

STRENGTHENING INDIGENOUS AND INTERCULTURAL MIDWIFERY: EVALUATION OF A COLLABORATION BETWEEN GUATEMALAN AND CANADIAN ABORIGINAL ORGANIZATIONS¹

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ABSTRACT

The paper reports on an evaluation of a project implemented in collaboration between Guatemalan and Canadian Indigenous organizations that sought to strengthen Indigenous and intercultural midwifery. It describes the initiative and analyzes it from a process and impact evaluation perspective.

Keywords: Indigenous midwifery, Intercultural health, Indigenous collaboration, Intercultural midwifery, Guatemala, Canada

Sixty-five percent of Guatemala's population is Indigenous, the majority Mayans. Most Mayan communities are located in rural areas and are fairly poor. They have very limited access to health care, particularly hospitals and professionally trained physicians, and the little government health care they receive is often culturally inappropriate. Guatemala also has one of the highest maternal mortality rates in the world (70 per 100,000), as well as a high infant mortality rate (51 per 1,000 live births). In rural Indigenous areas maternal mortality rates can reach 211 per 100,000 (Ministerio de Salud Pública y Asistencia Social [MSPAS], 2000). The Indigenous people, especially traditional midwives (*comadronas*), play an important role in maternal and infant health. In rural areas, the *comadronas* provide midwifery care to approximately 85% of pregnant women in the Mayan communities. They are not only responsible for assisting with birth, but also for providing spiritual guidance to mothers and families, and spiritual and empirical treatments to infants.

San Juan de Comalapa is a municipality of the department of Chimaltenango located in the southwestern part of Guatemala, with 35,500 people, divided between a town centre and 27 surrounding villages and hamlets. It is located 25 km from the urban centre of Chimaltenango (capital of the department) and 85 km from Guatemala City. Comalapa's population consists almost entirely of Kaqchikel Mayas (95.2%) (Inforpressca, 2009). Townspeople rely heavily on small-scale maize agriculture for subsistence needs, but many also grow vegetables and produce textiles for national consumption and international export.

A Midwives Association (*Asociación de Comadronas de San Juan de Comalapa*) was formed in 2002 by 16 *comadronas* from the town of Comalapa together with 69 *comadronas* from surrounding villages. The *Asociación*

de Comadronas is supported by *Fundación Kaslen* (Kaslen means “life” in Kaqchikel), a Mayan nongovernmental organization (NGO) formed in 1985 to develop and manage a community health program in the area. Another Guatemalan NGO, *Asociación de Servicios Comunitarios de Salud* (ASECSA), based in a nearby urban centre, has over the years supported *Kaslen* with a number of initiatives.

A study (referred to in this paper as the “Intercultural Health Study”) conducted by the First Nations Centre for Aboriginal Health Research (CAHR) (O’Neil et al., 2006; Mignone et al., 2007) suggested that the *comadronas*, despite their central role as health care providers, suffered discrimination related to being Mayan, women, and poor, and lacking formal education — many are illiterate. Further, the study corroborated what other researchers had suggested, that the prevalent biomedical model of the public health care system did not fit well with Mayan pregnant women’s understanding of birth (Berry, 2006). As this author argues

the problem is not that Mayan midwives, their clients and families fail to understand the biomedical information about dangers in birth, but rather that this information fails to fit into an already existing social system of understanding birth and birth-related knowledge. (Berry, 2006, p. 1958)

In line with the notion that an effective approach to improving midwifery care must be done within the worldview and knowledge system of the Mayan midwives (Paul and Paul, 1975) and with the particular context at its centre (Thaddeus and Maine, 1994), the findings from the Intercultural Health Study led to a collaboration among Canadian Aboriginal health organizations and Guatemalan Mayan organizations.

Numerous concerns raised by the *comadronas* were discussed by CAHR with the Cree Nation Tribal Health Centre (CNTHC) of the Swampy Cree Tribal Council (Manitoba), who agreed to work together on a concept paper that was submitted to the Indigenous Peoples Partnership Program (IPPP) of the Canadian International Development Agency (CIDA). The concept paper sought seed funding to visit the *Asociación de Comadronas* and to develop a project proposal mainly based on their goals. Representatives from CNTHC and CAHR travelled to Guatemala and had several conversations with the *comadronas* and the two other collaborating Mayan organizations, *Fundación Kaslen* and ASECSA. This led to a full proposal, reflecting the interests of the Mayan and Canadian organizations, that was eventually funded by CIDA. The project commenced in January of 2007 and was completed

in February 2008 (Mignone et al., 2008). This project is referred to in our paper as the “Comadronas Project.”

