in case you need to call, have 2 backup numbers, make sure you drink and eat, and sleep well, and always be prepared, have your equipment ready. We want health workers to be well, we want communities to be well, and we want mothers and children to be well.* (Jenny, Phonthong DH 2020)

The mention of self care caused a hum of surprise during some workshops, usually followed by nods of acknowledgement.

During workshops, the teaching of kindness and principles of respect, polite conduct and humility, were not just spoken about but modelled in the conduct of the trainers, and this is something that was acknowledged by participants during final feedback sessions, with one participant in the Phonthong workshop of 2020 highlighting how much she enjoyed "the kindness in the room".

The focus on kindness is presented as an important practice because it can lead to better outcomes in childbirth. When a woman is relaxed in birth because she feels safe and secure, her body is free of protective tension, and she will birth with less pain and greater ease. This component of the program builds on the evidence that when a mother feels secure and safe the hormonal interplay of normal birth physiology is unhindered by unnecessary adrenalin.

5.2. Physiology of birth

The physiology of childbirth is core to the curriculum of the program. Although all participants have varying levels of medical training, few came into the program with

a strong foundation in the physiology of childbirth. During workshops in 2020 in particular, it became apparent that many of the village health workers and health centre staff attending knew very little about the birth process, despite being tasked with the role of caring for women during pregnancy and birth. The team became concerned that more discussion of the physiology of normal birth might be needed in future to address this lack of basic knowledge.

Understanding how the baby moves through the pelvis, and the way the pelvis can move and flexes to make space for the baby to pass through, is an important part of understanding how the movement of a mother can help a child to be born. The physiology of the pelvis, and the use of different positions to create space, is the focus of the second morning of the training program. By understanding that it is possible to make space for the baby to pass through, participants are able to recognize the value of trying different positions if labour is slow or especially painful. The training introduces a deeper appreciation for the value of free movement during labour (as recommended by the WHO) and the physiological effects of lying down, which can lengthen labour and reduce space in the pelvis.

5.3. Touch

Learning and practicing hands on skills for supporting mothers in childbirth is a core focus of the training curriculum. The team are all highly skilled in hands on techniques for helping mothers to feel calm and relaxed, relieving pain. The emergency management skills are also largely hand-on skills, emphasizing ways to position the mother, to touch and assist the baby, (as well as use of crucial equipment such as a bag and mask for resuscitation, or the pinard for listening for the baby's heartbeat).

The team all commented frequently on how fast local participants are able to pick up the hands-on skills, in contrast to participants in other places in the world. This reflects the tendency in Lao cultures towards physical closeness and touch, especially between people of the same sex, as a part of daily life. People are used to touching one another, and offering hands-on care to one another is much more a part of daily life, whether it be offering massage to help with daily aches and pains, or grooming one another. Across Southeast Asia a culture of touch exists that is very different to everyday conduct in Australia. The style of teaching, with so much focus on the practice of hands on skills, is well attuned to this cultural context.

5.4. Storytelling

At the beginning of each topic, attendees were invited to share their stories of when they had encountered a relevant situation while caring for a woman. These opportunities usually yielded a rich range of stories, and provided an opportunity for participants to debrief with colleagues and to seek feedback and advice on a challenging situation. It also allowed the team an opportunity to adjust the teaching to respond to the needs or concerns raised. For example, during the Phoukhone workshop in 2020 a participant shared a story about a baby who was born with the cord wrapped tightly around the neck. Not knowing what to do the Health Clinic staff cut the cord. Much discussion followed among participants about how to manage this situation, with participants from the previous year emphasizing that it was safer not to cut the cord so quickly. This allowed the team an opportunity to extend the discussion of delayed cord clamping and incorporate more demonstrations of different ways to help a baby when the cord is wrapped round the neck, and to discuss more extensively the associated risks.

