Developing Nursing and Midwifery Communities of Practice for Making Pregnancy Safer

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Abstract: Nursing and Midwifery organizations have been building capacity to utilize virtual electronic communications systems to support collaborative projects since 2005 when the Global Alliance for Nursing and Midwifery became a reality. The Nursing and Midwifery Community of Practice for Making Pregnancy Safer has grown from 55 members in 18 countries at the end of the first year to 382 members from 79 countries by the end of 2009. The Spanish-language community created in 2007 has 187 members from 32 countries. We will present background information on developing

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communities of practice, strategies for building capacity and lessons learned over the past four years. We will present our findings from a simultaneous discussion held in Spanish and English on traditional midwifery and active management of the third stage of labor-applying the evidence, discussing the challenges and rewards of a bilingual discussion. Additionally, findings from an on-line survey to elicit feedback on the discussions and recommendations for future direction will be discussed.

Keywords: Communities of Practice, Knowledge Gateway, Making Pregnancy Safer, Nursing, Midwifery.

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1. Introduction

Since 2005, nursing and midwifery organizations have been building capacity to utilize virtual electronic communications systems as a mechanism to enhance collaboration and knowledge sharing. In 2006, the Global Alliance for Nursing and Midwifery (GANM) was launched with a global video conference and a discussion forum on the topic of Leadership in Achieving the Millennium Development Goals. The goal of the GANM was to develop a virtual Community of Practice (CoP) to enhance health outcomes through international nursing and midwifery collaboration and knowledge sharing. CoPs provide a framework for sharing resources, knowledge, and expertise globally in order to build capacity. For an in-depth discussion on the formation of the GANM and communities of practice see Lori, Land & Mamede (2007).

The Nursing and Midwifery Community for Making Pregnancy Safer (MPS-CoP), one of the original sub-communities of the GANM has continued to flourish over the past several years. It has grown from 55 members in 18 countries at the end of the first year to 382 members from 79 countries by the end of 2009. Because of the obvious limitations imposed by working in only English, a Spanish language community was created to extend opportunity for membership. Currently the Spanish language community, Parteria y Enfermeria para una Maternidad Segura, has 187 members from 32 countries.

This article presents a summary of the experiences from two simultaneous discussions held in Spanish and English within the MPS-CoPs on 1) traditional midwifery and 2) active management of the third stage of labor; discussing the challenges

and rewards of bilingual discussions. We will also present the results of a brief survey taken by members following the bilingual discussions. Finally, strategies for building capacity and lessons learned over the past four years will be offered.

2. The Making Pregnancy Safer Communities

The Making Pregnancy Safer initiative aims to save the lives of women who every year die from causes related to pregnancy and childbirth. The World Health Organization (WHO) Department of Making Pregnancy Safer was created in 2005 to decrease the unacceptably high rates of maternal and neonatal mortality worldwide by ensuring skilled care at before, during and after pregnancy and increasing the availability of emergency obstetric care (WHO, 2009). Its focus is to work toward attaining the Millennium Development Goal (MDG) #5 targets to reduce by three-quarters the maternal mortality ratio and achieve universal access to reproductive health.

The Making Pregnancy Safer, Community of Practice is a sub-community of the GANM. The goal of the MPS-CoP is to provide a horizontal exchange of knowledge and bridge gaps in information in order to reduce health disparities, improve maternal health and work toward achieving the MDG #5. Moderation of the English language MPS-CoP is provided by the WHO Collaborating Center in the University of Michigan, School of Nursing.

The Spanish language community, Parteria y Enfermeria para una Maternidad Segura, was launched in 2007 during the Regional Conference of the International Confederation of Midwives (ICM) held in Argentina. The Conference provided an opportunity to promote both the English and Spanish language communities among midwives from the region. A presentation during a plenary session provided background and details of the evolution of the COP and future plans. Conference participants were encouraged to join and become active. A workshop was held for Spanish language conference participants and included individual practice sessions for new users scheduled at convenient times throughout the conference.