The key issue, as identified by the *comadronas* themselves during the proposal writing for the Comadronas Project, was the need for a stronger and broader *comadrona* organization to work with other Indigenous organizations, other NGOs, and state institutions on a more equal basis in maternal and child health care. By addressing this issue, the project sought to enable the *comadronas* to reduce the discrimination that not only affects the *comadronas* themselves, but ultimately the health of Mayan women and children in the area. A stronger organization would enhance the role of Mayan women in this community, and generate offshoot initiatives related to women’s education, economic development, and leadership roles. The *Fundación Kaslen* would enhance its function as a Mayan governed primary health care centre by expanding child and maternal intercultural health programs in which *comadronas* and western health practitioners work side by side. In particular, the project sought to improve maternal health and reduce child mortality by strengthening Indigenous midwifery and intercultural health care and enhancing the collaboration between Guatemalan and Canadian Aboriginal organizations on Indigenous control and self-governance in health care.

The paper evaluates the Comadronas Project by discussing process and impact aspects of the project. First, it briefly describes the methodology including the analytical themes and the main data sources. The next section presents the process findings of the evaluation, followed by a section reporting on the impact evaluation. A final section discusses the results.

METHODS

The project was evaluated from a process and an impact perspective. Process evaluations address program delivery issues and stakeholders concerns. They focus on the internal dynamics and actual operations of a program to understand its strengths and weaknesses. This type of evaluation examines the changes that occur as a result of a program with the focus on how it is operating. According to Scheirer (1994), process evaluation “verifies what the program is and whether or not it is delivered as intended to the target recipients and in the intended dosage.” The process evaluation of the Comadronas Project assessed its implementation on several areas, comparing planned activities and activities that took place. The assessment of impact includes several immediate changes that were a consequence of the

Comadronas Project. It used baseline information from the Intercultural Health Study (O'Neil et al., 2006) and analyzed it with information gathered by the Comadronas Project.

The process component of the project used the logic model developed for planning and writing the proposal of the Comadronas Project to compare the stated objectives with the processes that took place. The main domains defined by all project partners during the proposal writing stage were: midwifery capacity building; community awareness and strengthening organizational capacity; articulation with the formal health care system; exchange visits; and partnership building. These were the guiding themes of the Comadronas Project and the main aspects relevant to the process evaluation. The data sources for the process evaluation were postworkshop questionnaires, detailed narratives of all project activities produced by two internal evaluators, records of the project coordinators, minutes of meetings, and informal interviews with project participants. The information was triangulated across the different sources and analyzed within each domain matching stated objectives to what was accomplished.

Outcome evaluations assess the impact or success of a program in achieving its goals. They examine change as a result of the program, and whether or not it had the desired effect (The Provincial Centre for Excellence, 2007). To assess the impact of the Comadronas Project the evaluation employed two distinct frameworks used by the Intercultural Health Study. The frameworks compared the data from the Intercultural Health Study pertinent to the Guatemala case study (as a baseline) against new data gathered at the conclusion of the Comadronas Project.

The first framework refers to the five themes related to intercultural health care as it applied to our project. This framework was developed by the research team of the Intercultural Health Study to comparatively analyze the case studies (O'Neil et al., 2005). The assessment themes were: cultural, financial, and management approaches to intercultural health service development; opportunities and benefits provided by the intercultural health initiatives; constraints and risks associated with the articulation of indigenous and western health systems; and assessment of impacts of intercultural health system development. The second framework applied existing best practice criteria for Aboriginal health and health care developed for the National Aboriginal Health Organization (Mable and Marriott, 2001). These criteria were: impact; sustainability; responsiveness and relevance; client focus; access; coordination and integration; efficiency and flexibility;

leadership; innovation; potential for replication; health policy identification or resolution; and capacity for evaluation.

The baseline data sources for the impact evaluation were ten individual interviews, seven focus group meetings, nine site observations, and twelve case documents. The follow-up information was derived from postworkshop questionnaires, detailed narratives produced by two internal evaluators of all project activities, records of project coordinators, minutes of meetings, and informal interviews with project participants. The data was triangulated across the different sources and was analyzed comparing the baseline information against the follow-up information. A set of analyses was conducted for each analytical framework.