5.5. Somatic learning

The use of movement, hands on practice and role play, and repetition of actions to accompany step by step rote learning of emergency protocols, are all examples of somatic learning that is incorporated into almost all that the program covers. Somatic learning is learning that is "*felt* by the body" (Horst 2008) and remembered *in* the body (Coetzee 2018). It is an approach that recognises the way that all learning occurs in and through bodies, and is especially appropriate to teaching in this context. First, health workers must put their learning into practice through their bodies, so an embodied pedagogy is an appropriate way to foster the kind of body-memory that midwives need to foster in order to respond effectively in an emergency. Second, an embodied pedagogy is much more in tune with the way that local cultures understand the interconnected relationships between mind-body-spirit (Platenkamp 2010) which is very different to the Cartesian understandings of being that dominate in most higher education contexts (Nguyen and Larson 2015). While an embodied pedagogy is very different from the kind of classroom based rote learning that participants were expecting, all responded very positively.

The use of movement and memorized actions creates an active and energetic learning environment. Following every workshop participants commented on how fun the workshops were. But the use of movement also has an important pedagogical impact in that it helps the learning to sink in to the body. Participants

often commented on how much easier it was to understand the content, and those who attended two years in a row were able to recall the aspects of the workshop that were embedded in movement more readily than they recalled aspects that had just been part of spoken delivery. One example of this arose during the Phonthong workshops in 2020 when discussion of delayed cord clamping provoked an unexpected response. Despite many of the participants having attended the previous year when the benefits of a 3-5 minute delay had been discussed, and a presentation made that highlighted the WHO recommendations on delayed clamping, these participants received the information as if they were hearing it for the first time. In contrast, when it came to practicing the emergency skills 'dance' they readily recalled the steps and many shared stories of delivering babies using the steps that they had been taught in 2019.

The training that the Birthwork team provides is well suited to the needs of remote health workers and the groups respond very well to the hands on training style. The use of embodied learning techniques, song, and hands-on practice of technique was enjoyable for participants and allowed them opportunities to bring up and reflect on their own experiences. Most participants and the midwifery trainers from LP Dept of Health agree that the hands on learning style, the opportunity to do activities and practice on model babies and pelvis, to work with their own bodies, and to rehearse the emergency steps with the 'dances' taught by Clare, were effective in helping them to understand the content of teaching, to absorb and be able to remember. The small group practice meant that all participants had to be actively engaged, and it also provided opportunities for them to ask questions and seek clarity outside of the large group. In Laos most education follows traditional rote learning formats, and students are discouraged from asking questions or voicing critique. The more fluid (and sometimes chaotic) form of these training sessions were able to counteract those established expectations of how learning happens and empower participants to engage more actively.

Weak points in the training related to areas that were not the focus on hands on learning and role play. The information that had not been retained so well was related to the knowledge and information that was not part of practice activities, or part of the 'dances'. Notably, in Phonthong information about delayed clamping, and the benefits of waiting 3-5 minutes or waiting for the cord to stop pulsing did not appear to have been retained by staff from the previous year. This is as recommended by the WHO and reinforced by LP Dept of Health midwifery trainers

during both the 2019 and 2020 workshop, but midwives and other health workers in the Phonthong workshop still treated this as a new idea during the 2020 presentation. In contrast, the staff at Phoukhone District Hospital had clearly taken the information about delayed cord clamping on board, in all likelihood thanks to the enthusiasm and advocacy of one particularly attentive participant in the 2019 training. A Hmong doctor at the District Hospital was one of the most engaged participants during the 2019 sessions, and in 2020 greeted our return with the immediate sharing of how he had been using different positions and waiting before clamping the cord, all communicated using gesture and demonstration before the workshop began, and again with translation during the workshop.

6. Impacts of Birthwork training

Early indications are that health workers have responded very well to the training, and that it has had a positive impact on practice. Health workers have been able to implement the skills they have learned, and have been able to work with increased confidence to provide women with opportunities to move around more during labour, for example. During 2019 and 2020 trainings the team was able to revisit sites where training had been conducted 12 months earlier. During these return visits health workers were asked to reflect on what they had retained from the previous year, whether their practice had changed in the intervening 12 months, and to share stories of times that they had been able to put their skills into practice.

In 2019 the team spent one day revisiting the Nagiew Health Centre in Chomphet District. During this visit they heard from village health workers, midwives and nurses who had received training from the Birthwork team a year before, in December 2017. Many of the medical workers present spoke about how they had begun to apply what they had learned in the previous year. This included the use of varied birth positions and stories about how much women their husbands were happy to be given options. There were also examples of the emergency techniques being applied, including stories of 2 participants who together confidently helped deliver a breech baby when there was no time to transfer to the district hospital. They used the breech techniques they remembered from the training.

