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Global Health Council

34th Annual
International Conference
on Global Health

Partnerships
WORKING TOGETHER
2007

Final Program

May 29 – June 1, 2007
Omni Shoreham Hotel, Washington, D.C.

www.globalhealth.org

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22 February 2007

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Dear Dr. Mohammad Zulkarnain, MS:

We are pleased to extend this invitation to you to attend our 34th Annual Conference, Partnerships: Working Together for Global Health, to be held during the week of May 29, 2007 at the Omni Shoreham Hotel in Washington, DC.

Over its 34-year history, the Global Health Council has convened thousands of public health professionals from close to 100 countries at our annual conference. During that time, the conference has featured a wide range of health themes on women, children and youth, the environment, and post-conflict settings, to name a few. It is this diversity that has given the annual conference its reputation as one of the premier gatherings in the field of global health. The 34th Annual Conference will focus on exploring examples and models of working across institutions and approaches, and studying these relationships: how they are built, what they have and can deliver, and how those living in poverty and disease can best benefit. All of these joint efforts are means to our common end: to tackle complex health problems and find solutions to these problems at all levels, and in so doing, improve the health of the world. For 2007, we invite you to join our community and explore new alliances at our 34th Annual International Conference on Global Health.

To investigate and learn about different approaches to these questions, we invite health and development professionals, providers, community organizers, program managers, policy-makers, researchers, and advocates to attend our 34th Annual Conference.

Your abstract titled *Expanding Postpartum hemorrhage prevention at homebirth in Indonesia* has been selected from over 1000 abstract submissions for presentation at the conference and we would very much like to have you participate as a Roundtable presenter. To ensure your attendance, we will provide you with the following financial assistance:

- ✓ Registration Fee ($125 value)
- ✓ Awards Banquet Ticket ($75 value)

We feel that you have much to share in interacting with our international audience, and that you will also carry home much valuable new information to share with your colleagues. We hope you will join us for what promises to be an exciting celebration and an unparalleled opportunity for learning, exchange, and reaffirmation. Should you have any questions in the meantime, please contact our office at 802-649-1340, or by email at conference@globalhealth.org.

Sincerely,

Nils Daulaire, MD, MPH
President and CEO, Global Health Council

Presenter Information: Mohammad Zulkarnain

Biography: A lecturer and researcher at faculty of medicine, Sriwijaya University / Palembang /Indonesia.

Actively involved in the promotion of women's Health in Indonesia.

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Abstract Format: Format II / Program

Abstract Title: Expanding Postpartum hemorrhage prevention at homebirth in Indonesia

Submission Type: Preformed Panel Abstract

Key Health issue: Women's Health

Keywords: Postpartum hemorrhage, misoprostol, partnership

Learning Objectives:

By the end of my presentation, participants will understand that interventions that have been demonstrated to be effective, feasible and fully endorsed by Health Ministry and other stakeholders still face many challenges in scale up arising out of funding and policy problems, and that successfully taking such interventions countrywide requires broader partnerships and long term support.

Partnership Model:

The partnership is among NGOs, private sector and government; and among district health department, midwives and community health volunteers (CHVs) supported by professional organizations and technical assistance organizations.

Background:

In Indonesia, the maternal mortality ratio is 307 per 100,000 live births, about 30% due to postpartum hemorrhage (PPH). We are expanding community based PPH prevention throughout the country especially in remote areas, to ensure that women who are unable to access or be accessed by skilled birth care providers are protected from PPH. The approach is to use well trained community volunteers to educate women and distribute misoprostol to be used immediately after childbirth.

Design/Methods:

The partnership involves the central MOH providing a limited budget, and technical guidance and all districts/provinces provide their own budget. NGOs and donor agencies are supporting districts/provinces. The professional association and organizations such as JHPIEGO/JSI provide technical assistance. The Central MOH also facilitates the purchasing and preparation of the drug.