3. Simultaneous Discussions in English and Spanish

3.1. Getting Organized

Preparations for beginning a simultaneous discussion in both English and Spanish were somewhat daunting. First of all we needed leaders who could communicate in both languages in order to synthesize the responses from participants and develop digests for each community at the end of the day. Members who were able to work in both languages were invited to assume the role of facilitator for the discussion. Responsibility for administrative aspects of the process was also defined. A special e-mail address was provided for individuals who had difficulties with the process of registration or in accessing information. It was anticipated that individuals new to the Implementing Best Practice (IBP) Knowledge Gateway could experience problems. Technical expertise was secured to address challenges promptly so that participation in the discussion would be supported.

The leaders realized that translation of contributions would not be possible. However, it would be possible to share some key aspects of the discussion in one language with the other by having some bilingual invited guests or experts as well as

members participating in both community discussions. We also prepared a summary midway and at the end covering the discussions in English and Spanish for both communities.

3.2. The Discussion on Traditional Midwifery

The Virtual Global Discussion Forum on Traditional Midwifery was held in the IBP Knowledge Gateway from April 7-18, 2008. It was conducted simultaneously in the English and Spanish language Making Pregnancy Safer Communities. During an informal discussion on traditional midwifery in 2007, 15 members from 9 countries made contributions to the exchange with ideas, experiences, opinions and evidence. With this level of interest and because most of the participants were from developing countries, the community leaders were optimistic the planned forum would address the particular concerns of midwives and others regarding traditional midwifery, especially in low resource settings.

There were 85 contributions from members representing 19 countries during the two weeks of the discussion in the two communities combined. Invited guests included representatives from the WHO, the International Confederation of Midwives (ICM), the International Alliance of Midwives (IAM), Latin America Alliance of Midwives (ALAPAR), and Latin American & Caribbean Network for Humane Childbirth (LACHUPAN) as well as others with a particular interest in the topic. The invited guests provided opening statements and supporting documents to stimulate discussion, responded to comments or questions from members and also provided closing remarks. A leader from each of the communities facilitated the discussions, supported by volunteers from two WHO Collaborating Centers (Johns Hopkins School of Nursing and National Autonomous University in Mexico) and several community members in training to become future leaders of CoPs.

Much of the discussion focused on experiences linking traditional midwives or traditional birth attendants (TBAs) with the formal health system. Factors in success or failure were identified, in part based upon the experiences and by evidence shared from the 19 countries. It is important to note that more than half of the 19 countries represented in the discussion are classified as developing and have significant underserved areas for maternal and newborn services. The members from developed countries shared their views on traditional midwifery in their own country or with regards to work in a less developed country. In some cases members reflected on experiences with traditional midwifery decades earlier. A nearly universal theme in all of these experiences was the need to work with traditional midwives as a vital community resource for mothers and newborns. Factors in success or failure in linking traditional midwives or TBAs with the formal health system were discussed. A number of points were identified as key to successfully working with traditional midwives including:

- Community involvement, especially listening to the mothers themselves regarding their preferences
- Mutual recognition and respect with reciprocal continuing education on normal physiology and handling emergencies
- Monthly peer review among traditional midwives and in collaboration with a professional midwife when possible
- A system for replenishment of adequate supplies
- Sustained support and direction from the Ministry of Health and international development agencies
- Functioning referral and transportation systems

- Recognition of beneficial practices from both paradigms
- Recognition of a collaboration system to maintain responsibility and autonomy of traditional midwifery and the profession at all levels
- Cultural competency in curricula of health care providers
- Appropriate education programs and career ladders for traditional midwives and TBAs who choose the professional midwifery option

The need for additional documentation of experiences was highlighted. It is especially important to make explicit the role of the midwife when documenting experiences in which they are involved. For example, it was pointed out that in a Lancet article on improved maternal health in Peru (Fraser, 2008) which was shared during the discussion, there was no mention of either the traditional midwife or the formally trained midwife even though both have important roles in meeting the needs of pregnant women and newborns in that setting.

