

Emergency Obstetric Referral in Cambodia: A Teaching Case study



The ReBUILD Consortium is a 6-year research partnership, funded by the UK Department for International Development (2011-17). ReBUILD aims to improve access of the poor to effective health care and reduced health costs burdens, through the production and communication of robust, policy-relevant evidence on health financing and human resources for health.

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A Case Study for District Referral Systems Critical Emergency Referral in Cambodia

Teachers's Guide

Issues Covered

This case study deals with Emergency Obstetric Referral and tackles issues around:

- ◆ Family & Community Participation and Voice
- ◆ Clinician behaviour, motivation and attitude
- ◆ Identifying positive resources for maternity care in a low income setting

Prerequisites

The case study assumes that readers have a general understanding of health systems - definitions, functions, values, and frameworks. It also assumes some understanding of maternal healthcare in low income settings and exposure to the Three Delays Model. Some knowledge of politics and recent health policy reforms in Cambodia would also be helpful.

Case Study Summary

The case study presents an edited interview with a mother who accompanied her pregnant daughter through three referrals within the Cambodian health system in pursuit of a safe and live birth for both mother and baby. Readers of this case study have access to an edited version of the interview transcript. Students can read the transcript and examine it for instances of best practice and gaps within Cambodian obstetric referral.

Case Study Objective

To provide teachers with a recent case study of critical emergency referral in rural Cambodia, to glimpse the current state of health system in that country, show the active role taken by family and communities in referral, and challenge participants to identify positive resources in what may appear to be a negative situation.

Learning Objectives

- ◆ To understand the concept of referral, how it may function in contemporary rural Cambodia;
- ◆ To use a health systems thinking approach to understand the case;
- ◆ To understand that even in the bleakest situation, there are existing positive resources that can be recruited to strengthen referral and a health system – that is, to approach change in a positive manner.

Discussion Guide

Possible questions for discussion, based on this interview transcript, are:

- ◆ How did the labouring women get from home to the Health Centre? And from the Health Centre to other hospitals?
- ◆ Who accompanied her during each transfer and why?
- ◆ At different stages of the delivery journey, decisions were made to move the labouring woman. Who made the decisions each time?
- ◆ What were family members doing throughout the delivery journey?
- ◆ Which clinical staff were involved in this delivery journey and what were they doing?
- ◆ Which other stakeholders are involved in transfer and care in this story?
- ◆ How would you rate the relative importance of the actions of these different stakeholders (family, clinicians, others)?
- ◆ What financial costs are mentioned in this story that need to be paid to enable clinical care and referral?
- ◆ Is there any indication of 'under the table' payments in this story? If so, who initiated them and what was the outcome?
- ◆ Did the family seem able to pay?
- ◆ Even though her daughter's situation was life critical, what positive resources could the interviewee see in the Cambodian Health System?
- ◆ What is the interviewee's dream for future births? How does she think that dream can be achieved?
- ◆ Did referral documentation accompany the transfers from HC to DRH and DRH to DRH?
- ◆ Is there any evidence of back referral?
- ◆ What positive aspects can you see in this story (reference Murray & Pearson 2006 aspects of a functioning referral system)?
- ◆ According to Murray & Pearson, which aspects of a functioning referral system can you not see in this interview?
- ◆ If family were removed from this story of referral, would the pregnant woman and her baby have survived?
- ◆ How would you strengthen referral for obstetric emergency in rural Cambodia?

Student Resources

Background

Between 1970 and 1997, the Kingdom of Cambodia experienced ongoing conflict and violence through the years of the notorious Khmer Rouge mass genocide, subsequent Vietnamese backed takeover, and later factional fighting between two political parties that resulted in a coup d'état by Hun Sen. In 2015, Prime Minister Hun Sen continued to lead the country, which Transparency International ranked as one of the most corrupt in the world¹. This extends to the health sector. However, there are notable successes with decreased maternal death in childbirth and reduced under five child mortality. However, high maternal mortality continued to be reported in rural areas. UNICEF reported high home births for rural women, often alone, who were 4 times as likely to have complications in childbirth compared to women living in urban centres. UNICEF argued that a major reason for underuse was “weak communication and referral among various levels of (the health system), including inadequate linkages between communities and health facilities”².