PROCESS FINDINGS

This section reports on the process evaluation of the project. It compares the stated objectives to the actual processes that took place according to the main domains defined during the proposal writing stage by all project partners.

MIDWIFERY CAPACITY BUILDING

Sixteen *comadronas* leaders participated in a five-day intensive train-the-trainer workshop held at *Kaslen*. The workshop provided refresher information, enhanced technical practices, updated information relevant to midwifery practice related to the identification of high risk pregnancies and management of emergency situations (e.g., hemorrhage, baby resuscitation, postpartum complications, and others). Methods for training other midwives were also taught and practised. The workshop was structured to share knowledge from all participants, where learning took place from both “trainers” and “trainees.” Culturally relevant aspects of traditional midwives were central to the workshop. A Canadian First Nations midwife, a Guatemalan/Canadian midwife, and a *comadrona* leader were among the main trainers in this workshop. The project proposal was for train-the-trainer workshops with only five *comadrona* leaders, but when organizing the implementation the *comadronas* suggested more participants.

The *comadrona* leaders that participated in the train-the-trainer workshops conducted a total of 21 half-day workshops in which 76 *comadronas* fully participated over a period of 6 months (3 separate groups of *comadronas* participated in 7 workshops each). As part of capacity building, the project purchased and distributed over 100 copies of the Spanish version of

A Book for Midwives: Care for Pregnancy, Birth, and Women's Health (Klein et al., 2007) during the training workshops. The midwife leaders of the project (Canadians and Guatemalans) assisted in revising and redeveloping a more condensed and visually driven basic manual for midwives *Más que una sanadora* (ASECSA, 2007a). These texts were distributed to all participating *comadronas*, along with a basic kit for prenatal, delivery, and postpartum care (consisting of a handbag, sphygmomanometer, stethoscope, fetoscope, digital thermometer, tape, balance, scissors, towel, soap, blanket, chloramphenicol, disposable gloves, etc.) and the appropriate training to use the contents. Further, a document recording the training workshops' content and activities (ASECSA, 2007b) was produced and distributed to all *comadronas*. The original goal was to reach 85 *comadronas*. Although 85 started the workshops, only 76 *comadronas* completed all of them. The project surpassed its goals in both the distribution of the material (the kits included more items than initially planned) and the production of a document (ASECSA, 2007b) that was not originally planned.

Picture 1 - Mayan Midwives in Training



Community Awareness and Strengthening of Organizational Capacity

With the support of ASECSA, a further 3 day train-the-trainer workshop took place with the participation of the 16 *comadrona* leaders on issues

of self-esteem and gender equality. Following this workshop, ASECSA and some of the *comadronas* held a half-day workshop with the 10 staff members of *Fundación Kaslen* on these same issues. With the assistance of a Guatemalan obstetrician, they provided a similar workshop with 2 doctors and 25 nurses of the public health centre and the rural health posts. These workshops were held as originally planned.

As part of the work to strengthen their presence and organization the *comadrona* leaders gave talks to 27 village councils, and met several times with health professionals from the public health care sector to discuss the issues they face regularly both in working with the communities and in their dealings with the health centre and hospital. In all the above activities they had logistical support from *Kaslen* and ASECSA. The actual number of talks and meetings that took place was almost 90% of what was planned.

A last series of four (six days in total) workshops provided training on organizational and administrative skills to leadership and members of the *Asociación de Comadronas*. These workshops were organized by ASECSA and *Kaslen* staff. Towards the end of the project, the *Asociación de Comadronas* held two general assemblies with their membership to start the development of a self-regulatory body (to obtain legal status and establish practice and referral protocols). The *Asociación de Comadronas* also started the process of developing a strategic plan. The number and content of the workshops themselves matched what was originally planned. The assemblies of the *Asociación de Comadronas* were successful, but fell short of developing a fully self-regulatory body. It was acknowledged that the plan was too ambitious for such a short period of time. The *Asociación de Comadronas* continues to work towards this goal.