There is also the need for an evidence based approach to improve professional and traditional midwifery programs. The flaws of the international programs for traditional midwives reveals inadequacies in: 1) educational curriculum, 2) continuous support and 3) the integration of the traditional midwife to the local health programs (Goodburn et al., 2000; Pan American Health Organization, 2002; Schieber et al., 1994).

Recommendations which evolved from the discussions included:

- To involve traditional midwives and their organizations in national and international meetings where they are being discussed.
- To remember that the titles, traditional midwife and traditional birth attendant, suggest different preparation and scopes of practice in different contexts and realities. It is essential that there is a shared understanding of how a title is being used if comparisons are to be made across countries.

Finally, suggestions were made regarding how the CoP can support future efforts:

- Provide a space for all midwives to come together to support and learn from each other
- The Spanish language CoP can help to support and disseminate information on the work of the Latin American Alliance of Midwives
- The WHO and other international organizations should maintain linkages with midwives and their organizations for two way communication and program development
- Support documentation of experiences

3.3. The Discussion on Active Management of the Third Stage of Labor

The Nursing and Midwifery Community for Making Pregnancy Safer and the Parteria y Enfermeria para una Maternidad Segura Community sponsored a global discussion forum on changing practice with evidence over two weeks in late 2008. The purpose of this discussion was to promote dialogue and exchange information on how to effectively change practice using research based evidence with a focus on active management of the third stage of labor.

Active management of the third stage of labor (AMSTL) is an evidence-based, low-cost intervention used to prevent postpartum hemorrhage. It consists of a combination of interventions immediately after the birth of the baby designed to speed

the delivery of the placenta by increasing uterine contractions and averting uterine atony. Conclusive evidence that AMSTL significantly reduces postpartum hemorrhage and the need for blood transfusion was provided in the Bristol and Hinchingbrooke randomized control trials (Prendiville, Harding, Elbourne & Stirrat, 1988; Rogers, Wood, McCandlish, Ayers, Truesday & Elbourne, 1998) and the Cochrane Database of Systematic Reviews (Prendiville, Elbourne & Mc Donald, 2009). The WHO, ICM and the International Federation of Gynecology and Obstetrics (FIGO) (2004) agree AMTSL should be offered at every birth by skilled attendants to prevent postpartum hemorrhage, the leading cause of maternal mortality worldwide.

We invited guests with content expertise from 6 countries on 3 continents to provide expert opinion and answer questions posed by the larger community. In addition the authors of this article facilitated the discussions and provided administrative and technological support. The forum started with a virtual presentation, using the elluminate platform, of a case study in Honduras focused on implementing AMSTL in a low-resource setting. The presentation was recorded and archived in the library of the MPS-CoP for those unable to join the presentation in real time. Relevant evidence based documents and web links were placed in the virtual library for participants to check-out if additional resources or information was desired.

In order to stimulate discussion, questions were posed to the group each day such as: 1) What is the current policy for management of the third stage of labor in your clinical setting, educational program or hospital? and 2) Why are you interested in this subject? The first several days of the discussion covered general introductions and comments from the experts and participants about why the topic is important and what they would like to see come out of the discussion. Participants were asked to share success stories and barriers to changing practice specific to management of the third stage of labor.

The discussion in the English language community had 27 postings from 14 countries during the formal discussion. However, in response to a posting on nutrition and postpartum hemorrhage from South Africa and one on traditional midwifery from Puerto Rico, the discussion continued with 36 additional postings from 9 new countries. Experts provided 7 contributions. The Spanish language community had 23 contributions from 13 countries. There were 5 contributions from the experts. Digests, which provided a summary of one to two days of discussion were compiled by the facilitators and posted every other day. These also contained full text contributions and provided a mechanism for participants to view all the exchanges in the forum in one document.

Participants shared their experiences and challenges of implementing evidence based care in numerous settings. Some of the themes included:

- Adapting the evidence with experience and wisdom of the setting
- Scope of practice for various levels of personnel
- Establishing trainings to change practice in limited resource settings
- Evaluating outcomes after implementation of AMTSL
- Availability of necessary supplies to implement AMTSL
- Respect for choice and informed consent

Many participants shared valuable resources via URL links. When possible these documents were placed within the library resources for continued easy access by members.

