



Surmang Foundation

**Community Health Worker Program
Executive Summary and Annual Report 2011**

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Community Health Worker (CHW) Program – Background

Based on the results of the 2004 Surmang Foundation KAP survey [1] which showed high maternal mortality and infant mortality rates, the Community Health Worker (CHW) Training program was initiated and funded in 2006 through Surmang Foundation. The CHW program, based on working models in Nepal and India [2], sought to train women in the community to perform safe antenatal care and delivery. CHW Training was expressly designed to provide basic instruction on hygiene concepts and emergency measures that would set a framework for future training.

The overall goal of the project is to improve knowledge, attitudes and practices on the household level. By training community health workers to conduct prenatal visits, identify danger signs, attend births and visit newborns, we hope to reduce deaths preventable by simple interventions and timely referral for complications.

*-Saad El-Dien, Program Manager
Community Health Worker Project, 2006[3]*

The CHW program represented a shift in focus for the Surmang Foundation from an ambulatory clinic largely serving male patients, to a community based care model supporting and recognizing the maternal/child healthcare needs of area women. A group of 33 women, 10 in the catchment of Surmang and 23 in two villages roughly 60 kilometers west of Surmang, were identified by village leaders and trained in basic antenatal care and delivery. The 33 women were trained in 2007 and 2009[4], and in 2010, a group of 6 women from the nearby community of Zatch were added to the roster of community health workers. All 39 women were trained in 2010 and 2011, with roughly 75% of deliveries attended by trained CHWs in 2011 [Table 1]. The guiding goal for the CHW program since its inception in 2006 has been to reduce both maternal and infant mortality rates in the Surmang Township catchment area of Qinghai province, China.

CHW Program 2010: The effect of *Sangee* - the Earthquake

At 7:46 am April 14, 2010, an earthquake with the magnitude of 8.2 hit Yushu prefecture, the epicenter in the capital town of Yushu. Buildings collapsed killing and burying thousands of Tibetans. Phuntsok Dundrop, Surmang's clinic doctor and manager, was among those buried. Five hours later he was able to free himself and his family from the rubble in their Yushu home. Others were not so lucky; the devastation was massive and overnight the Chinese brought in military personnel to assist in disaster recovery. Post-earthquake, many Lamas and Tibetan spiritual leaders encouraged families to have children to "replace the dead". One CHW reported that she had two sisters who had IUDs placed following the deaths of their respective children. Both had their IUDs removed after the earthquake and got pregnant within the next month. One had her sixth, the other her fourth child. This story was echoed across the span of more than 10 villages where the CHWs live and work. The statistics for delivery by the CHWs show a modest increase in attended births in comparison to the last year. A larger change was the number of visits by the CHWs pre and post-delivery. Hospital deliveries remained unchanged for the year.

2011 CHW Schedule and Training

The Training schedule this year included two-day courses for Rongdou/Mendo villages, Zatch and Xiewu clinic. While the Surmang CHWs were carefully interviewed for their participation in delivery and antenatal care for payment, the Surmang CHWs did not have an exclusive training due to scheduling. The Rural Health Festival finished with a CHW training session of management of third stage delivery for every CHW attendee. Each CHW was paid for her five-day participation 300 RMB.

The Rural Health Festival, September 6-11 Surmang

The Rural Health Festival in Surmang emerged from a prototype Indonesian weaver festival organized to celebrate culture, achievement, and empowerment. The idea grew to bring together all of the CHWs together for a gathering of sharing and discussion about the benefits and barriers of the role of CHW personally and within the community. During the five days of the festival, women discussed their joys and achievements through group meetings led by Tibetans, role-play and traditional song and dance. The CHW's thoughts and ideas about their future included everything from a request for immunizations, medical training and equipment to funds to build roads, bridges and schools. In an extraordinary turn of events, one CHW from Mendo delivered her daughter on the final day of the Festival, under the care of sister, also a CHW and So Drogha, Surmang's female doctor.

Expert Evaluation

Prior to the Festival, four public health experts [5] arrived at Surmang to review and create a roadmap for a 3-5 year collaborative program between the Surmang Foundation and four Township Clinics under the Yushu Prefecture Public Health Bureau. The resulting three- part Report consists of specific key action points:

- 1) Mobilizing communities: strengthening community based care by expanding the training of CHWs, providing extra equipment and health education materials and exploring the HBLSS training
- 2) Linking communities to services: improving the referral system
- 3) Upgrading clinical services: ensuring skilled attendance at birth and basic EmONC. Quarterly training/case reviews for CHWs of Surmang/Zatch and Rongdou/Mendo, Recruitment and training of new CHWs
- 4) Training and capacity development: strengthening local capacity
- 5) Monitoring and evaluation: enhancing accountability [6]

Final Thoughts

2011 was an important and historical year for Surmang Foundation. Since the 2010 earthquake and with the newly created memorandum of understanding (MOU) between Surmang and the Yushu Prefecture of Public Health, Surmang has government endorsement to allow the expansion of the CHW prototype to four additional clinics in Yushu. The Rural Health Festival was the high point of the summer providing a unique – never before experience for both the CHWs and group of public health experts. The CHW program remains strong with a committed core of women who have increasingly demonstrated their sense of community cooperation and personal empowerment.