In 2020, as the team went through the training participants were asked at each stage how much they remembered, and were invited to share stories of times in the previous year that they had used the skills. In both Phonthong District Hospital and Phoukhone District Hospital, what health workers remembered most readily were

the steps for emergency management (PPH, breech, shoulder dystocia) that were taught through a 'song' with actions. The gist of these steps had been mostly retained, although some participants had forgotten steps or had the order mixed up. At the Phonthong District Hospital 17 of the attendees had participated in the training the year before. When asked what particular skills had been most useful several participants responded that it was difficult to specify which skills since before their training they had so little knowledge. All confirmed that they had encountered PPH in the intervening 12 months and had felt able to use their new skills.

In addition, many staff were enthusiastic about sharing stories of births in which they had helped women to move into the position of their choice: kneeling, squatting, standing, using the bed frame, door frame or family member to help to give support. Many had begun to introduce alternative birth positions in their care, both in clinics and when attending mothers at home. This was not the case for everyone, as some continued to rely on the bed during clinic births, but there was much more comfort with alternative positions than in previous years.

Less commonly used were the skills taught in use of manual pressure to relieve pain or ease the passage of a baby. Although the stories that were shared illustrated how well received this kind of hands-on care was for women. In Phonthong, for example, one midwife shared a story of when she had used manual pressure on the pelvis to relieve back pain, saying that she had done it to give the mother comfort and that the mother "really liked it". In Phoukhone, several participants enthusiastically shared stories of births in which they had helped the mother into different position and volunteered a strong advocacy for enabling the mother to choose the position "that makes her feel good" (Midwife, Phoukhone 2020).

More work needs to be done to assess uptake and impact. Systematic assessment of the impacts requires more time one-on-one time with health workers to understand how much of their previous trainings they have retained, which aspects of it they put into practice. Ideally, this would be triangulated against data on maternal and infant morbidity rates at the health clinic level to see whether the introduction of new practices has had an impact birth stats.

7. Meeting community needs and aspirations

Meeting needs of health workers providing childbirth support in areas with few resources and few options for seeking obstetric treatment was the focus of the training programs, and the program is well designed to meet this need. For health workers and midwives, the overall context, as detailed above, is one where health workers are often obliged to provide obstetric care without the kind of training that would be needed. In most regional health clinics health workers are providing care with very little in the way of equipment or support, and although they are under pressure to ensure that the quote of 80% of women birth in clinics, in fact the care they are able to deliver is limited. Even at the regional hospitals that capacity to respond to emergency situations is limited, with few options except to transfer women to one of the two provincial hospitals that are able to perform surgery. Because there is not always a level of confidence in dealing skilfully with unpredictable emergencies, transfers may be made unnecessarily, putting the mother and baby at potentially more risk. When transfer is impossible or conditions dangerous, the situation is compounded.

The training provided by the Birthwork team is focused on providing the kind of care that can optimize the chances of women delivering safely, focusing on making the most of the resources that all health workers will have available. The training foregrounds the ability of health workers to create a calm and supportive space through kind and respectful care which would maximise a woman's feelings of safety, and therefore support her bodies capacity to relax and to birth naturally. Rather than relying on medical equipment that may not work, the techniques taught focused on use of body position, touch, and commonly available tools such as a sarong or rebozo, a Pinard, and the presence of family. As part of this, the team encouraged the use of traditional practices that could safely support childbirth, such as options for using the rebozo in the same way that a rope is traditionally used in the home to support a mother to squat during labour. Use of the rope is still common in the villages, and bringing it into the training reinforces that this is a legitimate birthing practice. Overall the training emphasised the skills that can support safe and effective birth in the absence of modern equipment (or the reliable electricity supply needed to operate such equipment). This meant, for example, spending a portion of the training days on how useful the Pinard is to assist in check birth position and monitor heart rate of baby, in absence of doppler or ultrasound

equipment; Or practicing how to help a woman into different positions and to flex the pelvis to help a stuck baby move into better position and enable birth.