Results/Outcomes:
Following successful demonstration in one district, the intervention is expanded to five districts. The number of cases of PPH has been declining and no maternal deaths due to PPH have been reported in these districts. Fears that this CBD approach will decrease skilled attendance have proven unfounded. Births with community midwives have increased. Follow up also shows that the educational component is working as no one has taken the medication incorrectly. Sharing of these findings among all partners helps reassure them and encourage widespread support. A recent evaluation led by the MOH but inclusive of professional associations and NGOs and potential partners from non implementation districts will accelerate adoption in other parts of Indonesia

Impact of Partnership:

We believe that the relatively rapid transition from research to practice was because since the first step of the study we already involved key stakeholders and found a true champion within MOH to lead the national steering committee. During this expansion phase, the partnership between midwives and CHVs becomes so effective so that all new pregnant women are reported to the midwives by CHVs and are also encouraged to see midwives for antenatal care. This strategy can easily be applied in any other districts.

Co-Authors: Gulardi Wignjosastro, Harshad Sanghvi

Location: Ambassador Ballroom | map

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Preventing postpartum hemorrhage at homebirth: from research to practice

5 minutes	Opening Welcome, Leslie Mancuso, JHPIEGO
5 minutes	Co- Chair Nahed Matta, United States Agency for International Development Koki Agarwal, ACCESS
10 minutes	Background and Global perspectives: Working together to prevent postpartum hemorrhage at homebirth Harshad Sanghvi, ACCESS
15 minutes	Expanding PPH prevention at homebirth in Indonesia Mohammed Zulkarnain, UNICEF
15 minutes	Integrating PPH prevention at homebirth in community programs in Nepal Steve Hodgins, NFHP/JSI
15 minutes	Introducing Prevention of PPH at homebirth in Afghanistan Nasratullah Ansari, ACCESS-SSP
10 minutes	Ensuring Availability of Misoprostol Melodie Holden, Ndola Prata, Venture Strategies
20minutes	Q&A
5 minutes	Conclusion and next steps Harshad Sanghvi, ACCESS

Expanding Postpartum Hemorrhage Prevention at Homebirth in Indonesia

Mohammad Zulkarnain

Introduction

For the last 10 years, according to the *Indonesian Demographic and Health Survey* (**IDHS**) in 1997, the Maternal Mortality Ratio (**MMR**) in Indonesia was 334 per 100,000 live births, where 18 thousand women died because of childbirth each year or 1,391 died every month, placing MMR in Indonesia the highest in ASEAN. MMR in Indonesia is 3-6 times higher than other ASEAN countries such as Malaysia, Singapore, Philippines, and Thailand.

Eventhough IDHS 2003 showed that the MMR has decreased to 307 per 100,000 live births (decreased 27 points in 6 years), the figure remains very high. The Indonesian government is targeting to reduce its MMR to 226 per 100,000 live births by 2010, and furthermore, to reduce its MMR to 125 per 100,000 live births by 2015, in order to achieve the MDGs commitment. If the target successfully achieved, it means that the number of maternal mortality cases, currently 18 thousand per year, can be reduced to only approximately 7,000 women per year in 2015. The IDHS 2003 also showed that only 66.2% of women nationally and 48.6% percent of women in West Java deliver with a skilled attendant.

Based on the data from Central Bureau of Statistics and Household Health Survey (1991), Postpartum hemorrhage (**PPH**) was estimated to be the cause of 45% of maternal deaths; and self-reported excessive postpartum bleeding was reported in 7% of all live births. Even though the latest data from Household and Health Survey (**HHS**, 2001) shows that PPH is now only the cause of 28% of maternal deaths in Indonesia, it is still the leading and a very important cause.

One of the important factors affecting the condition of women delivering their babies in Indonesia is that they prefer to deliver at home. 1997 IDHS showed that 4 out of 5 babies in Indonesia were delivered at home including 7% who were delivered at midwife's house, indicating an increase by 2% compared to that of in 1994. In addition, there are 43% of women nationally and 31% of women in West Java whose delivery were attended by skilled providers. It was also found that approximately 25% of women who planned to be helped by a midwife, because of one or more reasons, could not be helped by midwife when delivering their baby, while oxytocin can only be administered by midwife or doctor.

Although the Ministry of Health has recommended that women deliver at Health Centers, *polindes* (rural healthcare center) or hospital, it was found that only 9% of deliveries took place at the public health facilities and 12% deliveries were at clinics and private hospitals. Home births occurred more in women below 20 years of age or above 35 years of age (83% and 78% respectively), women with many deliveries (58% -on the first delivery and 87% on the seventh or more delivery), and women in rural areas (84% compared to 41% in urban areas). As many deliveries happen at home, more birth complications also occur at home rather than in healthcare facilities.