Addenda

- A. Rongdou/Mendo CHW Interview Template
- B. Rongdou/Mendo CHW Curriculum
- C. Rongdou/Mendo CHW Payment Worksheet
- D. Zatch CHW Interview Template
- E. Zatch CHW Curriculum
- F. Zatch CHW Payment Worksheet
- G. Xiewu Curriculum
- H. Festival Training
- I. Surmang Interview
- J. Surmang Payment Worksheet

CHW Program – Measure of Success

Statistics are collected each year and deliveries are calculated from CHW interviews. The success of the CHW program has been measured by the following:

- Continued participation in program. Attrition is minimal; two women dropped out of the training in 2008/2009. Both moved away to areas outside of the training sphere
- 100% participation in intensive trainings; women give up their daily duties for 1 – 5 days to join the training each year. In Rongdou/Mendo, the women adapt their schedules to participate with less than 24 hour notice
- Stories and self-report of avid participation in birth, delivery, antenatal teaching and clinic referral
- No maternal mortality in attended births
- Verbalized enthusiasm and support for the program by the CHWs.

References

- [1] Wellhoner, M., Lee, A., Deutsch, K., Wiebenga, M., et al. Maternal and Child Health in Yushu, Qinghai Province, China. 2011 *International Journal for Equity in Health*, 10, 42 doi:10.1186/1475-9276-10-42.
- [2] Shetty, Priya Rani and Abhey Bang – pioneers of healthcare in rural India. *The Lancet* Volume 377, Issue 9761, Page 199 15 Jan 2011
- [3] See CHW report 2007. www.surmang.org/pdf/Dawn07_CHW_Report.pdf
- [4] See CHW report 2009. www.surmang.org/pdf/2009.pdf
- [5] Amy Levi, CNM, PhD, Karen Deutsch, NP, MPH, Mary Wellhoner, MD, MPH, Mariette Wiebenga, MD, PhD
- [6] See Part II. Outline of Project Design, Levi, A, Deutsch, K, Wellhoner, M, Mariette Wiebenga. Available through www.surmang.org

Table I

2011 Community Health Worker (CHW) Delivery Statistics				
<i>Calculated Q4 2010 - Q3 2011</i>				
Delivery Statistics	Rongdou/Mendo	Zatch	Surmang	Total
Number of women visited by CHW	90	33	68	191
Number of women still PG* at interview	6	0	13	19
Number of deliveries (number seen - PG)	84	33	55	172
CHW attended deliveries	81% (68)	70% (23)	64% (35)	73%(126)
Hospital Deliveries	18% (15)	15% (5)	9% (5)	15% (25)
CHW referred woman to ultrasound	17% (15)	58% (19)	59% (40)	39% (74)
Infant mortality at 30 days**	6% (5)	3% (1)	9% (5)	6.3% (11)
Infant mortality at 6 months***	12% (8)	6% (2)	13% (7)	9.8% (17)
Infant mortality for Hospital Deliveries	13% (2)	20% (1)	40% (2)	16% (4)

*pregnant (PG)

**includes hospital mortality

***includes 30 day mortality

CHW Delivery Statistics 2007 - 2011						
<i>Calculated Q4(Oct/Dec) - Q3(July/Sept) of following year</i>						
Number of deliveries attended by CHW	Rongdou/Mendo		Zatch	Surmang		Total
2007	6		N/A	26		32
<i>program suspended in 2008</i>						
2009	32		N/A	18		50
2010	39		N/A	30		69
2011	68		23	55		126
Prenatal visits by CHW			Postnatal visits by CHW			
	Surmang	Rongdou/Mendo(R/M)	Total	Surmang	Rongdou/Mendo(R/M)	Total
2007	25	40	65	23	21	44
2008	<i>CHW program suspended in 2008; 2009 contains 2 years of data</i>					
2009	64	0	64	37	0	37
2010	85	47	132	37	35	72
	Surmang	R/M	Zatch	Surmang	R/M	Zatch
2011	153	197	96	100	136	90
326						

*For 2011, Surmang includes Zatch data

2011 CHW Reported Maternal Statistics					
<i>Calculated Q4 2010 - Q3 2011</i>					
Maternal Demographics	Rongdou/Mendo		Zatch	Surmang	Total Mortality reported to CHWs
Average age of mother	30.12		31.39	30.61	
- age range	17-51		21-47	19-44	
Average number of children	2.88		3.45	3.19	
History of infant mortality*	9% (8/90)		24%(8/33)	16%(11/68)	14%
Reported maternal mortality in 2010/2011	0		0	0	0%

*CHW told of previous infant mortality by mother this number is likely underestimated