4. Survey of Communities

The forums were followed by a short on-line survey in the two communities to illicit feedback and identify areas for further discussion. A self-administered questionnaire was developed by the authors. The instrument contained items ascertaining information on participant's basic demographics including age, place of residence and educational preparation. The questionnaire was distributed through email with a \$50 gift certificate drawing as an incentive for participants. Participation was voluntary and no identifying information was collected that could be associated with respondents answers to survey questions.

4.1. Survey Technology

Survey Monkey®, a free, web-based survey tool was used to construct the short survey forms. Following the virtual discussion, an announcement was posted to members of the Making Pregnancy Safer CoP with a custom URL link embedded into the body of the text linking participants directly to the survey. This type of software has many advantages. Templates are provided yet as the survey designer you have the capability of customizing the types of question and the overall look of the survey. Surveys can also be created in multiple languages. Survey results can be downloaded directly into various formats for analysis including excel spreadsheets.

Members of the CoP were asked to complete the evaluation survey to help us improve the site and plan for future activities. The survey took approximately 10-15 minutes to complete. The survey link was kept open for approximately six weeks with three e-mail reminders sent out to members to complete the survey.

Data collected in the Survey Monkey software were transferred into two excel spreadsheets, one with data from the English language community and one with data from the Spanish language community, for analysis. Data were analyzed using SPSS, version 17. Data from the English language survey is presented.

4.2. Results

There were 59 respondents to the English community survey. Their ages are broken down into four categories/brackets (Table 1).

Table 1: Participants by age

Age Range	Number of Respondents (%)
25-34 years	8 (13.6%)
35-44 years	5 (8.5%)
45-54 years	26 (44.1%)
55 years and over	20 (33.9%)

Out of the 59 respondents twenty-eight live in either the USA or Canada (47.5%), seven live in Western Europe (11.8%), six live in Sub-Saharan Africa (10.2%), seven live in Asian or Pacific regions (11.8%), eight live in Latin America or the Caribbean (13.6%), two live in North Africa or the Middle East (3.4%), and only one respondent lives in Eastern Europe (1.7%).

Educational attainment varied widely in the group that took part in the survey. Of the 59 respondents, seventeen held doctorate degrees (28.8%), twenty-two attended graduate school (37.3%), eleven attended four years of university (18.6%), seven received their education among colleagues (11.9%), and two received education through vocational school or other (3.4%). Table 2 provides an analysis of respondents by type and sector of employment.

Table 2: Categories of Employment

Type of Employment	Number of Respondents (%)
Academics/Academia	18 (30.5%)
Public Sector/Government	15 (25.4%)
Private Sector	10 (16.9%)
Non-governmental Organizations	11 (18.6%)
Other	4 (6.8%)
Professional Association	1 (1.7%)

Of the 59 respondents who identify their careers as in/pertaining to any of these categories; academics, public sector/government, NGO, private sector, professional associations or other; 21 work specifically in education (35.6%), 20 in direct patient care (33.9%), 7 in governmental activities (11.9%), 8 in development activities (13.6%), 2 work in the other category (3.4%), and 1 respondent works specifically with advocacy (1.7%).

Only 15 individuals responded to the survey in Spanish. Respondents were from Latin America or Spain. A majority were midwives in academic institutions. The other responses were similar to those reported from the English language survey.

Regarding questions related specifically to the global discussions, of the 59 total respondents, 51 thought the virtual global discussions were helpful (86.4%), 2 thought the virtual global discussions were not helpful (3.4%), 5 were not sure whether the discussions were helpful (8.5%) and 1 individual did not respond (1.7%). Thirty-five respondents thought the number of postings from the global discussions was just right (59.3%), 16 though there were too many (27.1%), 1 thought there were too little (1.7%), 6 respondents did not participate (10.2%) and 1 respondent did not answer the question (1.7%). Out of the 59 total respondents, 51 found the e-mail digest format convenient (86.4%), 2 found the format not convenient (3.4%) and 6 respondents did not answer the question (10.2%).