In 2020 the addition of visual materials for use in clinics provided resources that could help health workers overcome some of the challenges of communication with mothers and families who did not speak the Lao language. Visual resources can support communication and education about birth position and the process of birth even when carers and mothers lack a shared language. The visual material reinforce the ability of health workers to explain to women what they are doing when they do assessments during pregnancy or labour, to offer education about position of baby, childbirth positions, and the process of childbirth. Improving the information available to women could both encourage them to seek assistance through pregnancy and during birth before problems emerge. Many women in village settings do not have access to such education.

For community members, the team has fewer opportunities to get to know the particular needs and practices of community members. Many of the challenges of providing birthing care in Laos are related to the cultural complexity of the setting (discussed below). The emphasis on kindness and gentle touch as foundations of good care, in emergency situations as in regular consultations, reinforces relations of respect between health workers and mothers. More work is needed to better understand the perspectives and concerns of women in rural and remote communities, and thus to shape maternity care services that can fit their needs. The success of the Birthwork training program could help to inform this process.

8. Cross-cultural context

The cross-cultural context of the Birthwork training programs is multifaceted. In addition to the need for cross-cultural sensitivity in the partnership between Lao and Australian professionals, the program must traverse different institutional and bureaucratic cultures, different languages, and different educational norms between the trainers and the participants, and is also delivering a training program that needs to equip medical staff for their work in a rich multi-cultural environment. Below I address in turn how well the program met the challenges of Australian-Lao partnership, teaching with translators, and the multi-ethnic context of northern Laos.

Australian-Lao Cross-cultural partnership

Respect for the local context and the development of training curriculum in dialogue between the Australian team and Lao partners has been extremely important. A great strength of the team is their ability to strike a delicate balance between offering the skills and knowledge they bring from their practice and experience, respecting local practices and adjusting to reinforce local clinical protocols. Aspects of local norms are at odds with how the team would practice midwifery in their home countries and the ethic of supporting natural birth that informs that practice. However, placed at the fore in this context is the aim of strengthening and supporting local health workers to care for women as best they can in the local context. Thus local clinical norms were never questioned, and the teaching program was designed to incorporate and reinforce local protocols. When issues came up during teaching, the team always checked with the Lao midwife trainers who accompanied us to the field to ensure that what they were teaching was not at odds with the other training that health workers receive. At the same time the training did nudge at the boundaries of what health workers are taught by incorporating a recognition of traditional birth practices that are usually not included in any formal teaching of midwifery in the Lao context. A key example of this is the practice of giving birth in the squatting position, gripping a rope hung from the rafters of the house. This birth position is shared by many different communities in Laos, and by including it in discussion of different birth positions the program affirms the validity of this traditional practice where formal training tends to emphasise the lithotomy position.

A **flexible and adaptable approach** was crucial to enabling positive partnership between the Australian and Lao team members. Plans changed often while in the field, and, as is usually the case when working in the Laos context, there is often a lack of clarity about what should be happening and where/when the team is going. These conditions are entirely normal in the Southeast Asian context, and especially in projects that involve coordination between local organisations or local government offices and foreign staff. Conditions change, and often the reasons for changes to schedules is not communicated clearly. At work beneath the surface in these contexts are the intricate politics and protocols of local hierarchy, and while locals have the cultural knowledge and language skills to understand what is going on, it is rare that these circumstances are translated to foreigners in the way we might expect when working in a European setting. Local staff are much more likely to just accept changes without wanting to know why. While this can be frustrating,

the Birthwork team was adept at adapting and going with the flow, without insisting on the kind of clarity around schedule one might expect in an Australian context.

Teaching with translators

A key challenge of the training sessions is that they take place through use of a translator. The efficacy of translation is centrally important. An ideal translator would have a mastery of the specific clinical language, an ability to straddle the linguistic norms of culture, and ensure clarity in translation. Because of the nature of the cross-cultural interaction, yet the importance of precision of understanding, high quality translation is essential. At times key concepts or information went astray, or the translator would take time to offer her own additions to the curriculum. Often this complemented what teachers were saying, but at times it took the sessions off track. A sound understanding of medical terminology would help ensure clarity of translation, and perhaps a more professional approach of sticking to direct translation. It is important that translators 1) have a good rapport with teachers, 2) understand the intention of the material, and 3) that they are able to work to effectively ensure that participants are grasping the material. Translation during the 2019 training sessions usually met the 1st and 2nd criteria, but at times fell short of the 3rd.