Health System Structure and Referral in Cambodia

Cambodia operates a tiered health system, based on operational district (ODs) since 1996, to ensure access to community and higher level healthcare facilities. An OD consists of

- one Health Centre (HC) per 8-12,000 people, providing a minimum package of activities including antenatal care (ANC), normal birth delivery and post-natal care (PNC);
- a District Referral Hospital (DRH) that provides a comprehensive package of activities that will always include gynaeco-obstetric services;
- further referral to a Provincial Referral Hospital (PRH) when a DRH cannot manage a case or does not have a surgery;
- referral of last resort to a National Referral Hospital (NRH) in the capital, Phnomh Penh.

Referral protocols for sending and receiving facility were included in the Ministry of Health’s “Safe Motherhood Clinical Management Protocols” (MoH 2010) that details activities required for a referral during delivery or immediately after but do not state which cadres of staff are responsible for doing so.

An ID Poor Program (in which government pay health costs for those with an ID poor card through the Health Equity Fund) operates in selected ODs in the country. A national Midwifery Incentive Scheme (in which cash is paid to clinical staff of US\$15 per live birth in HCs and US\$10 per live birth in any RH to encourage facility births) operates across all ODs.

Additional background resources to this case study have been published online at the project website <https://rebuildconsortium.com/themes/additional-research-themes/access-to-obstetric-care-referral/> These include:

- Case Study Context: A literature review on maternal health care in Cambodia from precolonial times to the present day.

¹ Transparency International <http://www.transparency.org/country#KHM>

² UNICEF (2011). Maternal, Newborn and Child Health and Nutrition <http://www.unicef.org/cambodia/6.Maternal.pdf>

- Interview Format: The case study that follows was an in-depth interview supported by mapping – the question guide and an example of the mapping tool used to assist the interview process.

The Research Project

The research team set out to document delivery journeys in the public health system that took place in a rural province of Cambodia within the last year, using an appreciative lens. The objective was to find out what different interviewees (women, families, community volunteers, clinicians) saw as the positive aspects of journeys that had been undertaken in the last year, with a view to strengthening obstetric referral by building on existing positive resources within the health system.

Terminology

There was extensive discussion on what the term “referral” actually meant. The research team initially used the term to mean any movement from home to and through the health system and back home again. However, to clinical staff who participated in an early project workshop, this meant any transfer of a woman only when clinicians or other health system staff were involved. To take account of this, the term “delivery journeys” was used so that the community aspect of referral in the research would be retained in discussions with clinicians. Students should note, therefore, that referral in this research has a wider meaning than other studies on referral in international health.

The research team had also assumed that any delivery journey that was a referral was an emergency (a critical life threatening event). That is to say, any obstetric referral was automatically an emergency. However, clinical staff differentiated between a referral that was normal (not life threatening) and critical and this distinction is retained in this case study.

What follows is an edited interview transcript of a critical referral in which a mother describes her actions in getting her daughter, pregnant with a second child, to a public healthcare facility, and moving through the public health system, and back home again. In it, she compares the experience of the second grandchild to that of the first. During the interview, the interviewee continually wove between the two stories. For simplicity, these have been split so that the story of the birth of the second grandchild comes first. The interview took place in November 2015 with a researcher from the Cambodian Development Research Institute in local language.

Note that \$US1 = 4,000 Cambodian riels.