5. Strategies for Building Capacity

A The experience of developing the communities of practice highlighted the potential for addressing information needs of members while supporting the exchange of ideas and solution of problems in applying new evidence in the practice setting. At the same time the challenge for building capacity to sustain the effort was evident. By the end of 2007 only a few individuals had assumed responsibility to moderate the communities and facilitate discussions. The individuals were committed to the development but there was little evidence of institutional support for the effort required to manage the communities on a routine basis. Leaders believed that specific strategies were needed to build capacity within existing communities and to establish additional communities based upon interest and identified needs. Developing institutional commitment and providing training were

short term strategies selected by the community leaders to be the focus of work during 2008 and 2009.

WHO Collaborating Centers for Nursing and Midwifery were a logical choice for developing institutional commitment for several reasons. In the Americas Region two new Centers were in the process of being designated to support the development of midwifery in Latin America and the Caribbean. The Regional Office of WHO was promoting the Spanish language communities of practice as a mechanism for supporting midwifery work. The terms of reference and work plans for the designation of these two Centers included some responsibility for the Communities of Practice. WHO Collaborating Centers are required to report on their progress in fulfilling those responsibilities on an annual basis. Re-designation after four years is based upon satisfactory completion of those requirements.

During 2008 faculty from the Collaborating Center in the School of Midwifery at the University of Chile facilitated discussions and by the end of 2009 were actively involved in managing the Spanish language CoP. Several other Centers, including the University of Michigan, School of Nursing, Johns Hopkins University, School of Nursing, and the Nurse-Midwifery Education Program at University of Puerto Rico, were actively involved in discussions and participated in special training programs for community leaders. This approach of defining a role for the WHO Collaborating Centers is being proposed within plans to re-launch the Global Alliance for Nursing and Midwifery in 2010.

Training of individual community leaders has been on-going since the communities were established. Much of the training has been provided individually and as part of formal and informal discussions when a community member has been asked to assume some responsibility for a discussion. Quick Start Guides for users and community leaders that provide basic information have been developed. These guides are made available electronically and archived in the libraries in both the English and Spanish CoPs for ready access. A practice community provides a space for new members and leaders to try out certain technical functions such as adding a document, forwarding a document, beginning a discussion and recording discussions. The definition of competencies for users and leaders provides a check list to orient these individual training efforts. Mentoring by experienced leaders complements the training and self-study approaches utilized.

Technical, managerial and administrative support for the IPB Knowledge Gateway is provided by the WHO, Department of Reproductive Health and Research (WHO/RHR) in collaboration with Johns Hopkins University INFO Project. Moderation of the Global Alliance for Nursing and Midwifery Community of Practice is provided by the WHO Collaborating Center in Johns Hopkins University School of Nursing with support from WHO/RHR, WHO Department for Human Resources for Health, Nursing, Midwifery and Health Professions and members of GANM Steering Committee. In March, 2008 they organized a two hour virtual training session via e-lluminate for beginning leaders of CoPs. The session included an overview of the IPB Knowledge Gateway platform and the specific functions leaders utilize particularly with a virtual forum. A desk top sharing feature of e-lluminate makes it possible to demonstrate these functions within the practice community previously mentioned. The first training session was recorded so individuals unable to attend could view it at a later date. Participants evaluated the training session as effective.

Plans to develop sub-communities which responded to the interests of members as a capacity building initiative have been less successful. Existing networks have

developed other mechanisms for facilitating dialogue and exchange of information. Another issue for some individuals in becoming active community members is e-mail overload. Even though it is possible to limit the frequency of receiving e-mails from a particular community to daily, weekly or even monthly, this feature does not seem to resolve the problem of volume overall.

A final consideration in building capacity is what to do about reaching individuals in areas with problems of access to electronic communications systems but unmet needs reflected in high mortality and morbidity for mothers and newborns. The leaders of the Making Pregnancy Safer communities have been encouraged by the number of developing countries represented among the membership in both English and Spanish language communities. However, in most of these countries the number of participants is relatively small. One issue for the Spanish language community was the process of registration. Although the invitation was provided in Spanish the link provided to the registration page was only available in English. This problem has now been resolved with the availability of the registration page in Spanish.