Articulation with the Formal Health Care System

Fundación Kaslen took the lead in establishing an intercultural network related to maternal and infant health, to facilitate the dialogue between different stakeholders, such as the *comadronas*, health professionals, etc. The intercultural network organized a one-day seminar where physicians and *comadronas* discussed their respective work and addressed joint issues related to maternal and child health. The original plan was to conduct several more seminars, but scheduling difficulties limited this activity. Nonetheless, the seminar was very successful in establishing an intercultural health dialogue between western practitioners and the *comadronas* based on mutual respect and recognition.

Exchange Visits and Partnership Building

A central part of the project was the exchange visits of First Nations leadership and Mayan leadership. The chiefs of Mosakahiken Cree Nation and of Mathias Colomb First Nation, as well as the executive director of the Cree Nation Tribal Health Centre visited Guatemala for a week in June of 2007. A series of very fruitful meetings and ceremonies took place. The First Nations leaders met with 15 *comadronas* to learn about their work and exchange knowledge. They also had work meetings with the board of *Fundación Kaslen* and *comadrona* leaders to assess the current partnership and discuss ideas for future joint endeavours. A draft agreement to continue the partnership was written and ideas for a new project were defined. The key agreements from the conversation were to support the development of an intercultural maternal and child care centre at *Kaslen* with the *Asociación de Comadronas* as main partner, and develop a mechanism for sharing the knowledge and experience of *comadronas* and Mayan spiritual healers with Tribal Council First Nations. They also discussed strategies for strengthening self-governance of health services that include western and Indigenous health knowledge in both Guatemala and Canada. The First Nations leaders visited several villages and met with *comadronas* at their homes. Over a number of days they also participated in several traditional Mayan ceremonies, led by different Mayan spiritual leaders. The opportunity of sharing these ceremonies became one of the highlights for both the Canadian and Guatemalan partners.

Three Mayan leaders visited Manitoba, Canada for several weeks in August of 2007. They were the head of the *Asociación de Comadronas*, a Mayan spiritual healer, and a Mayan physician and head of ASECSA. They participated in numerous activities with First Nations organizations and universities, visited First Nations communities, and took part in several gatherings and feasts.

The Guatemalan visitors participated in the Cree Gathering at Grand Rapids First Nation and were special guests at the feast organized by the Chief. They also gave a public talk at the main event of the Gathering. In the days that followed they visited and met with staff from CNTHC and Swampy Cree Tribal Council, and took part in Treaty Day festivities at Opaskwayak Cree Nation. Several meetings were held among project partners to finish planning future joint endeavours.

The visitors were also formally invited to two First Nations. At Mosakahiken Cree Nation they toured Band administration offices, met

with elders, and participated in a sweat lodge and feast, at all times guided by the Chief. At Mathias Colomb First Nation they toured the day care, the school, the community health centre, and a cultural ground. The visitors had lunch with elders, visited the home of several elders, and participated in a radio interview. Towards the evening, after visiting the church, they participated in a very emotional community feast where the Guatemalans shared their struggles and vision with Mathias Colomb community members. The Chief accompanied the group during the whole day.

The last several days were dedicated to participation in a midwifery training workshop held by University College of the North (UCN). The workshop included elders, professors, and approximately 15 Aboriginal midwifery students from UCN. The Mayan spiritual leader gave talks about the struggles of Mayan people and about the Mayan cosmovision and calendar. The *comadrona* shared her knowledge of traditional midwifery and its practice, including spiritual healing practices for newborn babies and children, and explained the central role of the *comadronas* in their communities.

These exchange visits and the activities took place as originally planned. From a process evaluation perspective, the successful completion of the exchange visits, one of the goals of the project, implies a positive result. In fact, the mutual knowledge sharing, participation in ceremonies, and drafting of

Picture 2 - Mayan Ceremony with First Nations leaders from Manitoba



**Picture 3 - Ceremonial Site in Mathias
Colomb First Nation, Manitoba**



plans for ongoing collaboration surpassed initial expectations. The formulation of future joint initiatives indicates the value of the exchange visits in building partnership from shared interests.

IMPACT FINDINGS

The impact of the initiative was assessed from two distinct set of criteria. Impact was first assessed with the four analytical themes related to intercultural health that were used in the initial study for which we had baseline information (O'Neil et al., 2006). Second, the intercultural aspect of the initiative was assessed against best practice criteria also used in the initial study and for which we had baseline information (Mignone et al., 2007).

ANALYTICAL THEMES OF INTERCULTURAL HEALTH

The four main analytical themes used in the initial study were: cultural, financial, and management approaches to intercultural health service development; opportunities and benefits provided by the intercultural health initiatives; constraints and risks associated with the articulation of indigen-

ous and western health systems; and assessment of impacts of intercultural health system development.