Edited Interview Transcript – Birth of Second Grandchild

Question from Researcher (Q): *When did you leave home?*

Answer from Interviewee (A): My daughter was pregnant with her second child. When the labour pain came, we left home at around 10 in the morning. Some of my family came with us. My relatives heard that my daughter had a labour pain, so they wanted to help us. Those relatives were my male cousin, my aunt's daughter and my aunt as well as their husbands and wives. My daughter's husband wasn't at home at the time, he was in Thailand, working, but he sent money back to her. Four motorcycles took the family to the Health Centre. I was holding my daughter on one of them and my cousin drove. When my cousin had dropped me at the Health Centre, he went back to pick up his wife and came back. We arrived at the local Health Centre and stayed for 1 night. Some of those who accompanied me and my daughter returned home. The clinical staff said my daughter might give birth in the afternoon of the same day, so she just endured the pain. The next day, the doctor asked her, "Do you feel the pain again?" and my daughter replied that she had the pain sometimes. The clinical staff were then afraid that my daughter might get a swollen face and massive swollen arms and legs. The doctor said that her blood pressure was high and were worried that it would increase until her body turned blue and her face would become massive. The doctor was so worried that he sent my daughter to the hospital.

We were sent from the Health Centre to the District Referral Hospital. We used two of our motorbikes to travel there. The doctor at the Health Centre directed me to look for the head of hospital here, so I followed his advice. When I arrived, I was so worried about my daughter that I rushed to look for the head of hospital. I asked someone in casual clothes, "Where is the head of hospital? Doctor ... doctor..." Someone replied, "Aunty, if you are looking for the head of hospital, keep walking and looking." In fact, the speaker was the head of the hospital but he did not tell me who he was. I replied, "I'm worried about my daughter, so I'm looking for doctors because I did not know anyone here." He replied, "Why didn't you just identify me?" I responded that I did not know him, so I couldn't identify him. I was so worried about the unborn baby but he was making jokes. Later he laughed and said, "Because you were looking for the head of hospital, I answered the question like that." We spent two nights at the District Referral Hospital. There were a lot of young practicum medical students. When I was in the District Referral Hospital, my daughter was given only medicines. She never received injections. She took medicines three times a day. I said to a doctor, "Doctor, you should give my daughter injection so that her swollen legs may subside." He responded, "When someone is swollen like this, they are not allowed to get injection because it might affect the baby in the womb."

We stayed at the District Referral Hospital for two nights. At the beginning of the first night, I said, "Doctor, my daughter is getting more swollen, and I'd like to request that we get sent to a higher hospital." The doctor said, "Don't worry, let's wait and see for two more nights." I disagreed and met the doctor again the next day. I requested again, "Doctor, send my daughter out because she is getting more swollen. I am so worried because I have only one child." Doctor said, "Aunty, don't worry! Tomorrow I will meet the head of hospital and we will discuss about it." I thought my daughter's legs are getting swollen like a basket and her womb is also big. Then, I said, "Doctor, please send my daughter out." Doctor said, "Where do you want to go?" I said, "I want to go to the Provincial Referral Hospital in the neighbouring province". I wanted to go there because my first grandchild was born there. My daughter was massively swollen. She couldn't even pee, and the doctor kept asking for her

urine. I said, "She couldn't pee, doctor! Look! I don't know what to do if you just keep asking for her urine. What can we do now if she said she couldn't release her urine?" On the next day, the head of hospital said, "Aunty, what do you want? If I send you out, will you go?" I replied, "As long as you send me out, I will go because I won't let my daughter die." The doctor said, "Now you can decide where you want to go, such as another District Referral Hospital or a Provincial Referral Hospital? Now where do you want to go?" I responded, "I decide to go to the Provincial Referral Hospital in the neighbouring province, so please help issue a physician's letter for me". I said, "If the doctor takes us there, that's fine. If not, then we will ride our own motorbikes." The doctor said, "Now you don't need to ride your motorbike because we will arrange a car for you."

We travelled to the Provincial Referral Hospital in the neighbouring province in the ambulance provided by the District Referral Hospital. We spent only 150,000 riels (USD37.5) on it. However, they asked the driver to meet me and arrange payment. The driver wanted 200,000 riels so we bargained. Three doctors came with us, 2 student doctors and the head of hospital, in the one ambulance. My daughter and I, together with my younger sibling and my aged mother, were also in the ambulance. My daughter spent 4 nights at the Provincial Referral Hospital and delivered the baby there. However, we were not allowed to leave the hospital after giving birth for another 3 days.