During the discussion on traditional midwifery, members involved traditional midwives in several countries in the exchange by incorporating their comments in their own contributions. Summaries of the discussions were included in various newsletters or bulletins utilized by networks for keeping their members informed. Further discussion of this issue will be included in future plans.

6. Lessons Learned and Future Plans

In our first attempt at holding a simultaneous discussion in two languages we experienced some significant administrative challenges. A small number of individuals, registered in both the Spanish and English language communities received digests from only one community. The potential to have cross-fertilization of discussions was greatly enhanced by bilingual participants following and contributing in two communities. This was more challenging because of the technical difficulties.

We also expected more sharing of experiences from the field related to implementation of AMSTL considering the publicity it has received at international meetings, conferences and consultations since release of the WHO/ICM/FIGO joint statement (2004). One possible explanation is that members of the MPS-CoPs have not had an opportunity to participate in any of those activities and their institutions are not implementing the policies put forth.

Global discussions provide an opportunity to share up-to-date information on the topic being discussed. A number of technical documents and reports were provided and web sites where additional information could be obtained. There were many more resources available in English than in Spanish. Copyright laws preclude circulating full text copyrighted materials without permission. Therefore, it was impossible to share everything suggested by members during the discussions. Additional challenges currently under review by the leadership of the CoPs include:

1. Effective moderation of a community.

What does it mean to moderate a community and a global discussion? Should contributions from members be edited? When? Why? How? An example of this was the

mixed reaction to the posting of a petition from the Midwives Alliance of Latin America. There is limited guidance from the IPB Knowledge Gateway on the question of editing. Therefore, the communities will need to decide how they wish to handle moderation in future discussions.

2. Reaching midwives and nurses in countries with fewer resources and large populations without access.

The Nursing and Midwifery Communities for Making Pregnancy Safer continue to grow and develop. However with 382 Members from 79 countries in English language community and 187 Members from 32 countries in the Spanish language community there is not good representation from all countries which are making significant progress in this or in other strategies for making pregnancy safer. We need to expand membership within countries and add members from additional countries. The relationship of the subcommunities with the GANM also needs to be considered and further developed. With 1500 Members in 150 countries, the GANM may be a better venue for a global forum because of the potential of reaching more individuals. However, many of those members may not have an interest in topics related to the initiatives for safe motherhood.

Both formal and informal discussions have taken place within the MPS-CoP. In addition to the bilingual discussions highlighted here, two informal discussions were held in the Spanish language community during 2009, one on assessing cervical dilation during labor without vaginal exam and one on maternal mortality. These topics were suggested by community members. Details are available in the community archives at http://my.ibpinitiative.org/ and will be utilized for planning future activities including research and continuing education as well as other global discussions.

The Spanish language community is being utilized as a venue for piloting a series of short virtual continuing education programs provided in Spanish. By the end of 2009, five programs using different virtual modalities were being finalized for dissemination during the first half of 2010. The programs are:

- Cervical Cancer Screening in Low Resource Settings
- Neonatal Resuscitation
- Eclampsia
- Gender Perspective for Maternal Mortality
- **Cultural Competence**

Although the programs will be offered through other networks and organizations it is expected that the CoP will become the main site for information on updates as well as future programs.

7. Conclusion

Communities of practice offer the opportunity to share new information and best practices. The digests and the supporting documents archived from discussions are available to members at any time for subsequent analysis and reference. Communities of practice have become a resource for strengthening nursing and midwifery worldwide. By providing a platform for exchange of information we can bring together the community wisdom and evidence based needed to improve d practice and the health of mothers and newborns worldwide. New members are always welcome.

The links to register for the communities are http://my.ibpinitiative.org/public/GANM/NMmakingpregnancysafer/http://my.ibpinitiative.org/public/GANM/MaternidadSegura/

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