In 2020 the translation in Phonthong DH was conducted by a medical assistant who works at the District Hospital. Having been a participant in the workshops the year before he had a good basis in the curriculum, and had the knowledge of the medical system and medical terminology required, although at times missed the nuance of the English as he was not entirely fluent. The Phoukhone translation was conducted by the same translator as had accompanied the team the year before with the same challenges as this translator is not familiar with clinical terms, and at times could not communicate clearly and effectively. This meant the team were not able to fully appreciate what participants were saying especially during story telling or question answer sessions, and the team were concerned that accurate information was not being translated into Lao. Ameliorating these concerns, the head of Provincial mother and child health accompanied the team in Phoukhone and was able to offer translation of course content, but was not so effective when it came to sharing stories/feedback.

Multi-ethnic context of northern Laos

Laos PDR is one of the most ethnically diverse countries in the world. The Laos PDR government recognises 149 ethnic groups, but ethnolinguists have sugested that the correct number is closer to 160. There are 86 documented languages spoken in Laos, but the Vientiane Lao dialect is the official language of the country. Lao is widely spoken and is the language that all children are taught at school. For communities in inaccessible areas, like the mountains of Luang Prabang Province, many ethnic minority people cannot speak or understand Lao, with men being more likely than women to be able to communicate in Lao. Officially there is no distinction made between majority Lao Lum and other groups, all are officially classified as 'ethnic groups' (Badenoch and Shinsuke 2013) . However, minority groups are often still looked upon as 'backward' or 'undeveloped', and are not always treated with respect.

The Districts in which the Birthwork team delivered training provide care for a population that are ethnic Khmu, Lao Lum, and Hmong. Traditional care around pregnancy and birth differs between cultural groups. The multi-cultural environment of northern Laos presents particular challenges to the effective provision of maternity care. In studies exploring the reasons why women do not attend ANC appointments and choose to give birth at home, Sychareun et al (2012, 2016) found that in addition to transport difficulties and discomfort in clinics, women also felt afraid, and many had experienced bullying and mistreatment, and felt spiritually physically vulnerable in hospital, being unable to receive the traditional spiritual or medicinal treatments that they need for a safe and healthy birth and having to submit to intrusive examinations by medical staff (Sychareun et al. 2016; 2012).

The Birthwork program, in its advocacy for kind and respectful care and the encouragement given to participants to enable women to have family members assist during labour, provides an opening for health workers to welcome cultural practices into the birth space.

9. Potential to scale up or scale out

The training is work undertaken in the hope that it will create a ripple effect, as participants are strongly encouraged to pass on their knowledge so that may spread outwards to other health workers and the women they care for. Sharing knowledge about childbirth, the body, and the central importance of kind and respectful care in

all circumstances is a prominent theme in the training sessions. Thus, in an informal way, a scaling out of the program is already in play as participants are strongly encouraged to share their learning with mothers and colleagues, posters are circulated which demonstrate a range of possible birth positions and educate viewers about the pathway of the baby through the pelvis, placental separation and the important aspects of breastfeeding and nutrition.

The encouragement for participants to share knowledge and teach women in the community is undertaken with a conscious intention to enable women to be able to connect with the physiology of pregnancy and childbirth and to gain control over their own bodies. In contrast, official policy in Lao PDR creates an environment in which only medically trained Skilled Birth Attendants are considered to possess legitimate knowledge and skills. The democratisation of knowledge that is encouraged by Birthwork sits at odds with this, but has so far been unproblematic to Provincial Health Department partners. Discussions of taking the program a step further, to offer training to community members were not well received. Officials were not willing to discuss the sugestion, for example, that village Traditional Birth Attendants might be given additional skills in emergency management.