I offered the doctors 30,000 riels for their food while we were waiting for a car to return them to the District Referral Hospital. He said, "It's OK, Aunty." I said, "It's OK, please accept it to buy food." When I arrived at the hospital, I was asked to provide a thumbprint (on a referral letter). There were two doctors tasked to give injections to my daughter. I didn't have much money, so I gave them 5000 riels each. At first they didn't take it but I said, "Don't deny my offer, take it to buy food to eat" and they kept it. In one hour my daughter was injected 5 times. I think there were around 20 injections for just two days. My daughter's swollen legs gradually reduced. After that, I was asked to provide thumbprint (twice) (on referral letters) because they couldn't guarantee safety of the unborn baby. The doctor said, "Now, you need to choose between your grandchild or your daughter?" I replied, "My grandchild is yet to see sunlight, so please help my daughter because she is my only child." A day or so after that incident, another doctor came to meet me. He said, "Your daughter is only 8-months pregnant and your home is far away - what do you want us to do now?" I replied, "If the doctor says that he can help my daughter deliver the baby prematurely, like giving her injections, just do it." My daughter was then taken to a room and checked up three more times. The doctors didn't allow me inside, to accompany her. I think it was about 4 days later, a doctor came to give her 2 injections. He said, "In the afternoon, she might be in childbirth pain after waking up from her afternoon siesta." Around 11 pm that night, my daughter told me, "Mother, I have a labour pain." I replied, "I will inform the doctor." The doctor came to give her another 2 injections. After some time, I called the doctor, "Doctor, my daughter is nearly delivered she has strong labour pain now." The doctor said, "Come in, Granny, just take her into the delivery room." We took her into the labour room in a rush, as I hadn't got a sarong ready for my daughter and the doctor wasn't dressed properly. When the baby girl was born, it was this small (showing size with her hands). The baby was born around midnight and we were asked to leave the delivery room about half an hour after the birth, and go back to the ward so that we could have a rest. It was not like in the Health Centre. Since my daughter's husband wasn't around, I looked for someone to help take my daughter from the delivery room to a patient room, and I hired someone to do it for 5,000 riels. It wasn't far but, I couldn't carry both baby and mother. At that time, we needed to pay the medical bill first before they gave us any more injections. They asked us to give thumbprints (on the bill) and 90,000 riels. They only provided us treatment after we paid them. When we got there, they need to have a slight cut on my daughter's baby ear. The doctor used paper and cotton wool to

soak blood while my daughter watched them doing it. They said it was required for every newborn. But I don't know and I didn't dare ask the doctor.

Q: When you think about the experiences you had with the Health Centre and the two hospitals, do you feel happy or satisfied with any point?

A: I feel happy and satisfied when I went to the Provincial Referral Hospital in the neighbouring province because it seemed that we would survive and there was no more danger to my daughter. I feel satisfied with the Provincial Referral Hospital the most because I have never see anyone in danger there. I advised my relatives, "I will take you there and even be your care taker as long as you go that Provincial Referral Hospital." I really feel satisfied with this hospital only because they take care of us well. At the time of my grandson's birth, there was only one toilet available on the ground floor, but now there are toilets on the upper floors as well so its cleaner. I only feel unsatisfied with cleaners. Those cleaners wander around at 4am and asked us to get rid out of our belongings and scolded newcomers severely. I went to the hospital twice, so I know the drill. I just need to put all belongings in a closet provided, and there was a shoe shelf to put our shoes.

Q: Your daughter lost a lot of blood and was very swollen, her baby was premature, but they both survived. Can you think of what factors led to their safety?

A: I just kept praying for her. If my prayer materialized, we would hold a ritual when we returned home. At the hospital, I also offered some fruits at the spirit house. I just kept praying to the spirit of our ancestors to take care of the younger generation. When I came back from the Provincial Referral Hospital, I invited a Buddhist monk to make a chanting ritual for our safety.

Q: Are there any other factors that you can think of?