Cultural, Financial, and Management Approaches to Intercultural Health Service Development

The governance and management model of midwifery in Comalapa has one entity in charge of western medicine (the formal health care system) and another for traditional Indigenous health care (the *comadronas*). The Intercultural Health Study assessed the attempt at articulation of cultural approaches within the broader health system at different levels. The evidence suggested not only that this articulation was not properly taking place, but that race barriers were experienced by Mayan women in hospitals and other sectors of the health care system. One of the objectives of the Comadronas Project was to improve this situation. The various joint activities between *comadronas* and health care professionals of the public health centre and hospital enabled a discussion of the barriers (e.g., cultural, transportation, family) faced by Mayan women in receiving necessary hospital care and the formal system's lack of acknowledgement of the central role of the *comadronas* in the care of Mayan women. Evidence of the impact, as recorded in the minutes of the meetings, came from the active participation of health professionals in the joint meetings and the better understanding of the work situation of the *comadronas* and the reality of Mayan women.

Government funding for the public health system is limited or nonexistent for the work of the *comadronas*. The project did not have much impact in this respect. There were some improved resources provided by the project itself (kit for *comadronas*, training material, etc.), but this was quite limited compared to the needs. Nonetheless a stronger *Asociación de Comadronas*, together with the support from other NGOs and possible international support, may improve the accessibility of resources for maternal and child health care.

Opportunities and Benefits Provided by the Intercultural Health Initiatives

The Intercultural Health Study suggested a number of interesting opportunities provided by intercultural health initiatives. However, the opportunity for knowledge exchange between western and traditional indigenous practitioners was not particularly visible in Comalapa. The existing model emphasized western practitioners "training" the *comadronas* without acknowledging their skills and did not allow for a two-way exchange. This approach

Picture 4 - Monitoring Heart Beat of New-born during Training

constrained opportunities for knowledge exchange. The documentation from our initiative provided strong evidence of a shift in this situation. First, the workshops were jointly developed with the *comadronas* leaders who had a central role in the training itself. Further, it was not a top-down approach, but a sharing of different expertises. Finally, the initiative increased the awareness of western health care providers of the practice and experience of the *comadronas* through several joint meetings and workshops that took place.

Another significant opportunity was to increase trust among community members towards the health care system. There was strong evidence of lack of trust in the Mayan women and *comadronas* towards the western health centres and vice versa in the Intercultural Health Study. The joint meetings and workshops of the project improved levels of trust between western practitioners and the *comadronas*, as reported by minutes of these meetings and follow up interviews. However, there was no evidence of direct impact on how trusting Mayan women currently feel towards the state health care centres.

The previous study provided evidence of traditional knowledge and practices being valued within the communities but not by external sec-

tors. The stronger *Asociación de Comadronas*, together with the joint activities with western health practitioners appear to have fostered an increased sense of recognition and the potential for increased ownership and control over health care by the Mayan organizations in the area. In fact, plans for the development of a intercultural maternal and child health centre at *Fundación Kaslen* were completed.

The articulation of Indigenous and western systems can facilitate more timely and appropriate referrals when medical care of higher complexity is required. The existence of numerous barriers reported by the Intercultural Health Study gravely limited appropriate referrals. Although there was no evidence from our project to suggest an impact at this level, the plausibility of a reduction in barriers can be observed with the continuation of joint activities between *comadronas* and western health projects that were initiated with our project.

Constraints and Risks Associated with the Articulation of Indigenous and Western Health Systems

In Comalapa the Intercultural Health Study reported that western health professionals had some acceptance of the *comadronas*, but only as adjuncts to the western system. The relationship with personnel at the hospital and health centres was not particularly positive, thus limiting the cultural appropriateness of services. The lack of clarity in the legal framework for the practice of traditional midwifery, and its interaction with western medicine, also created many constraints. The legislative situation of *comadronas* was unclear, although the public health system sought to regulate them through a registration system. The Comadronas Project reported some impact in improved relations between western practitioners and *comadronas*, and some increased recognition of their knowledge and practice. There was not enough evidence to suggest that health professionals had changed substantially their view of them as simple assistants to the western system, rather than part of a legitimate, autonomous, informal system. There was no impact of the project on the legal situation of the *comadronas* since there was no change in the registration system that seeks to regulate them.