The Laos political system and health funding structures present significant challenges for the introduction of policy changes, yet alternative approaches are possible. There was implicit acceptance at the District level that village health workers often needed to assist in homebirths. At the local level it was recognised that many women had no choice but to deliver at home and it was accepted that health workers would have to go to them. Sychareun et al (2016) also point out that incorporating benign cultural practices into clinical practice could be one way to make the clinic a more welcoming and safer place for women. Clinics and hospitals could enable family involvement in birthing and keeping a mother warm after birth and argue that changes to care practices can be addressed with sensitivity to community stakeholders. The Birthwork program would be an appropriate complement to these kinds of initiatives.

The Birthwork training program is certainly making a meaningful contribution to the capacity of health workers to provide care at the district level. The form of respectful and sensitive care being taught has the potential to ameliorate many of the barrier to women seeking support during childbirth (as discussed in section 1.2 Context). It is a low cost, and potentially high impact approach, and if it could be conducted

across other regions of Laos could make an even more significant contribution. It is also a program which could be adapted in order to enhance the skills and capacities of community members who already provide care to birthing mothers, such as the female elders in Hmong communities who attend women if the birth is difficult. However, for the program to be extended would also require new layers of formal approval and governance which could take the control for program development out of the hands of the Birthwork team, and threaten the sensitivity and ethical approach that defines the program as it is.

10. Conclusion: Creating a Global Network of Care

In the field of international health and development programs, the Birthwork midwifery training program in Laos is exceptional. It is built on basis of relationships and mutual trust between partners in Australia and Laos. It is supported by an extensive network involving INGO workers in Luang Prabang, including the formal hosting and support provided by Swiss Red Cross and the informal friendship and moral support provided by staff from Save the Children. Local institutions are also crucial in making the program work. The Luang Prabang Department of Health provides personnel and vehicles to enable the training to take place. The funds that the Lao Birthwork team raise enable Provincial Health Centre staff and District Hospital staff to participate by covering their expenses to attend the training. The funds also cover the costs of the Australian teams travel and in-country expenses, but they are not paid for their services. There is substantial funding provided by Send Hope Not Flowers, the donations and voluntary work of women who sew the Days for Girls menstrual kits, and the contributions of midwives, doulas, and other supporters in Australia who all make the program possible. This network of collaborators enable a program to take place that is small scale and intimate, and responsive to local needs and circumstances.

The Birthwork program is at present a form of 'informal health development' taking place on an ad hoc basis, an intervention built on personal connections and relationships, nurtured by commitment and shared concerns. The teaching program is developed with a careful and considerate attention to the needs of health workers in context, the policy structures in which they work, and a commitment to an ethic of women centred care. Largely because the program takes place 'under the radar' it has been able to focus on teaching respectful care, democratising knowledge, and low tech, hands on skills that are not part of current curriculum. In doing so it

works to effectively enhance the abilities of health care workers, and building their capacity to provide safe care in situ, whether in clinics or in women's homes.

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Appendices

Appendix 1: Team members

From Australia:

Jenny Blyth, team leader & project coordinator for Birthwork in Laos. She has a great interest in what happens at the interface between medical and traditional models of birth care. Jenny first spent time in Northern Laos in 2005, and then has made several trips since. Over time, she observed some of what was happening and not happening to support women's wellbeing in Laos communities through tradition, government initiatives and INGOs projects. This led to being invited to volunteer some training to the poorest and most under-resourced districts in Luang Prabang Province. In Australia Jenny works as an independent birthworker (birth attendant), childbirth educator, and bodyworker specialising in women's pelvic health.

She has been working with natural birth for over 35 years, preparing and supporting many hundreds of women through pregnancy, birth and early parenting at home in Queensland, Australia. She cares deeply about contributing to the evolution of collective birthing wisdom and the awakening of women's body wisdom and awareness of choices in relationship to birth. For the last 18 years Jenny has presented Birthwork Workshops that explore the many facets of working with birth through hands-on skills. They are open to care providers, bodyworkers and parents together; to create a powerful multi-disciplinary embodiment of knowledge, to temporarily address and experience dissolution of hierarchies and power structures implicit in systems of care, so that the focus is on the mother/birth giver as central to the birth experience, and to use language and communication

skills that are inclusive and appropriate to her needs. Jenny also does private consultation work
Jenny is author of 2 books *Birthwork* and *The Down to Earth Birth Book*. She also created the film *A World of Birthworkers*, and with Alieta Belle co-created 2 films about natural birth called *The Big Stretch* and *The Big Stretch Sequel*.