A: She recovered because she got injections from doctors otherwise she couldn't have. The Provincial Referral Hospital gave her 5 injections at one time. My daughter said, "I feel so hot, mother ..." So, I soaked a towel in water to wipe her body. She said, "I feel cold only on the outside, but inside its hot to death." I responded, "They give you injections to lower your blood pressure." I had asked the doctor. After 2 days, she recovered. When I lit the incense sticks and prayed to the spirits at the hospital, I offered bananas. When we returned home, I offered chicken to the spirits because I promised that when I prayed for my daughter when she was in hospital. There were about 2-3 spirit houses at that hospital.

Q: Anything else?

A: The attitude of the staff was different this time, not discourteous like before. This time, when I asked them anything, they just told me directly. They were gentle. But I wasn't allowed inside the delivery room. *[Family members were not allowed to get in?]*, No way! At the Provincial Referral Hospital, no-one is allowed in – at the Health Centre all family members can get in. I asked the doctor

why and he said the woman would be “too dependent” but I don’t know what it means. My cousins helped a lot. For instance, today one came to bring rice and the next day another came to do the same. I brought a gas cooker to cook rice and warm food by the patient room door – the cleaners never caught me doing it. There is a hospital bell that rings and the family can get rice from the hospital but I never went to get it

Q: Now, among the factors that you have discussed, can you think of the factors that you would want to keep and for other pregnant women to experience when delivering a baby like your daughter?

A: I think they should just go that Provincial Referral Hospital directly. My cousin really wants to have a baby, but she is so afraid because of my daughter’s experience. She is afraid of doctors. I said, “Just keep the baby and don’t be afraid because everyone has to go through it ... as long as you survive, it doesn’t matter who sees your private parts.” When I saw male doctors [at the Provincial Referral Hospital] sitting down, I said to them, “Doctor! Since you see women’s private parts like this, don’t you gossip about them?” The doctor said, “Aunty! I don’t have time to talk about them. My wife is like your daughter and vice versa. I don’t have time to talk about it.” The staff don’t demand money, we just put it in their pocket, and we pretend like nothing happen without letting others see it. Then doctors came to see us often. For me, as long as my daughter could survive, I don’t care how much I spent. I can sell my land because I have only one daughter.

Q: In the future, can you think of what would be the best delivery experience? What do you want?

A: I want a smooth, not difficult, delivery and my daughter is still alive. We want to come back home safe and for mother and baby not to die elsewhere.

Q: Who could help to get the best delivery experience in the future?

A: The doctors, otherwise how we could be safe? My daughter and her husband also went to have an antenatal checkup every month. One time, when her husband was in Thailand, she went by herself. The doctors said, “Why do you ride the motorbike yourself? What will happen and what you are going to do if you have high blood pressure and fall off along the way?” She said, “It’s fine.” When she went to Health Centre alone like this, everyone advised her not to do so. So when she started labour, I took her.

Q: How did your daughter feel about being sent from one hospital to another?

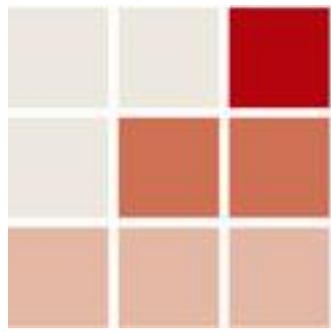
A: She said it’s normal. She played with her son as normal. She didn’t say she felt pain, but she only felt numb. The unborn baby didn’t move at all the whole time she was at hospital. Her babies are small though, when we came back from hospital, there were many people visiting us and asked how could her babies survive because they are so small. I’m baffled... (laughs).