The potential risk of iatrogenic consequences regardless of the system of medicine practised (western or Indigenous) had been identified by key informants in the Intercultural Health Study. A common theme was the acknowledgement of increased risk when a proper articulation across the two systems was lacking, as was the case in Comalapa. Our project's slight

impact on improving this articulation may have diminished potential iatrogenic effects. However, our initiative did not collect data that could assess this impact.

Assessment of Impacts of Intercultural Health System Development

A likely impact of intercultural health initiatives was the increase in access to both Indigenous and western health care (Mignone et al., 2007). This was not clearly the case in Comalapa because the intercultural model did not seem to be functioning properly. The fact that our project fostered the development of Mayan governed health care may play a role in the reduction of barriers, increased access, and higher user satisfaction. The evidence from our project suggested possible improvements in these areas, although the project did not collect data that could demonstrate this improvement.

A positive impact of intercultural health initiatives is Indigenous community development, including revalorization of Indigenous knowledge, cultural continuity, and pride as a people. Intercultural initiatives not only improve health care, but also the development of community participation and organization, which itself affects broader health determinants (O'Neil et al., 2006). The successful implementation of the Comadronas Project played a significant role in increasing community participation and organization (particularly of the *comadronas*).

COMADRONAS PROJECT COMPARED AGAINST THE BEST PRACTICE CRITERIA

Intercultural health in the initial study (O'Neil et al., 2006) was understood as practices in health care that consider Indigenous medicine and western medicine complementary. The basic premises are that of mutual respect, equal recognition of knowledge, willingness to interact, and flexibility to change as a result of these interactions. Intercultural health takes place at different levels including that of the family, practitioner, health centre, hospital, and health system. A "best practice" in health care must satisfy a series of criteria. It should demonstrate a tangible and positive impact on the individuals and population served, be sustainable, be responsive and relevant to patient and community health needs and to cultural and environmental realities, be client focused including gender and social inclusion, improve access, coordinate and integrate services, be efficient and flexible, demonstrate leadership, be innovative, show potential for replication, identify health and policy needs, and have the capacity for evaluation.

Table 1 summarizes our findings against the best practice criteria based on three levels of achievement: criterion met, partially met, and not met. It presents findings from the Intercultural Health Study (Mignone et al., 2007) and compares them to the assessment of each criterion at the end of the Comadronas Project. The assessment of met indicates evidence of a sufficient level of achievement of that particular criterion as defined in the framework. If the level of achievement was limited, the criterion was categorized as partially met. When there was evidence of not having achieved basic levels, it was assessed as not met. The initial assessment was conducted independently by the three main researchers of the study using the evidence collected (O'Neil et al., 2006). In the few cases of discrepant ratings, the evidence was again reviewed and a consensus was reached. The second assessment was conducted independently by three internal evaluators of the Comadronas Project.

Table 1: Best Practices Criteria: Before and After Comadronas Project

<i>Best Practices Criteria</i>	<i>Before Project</i>	<i>After Project</i>
Impact	not met	partially met
Sustainability	not met	partially met
Responsiveness and relevance	partially met	partially met
Client focus	partially met	partially met
Access	partially met	partially met
Coordination and integration	not met	partially met
Efficiency and flexibility	partially met	partially met
Leadership	partially met	met
Innovation	partially met	met
Potential for replication	partially met	partially met
Health/policy identification or resolution	partially met	partially met
Capacity for evaluation	not met	partially met
Criterion		
met	0	2
partially met	8	10
not met	4	0

Impact refers to the notion that the initiative demonstrates a tangible and positive health improvement for the individuals and population served or improvement for health care providers that can be measured quantitatively or qualitatively. In the absence of reliable quantitative data in both the western and traditional medicine experiences it was impossible to determine impact at either the individual or population level. In the Intercultural Health Study the criterion for impact was clearly not met. The Comadronas Project made some progress in this respect. It created a process for system-

atically monitoring the project and has increased the capabilities of the organizations involved to develop information systems that better track outcomes. This system is still quite rudimentary and consequently the criterion is only *partially met*.