Claire Eccleston, midwife and midwife educator, emergency skills
Claire has worked as a doula, supporting women in homebirths, and running parent groups. Since completing her formal midwifery training in New Zealand, she has worked as a midwife in primary care facilities, and has supported women in homebirth as well as working in the hospital system. She has taught midwifery workshops in Vanuatu and Cambodia, and works often with Pasifika and Maori communities in New Zealand so is well practiced as a carer and teacher in cross-cultural contexts. Claire contributed significantly to the design of the emergency skills component of the workshops, using her own knowledge as a clinical midwife, with reference to WHO standards, and drawing on her capacities in cross-cultural communication to develop a curriculum that is suited to the Lao context.

Steffi Arvanitakis, childbirth educator, doula, body work.
Steffi comes with a long experience in supporting women and families through the antenatal period, childbirth and the early period of infant care. She brings many years of practice as a lay birth attendant and doula, and extensive training in forms of body work (i.e. hands on techniques for managing pain, supporting optimum functioning of the body and supporting healthy fertility). She teaches at the Doula College in Melbourne, presents at midwifery and doula conferences, runs support groups for pregnancy and parenting, and provides support services to mothers and families around pregnancy and childbirth. Her interest has long been focused on learning from traditional childbirth practices and she brings her sensitivity to different perspectives into the work in Laos. She contributes of hands-on techniques for supporting normal birth, maximizing space through the pelvis and helping a woman with pain, as well as demonstrating how to work with women with kindness and gentleness.

Katharine McKinnon, researcher and development geographies scholar from La Trobe University, Australia.
Katharine joined as observer to provide feedback on the pedagogical approach of the program and its effectiveness in the cross-cultural context of rural northern Laos.

She also investigated the impacts of the program with trainees. Katharine is a human geographer whose work engages with community economies, gender, development and care. She holds a PhD in Human Geography from The Australian National University. Her research examines professional practice in international development, and explores potential for building community economies in a range of settings. Her research in Australia and the Asia-Pacific focuses on women's economic empowerment and community based indicators of gender equality, social enterprises and community economies of maternity care.

From Laos:

- Kemkhan, LP Provincial Health Department officer (Phonesay, Phoukhone 2019)
- Sengchan, Senior midwife trainer, LP Provincial Health Dept (Phonthong HC, Phouxay District 2019 Phoukhone, Phonthong 2019)
- Bouakeo, Maternal and Child Health, Luang Prabang Health Department (all locations 2019, 2020)
- Latsamee, Senior midwife trainer, LP Provincial Health Dept (Phonthong 2020)
- Pianut, Swiss Red Cross (Phonthong HC, Chomphet and Phouxay District 2019)

Appendix 2: 2019 Program Schedule

- 21 January travel to Phoukhon District
- 22-23 January Phoukhone DH training
- 24 January HCs in Phoukhone District: Phouviang HC, Pakeng HC
- 25 January travel to LP
- 26-27 January weekend
- 28 January travel to Phonthong District
- 29-31 January Phonthong DH training
- 1 February HCs in Phonthong District: Bandon, Kiewjia. Overnight to Nongkiew
- 2 February travel Nongkiew to LP
- 3-4 February break (lunch interview with Vanalee on 4th)
- 5 February travel to Phouxay District with Swiss Red Cross, visit to Health Worker Bualee at her village
- 6-7 February training at Phonthong HC in Phouxay District, travel back to LP
- 8 February Chomphet District, visiting HC where training delivered previously

- 9 February travel back to Australia

Appendix 3: 2020 Program Schedule

- 19 January I arrive LP
- 20 January travel to Phonthong District
- 21-23 January training at Phonthong DH
- 24 January HCs Bandon & Nahluang, overnight in Nongkiew
- 25 January travel back to LP
- 26 January rest day
- 27 January travel to Phoukhone District
- 28-30 January training at Phoukhone DH
- 31 January HC visit and travel back to LP
- 1 Febuary travel back to Australia

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