Edited Interview Transcript – Birth of First Grandchild

“... when my first grandchild, a boy, was being born we had gone first to the Health Centre. At the Health Centre, my daughter had lost a lot of blood and I thought she must have a cut somewhere. She was bleeding so much but my grandson was not born yet. There were two hands pushing like this (she demonstrated using her hands) ... so I thought my daughter must tear in some part of her uterus, right? There was so much blood and big pieces of coagulated blood like this (demonstrating with her fingers). After staying at the Health Centre for one hour, we used 6 sarongs. We could not wash down those sarongs due to thick bloodstains. I was asked to trash those. A doctor at the Health Centre checked her and asked, “Do you have leucorrhoea?” My daughter replied, “No, I don’t.” A while later, another doctor came to check her but she was still bleeding. So I called to the District Referral Hospital and spent US\$10 on phone call to inquire about my daughter’s condition as she kept losing blood after giving birth. Her husband was also present so I told him, “You go to fetch more sarongs.” After that, I asked some boys who were drinking can beers and eating boiled chicken at the Health Centre to help call the doctor at the Provincial Referral Hospital in the neighbouring province. I bargained for 170,000 riels for the ambulance to come and pick us up, but they wanted 200,000. [*Was it expensive for spending that amount on the ambulance at that time?*] Yes, it’s expensive. We were already in danger, so how could we not spend on ambulance and go to hospital? If we take normal car, it won’t cost that much. However, my daughter was sick, so I couldn’t let her die. At the Health Centre, they didn’t know what to do. I said, “If you don’t know, then give me a physician’s letter (referral letter) to send me there.” When we got into the ambulance, my daughter was unconscious and I thought she would die along the way, so I tried to pray for her. The baby was born, and was kept on one side. (Someone, not clear ...) mocked my grandson, “He will get loose and get your skull fractured.” I said to the doctor (Head of Health Centre) that came with us, “Please examine her again ... use torch to see it”. Her husband was also with us and said, “Mother, why is it so silent?” I said, “Let’s poke her ears.” When we arrived at the Provincial Referral Hospital, the doctor said, “She would die in one hour as she loses too much blood.” The doctor repeatedly said, “Why don’t you just let your daughter die and sue the Health Centre?” I said, “I don’t want to sue anyone, and I just want to see my daughter alive because I have only one child.” The doctors at the Provincial Referral Hospital scolded the Health Centre doctor severely, like a dog. I felt sorry for him because he helped us get to the Provincial Referral Hospital. They said to him, “Go away” (heavy tone). They used a needle like a fish hook to sew my daughter. I saw it because the doctor asked me to take the blood and trash it. I picked it up around 4 needles in the blood. The doctor also asked me to have a look in case any needles were in the blood and if I found any, to give them back to the doctors. After the baby was born, I asked my daughter, “When the doctor stitched you, is it painful? She said, “No, it doesn’t hurt, as the doctor administered anesthetic injection before stitching the wound.” The doctor who stitched the wound was male and senior. I don’t know how many needles they used to stitch the wound, as I already picked up 4. If my grandson died, I wouldn’t bury him there. I would bring his corpse back home. They probably don’t bury the corpse, but throw the corpse into river. A moto taxi said, “During the day, there are people walking around, so if you need to, we can take the corpse away.” There are people you can hire to do it for about 15,000 riels. The moto taxi is not afraid of doing it. I think the corpse might be thrown into the river. There are not many people who take their baby’s corpse home to bury. If they feel too difficult, then they just hire someone to dispose of it. I would take the corpse back home and bury it myself...”

Selected Readings and Sources

- ◆ Annear, P. (2015). *Health Sector Analysis: Cambodia Third Health Strategic Plan (HSP3) 2016-2020*. Commissioned by Department of Planning and Health Information, Ministry of Health with financial support from Korea International Cooperation Agency and World Health Organization. Melbourne, Nossal Institute for Global Health.
- ◆ Annear, P., et al. (2015). *The Kingdom of Cambodia Health System Review*. Health Systems in Transition series, Asia Pacific Observatory on Health Systems and Policies.
- ◆ Ith, P., et al. (2013). "Practices of Skilled Birth Attendants During Labour, Birth and the Immediate Postpartum Period in Cambodia." *Midwifery* 29: 300-307.
- ◆ Murray, S. and S. Pearson (2006). "Maternity Referral Systems in Developing Countries: Current Knowledge and Future Research Needs." *Social Science & Medicine* 62: 2205-2215.
- ◆ Nakahara, S., et al. (2010). "Exploring Referral for Injured Patients in Low Income Countries: a Case study from Cambodia." *Health Policy and Planning* 25: 319-332



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