In relation to a plan for viability and continuity of the initiative, at the time of the Intercultural Health Study there were no clear plans for *sustainability*. The public sector was (and is) unwilling or unable to provide resources. The project gave impetus to a plan to develop an intercultural maternal and child health centre run by *Fundación Kaslen* and the *Asociación de Comadronas*. This plan includes potential sustainability initiatives, among them the partnership with Indigenous organizations from abroad and the collaboration from international funding agencies. Consequently the sustainability criterion has improved from *not met* to *partially met*.

A high level of *responsiveness* to patient and community health needs, as well as to cultural and environmental realities was shown. The Intercultural Health Study suggested that the *comadronas* themselves respond well to the needs of the indigenous communities. In fact, they are the main providers of maternal care in the region. However, the articulation of the formal health services with the *comadronas* was lacking, reducing the responsiveness of the system to community needs, not to mention the lack of culturally appropriate services. Our project, despite having no significant impact in this reality, did make some inroads in the articulation with the public health system and their acknowledgement of the *comadronas*. The evaluation assessed this criterion only as *partially met* because the improvement was not substantial.

The Intercultural Health Study suggested that the *comadronas* demonstrated *client focus* in their sensitivity and provision of appropriate opportunities for individuals and communities, as well as special attention to elders, women, and youth. The experience was limited in this regard due to difficulties of the public health system that was clearly not client focused. The joint meetings and workshops of the initiative made some small progress in this regard, although, as a system, not enough to consider this criterion as *met*. The implementation of the maternal and child intercultural health centre would enable a true client focused system.

Access refers to improvement in the ability of individuals to obtain required services at the right time and place. The Intercultural Health Study assessed this criterion as *partially met* because access to the *comadronas* was good, but access to hospitals was not (because of numerous barriers,

including institutional racism). Again, the joint meetings and workshops of the initiative between *comadronas* and health practitioners from the public system seemed to have made some positive movement in this regard. There was no evidence of marked improvement in access, leaving the criterion *partially met*.

The provision of *coordinated and integrated* services for pregnant women across programs, practitioners, and organizations was almost nonexistent at the time of our initial study. The dialogue facilitated by our project between health care personnel from the public system and the *comadronas* had a minor impact on increasing the coordination of services, particularly referrals and the accompaniment of women by the *comadronas* to the health centre and hospital. The criterion was now assessed as *partially met*.

Limited data hinders the assessment of *efficiency and flexibility* of the experiences, both in the achievement desired results with the most cost-effective use of resources and the degree to which the initiatives are flexible to new requirements. The fact that this initiative is essentially community-driven indicates that it is more flexible than top-down health systems. Although there were suggestions of cost-effectiveness, more comprehensive and detailed data is needed. Further, the scarcity of resources for maternal and child care makes the cost-effectiveness issue almost irrelevant. Until there is an increase in funding to address the minimum needs, there can be no shift in meeting this criterion. It remains *partially met*.

Leadership represented as the ability to initiate, spur, encourage, inspire and catalyze change was evident. This leadership took different forms, and the development of new and creative solutions that meet or surpass known standards is innovative. The leadership of the *comadronas* and of the other Mayan NGOs was recorded as *partially met* by the Intercultural Health Study. The successful implementation of the Comadronas Project provided evidence of this leadership; it is now a criterion that is being *met*.

In terms of *innovation*, the project met the criterion, particularly in the way it was developed and implemented. The attempt to articulate the practice of the *comadronas* with the western health care system observed in the Intercultural Health Study was quite innovative. The lack of proper articulation only partially met this criterion. The progress made during the project suggests that the criterion of innovation is now being *met*.

The case initially could not serve well as a model for *replication* by others because of its limitations. However, there are important aspects of the initiative that can now be replicated in other Guatemalan regions and even

Picture 5- Midwives' Sharing Circle

other countries. The horizontal approach to training (of mutual recognition of knowledge) and the strengthening of the *Asociación de Comadronas* to increase leverage vis-à-vis the formal health care system are elements that can be replicated in other contexts.

From a *health policy* perspective, the case in Comalapa has clearly identified the issues, and sought to develop solutions. However, despite the progress made through our initiative, a resolution of the many issues has not yet percolated to higher levels of policy. Since not much has changed in meeting this criterion, it remains *partially met*.

Capacity for evaluation refers to the ability to measure outcomes, inform decision-making, and assess the effectiveness of strategies and programs as well as client satisfaction within the best practice. The initial study suggested a dearth of data required for proper evaluations. The state appears to have a negligible capacity or interest to create information systems that can evaluate not only intercultural health initiatives, but the publicly funded system itself. The Comadronas Project developed some systematic gathering and analysis of information, making some progress in the capacity for evaluation. The capacity is still relatively limited, and this criterion is only *partially met*.

DISCUSSION

The findings suggest how the collaboration among Indigenous organizations from different countries strengthened the organizations, increased their leverage vis-à-vis other sectors, improved intercultural health care, and potentially improved maternal and child health.

The Comadronas Project had a number of interrelated outcomes. Its aims were mostly achieved: to acknowledge and strengthen the work, practice, and leadership of the *comadronas* as women, health practitioners, and community leaders in San Juan de Comalapa; to improve their articulation with the public health system by reducing discrimination and increasing access; and to further the development of existing intercultural health programs at the *Fundación Kaslen*.

The project strengthened the organizational capacity of the *Asociación de Comadronas*. Other women and men, health care professionals, and the broader community were sensitized about the traditional midwives' role in maternal-child health care through a number of targeted training activities as well as more general discussions at the community level. In addition to contributing to reducing maternal and infant mortality and strengthening Aboriginal identity, organizations, and health, another important impact of the collaboration between the Guatemalan and Canadian Aboriginal organizations was to foster Indigenous control and self-governance in health care, which is crucial to sustain the results of the project over the long-term.

The training workshops had several impacts. One was the increased knowledge acquired by the 76 *comadronas*, particularly in new techniques and the use of certain equipment. Simultaneously, these workshops improved the relations between the public health centre and the *comadronas*. Health professionals gained more respect for the knowledge and practice of the *comadronas*, while the *comadronas* felt that health professionals were more willing to work with them in a relationship of respect and recognition.

The workshops on organizational skills strengthened the organizational capacity of the *Asociación de Comadronas*. This, together with the positive working environment of all the workshops and the development of an intercultural health network, created a shift in power relations vis-à-vis the *comadronas*, the public sector, and health professionals. The strong partnership and collaboration with ASECSA, *Kaslen*, and the Canadian Aboriginal organizations clearly signaled the respect and relevance that the *comadronas* merit. These collaborations were an important step towards the goal of Mayan self-governance in health in Comalapa.

Indigenous leaders exchanged their experiences in rescuing traditional knowledge and practices, and forms of self-governance. Further, First Nations' partners benefited from the knowledge shared by the *comadronas* and the Mayan leaders both in Guatemala and Canada, about their traditional practices, spirituality, technical expertise, and history of struggles. The moving scenes witnessed at the community feasts and gatherings with elders in the First Nations visited by the Guatemalan visitors, showed the deep common spirituality and values shared by Mayan and Cree peoples, and their commitment to continue working together. Finally, Aboriginal midwifery students at UCN greatly benefited from learning from the *comadrona* and Mayan spiritual healer about Mayan midwifery practices and the relevant role of midwives in Indigenous communities.

Picture 6 - Representation of Ceremony for Spiritual Healing of a Baby



An agreement was reached to continue the partnership in several areas, mostly related to health and health care. The project drafted a proposal to create an intercultural maternal and child health care centre at *Kaslen*, with a central role for the *comadronas* and the active participation of all partners. The initial steps in this direction have already been taken. Ideas for future community-based research in maternal and child health were discussed.

This initiative left several important teachings. First, research findings, if shared with communities and organizations, can lead to action oriented projects that truly serve the needs of these populations. Second, the successful implementation of intervention projects requires that they be thoroughly developed and planned with the main stakeholders, in our case the *comadronas*. Third, solidarity among Indigenous organizations and communities of different countries, through the implementation of joint initiatives, can play a tremendous role in the strengthening of cultural identities and the achievement of self-governance, health, and well-being of Aboriginal peoples. These teachings suggest a number of recommendations for the implementation of community-based projects and research. Among them is that the planning of the project be discussed and agreed upon in detail with the main stakeholders. This involves capturing the main issues of concern and working as a team in developing a strategy (and a proposal when necessary). The initiative, while being implemented, should be overseen by representatives of different stakeholders. In our case the management team was composed of a representative from each partner organization involved. Clearly outlining the roles and responsibilities of each partner organization is crucial to the success of the project, together with ongoing communication to make adjustments as needed. Finally, the differences in types and levels of organizations among project partners require profound respect among all partners for the different knowledge and experience of each.

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