National data on birth complication, including the cause of maternal mortality, are not available in Indonesia. It is due to the fact that 3 out of 5 babies in Indonesia were delivered at home (IDHS, 2003). Case fatality rate based on hospital reports is available, but it does not serve as a basis to describe general condition in Indonesia because the data were collected from women who delivered at hospitals, including those who are referred to the hospital for complications. The Health and Household Survey (HHS) in 2001 in its data collection from the community showed the cause of maternal mortality in Indonesia as listed below:

Table 1. Causes of Maternal Mortality in Indonesia

Causes of Maternal Mortality in Indonesia	
Hemorrhage	28.0%
Eclampsia	24.0%
Abortion Complications	5.0%
Infection and Puerperal complication	19.0%
Prolonged labor	5.0%
Trauma	5.0%
Other causes (emboli, etc)	14.0%

Source: Survei Kesehatan dan Rumah Tangga (HHS) tahun 2001

Table 2. Birth attendant and place of delivery in Indonesia and west Java, in 1997 and 2003

Delivery	Indonesia		West Java	
	1997	2003	1997	2003
BY HEALTH PROFESSIONAL	43.0%	66.2 %	30.5%	48.6%
AT HOME	79.3%	60.2 %	89.7%	71.4%
AT HEALTH FACILITIES	18.3%	39.8 %	10.1%	28.6%

Source: IDHS 2003.

Community-based distribution of misoprostol study

Since 2001, Ministry of Health (**MOH**) has collaborated with Maternal and Neonatal Health (**MNH**) program through a National Steering Committee, Indonesia association of obstetricians and gynecologists (**POGI**) and WHO Collaborating Center, to test the Safety,

Acceptability, **F**easibility and Program **E**ffectiveness (**SAFE**) of Community-based Distribution of Misoprostol for Prevention of Postpartum Hemorrhage in rural Indonesia.

The purpose of the study was to demonstrate that provision of correct information and community-based distribution of misoprostol (named "*Tablet PAS Bayi*" for the project) during the antenatal period and use of the drug immediately after home birth of the baby can lower the incidence of postpartum hemorrhage, is safe and acceptable to women and families, and is programmatically feasible. Patients and their support persons receive information on two occasions during their pregnancy from Bidan in antenatal clinics and from trained community volunteers (Kader) during home visits. Patients were asked to correctly recount the information before being given the medication and a safety reminder card. The woman and her support person keep the medication in a safe place together with all other things needed for childbirth to be used immediately after birth of the baby especially if they do not have a skilled provider attending.

Patient and their support persons (especially those who will accompany her during delivery) receive information once or twice during their pregnancy from Bidan in antenatal clinics and/or from trained community volunteers (Cadre) during home visits. Patients were asked to correctly recount the information before being given the medication ("Tablet PAS bayi") and a safety reminder card. The woman and her support person keep the medication in a safe place together with all other things needed for childbirth to be used immediately after birth of the baby especially if they do not have a skilled provider attending.

The study was completed in July 2003, and data from 1322 women followed up in the intervention area (Bandung district) was compared to 489 women in the comparison area (Subang district).

The PPH Study anticipated as many as seven maternal deaths among the 1,855 pregnant women, since at that time the maternal mortality rate in Indonesia is 334 per 100,000. In fact, there were only three maternal deaths unrelated to the use of misoprostol found during the PPH Study in Indonesia (due to dengue shock syndrome, due to multiple organ failure related to eclampsia, and due to congestive heart failure related to a pre-existing heart disease.)

98% of participants who were offered the medication, accepted misoprostol. Women were successful in taking the intervention drug in a self-directed manner following one-on-one counseling sessions, without the supervision of a skilled health provider. During the study, no evidence of misuse of misoprostol was discovered and every woman who took the drug did so after delivery of her baby.

The study concluded that trained and supervised community volunteers (kader) can successfully provide PPH prevention counseling and information and then safely distribute misoprostol to those women who are unlikely to be attended by skilled providers. The study also provides evidence that women understood the information provided by kader, acted on it and safely took misoprostol at the correct time. Women were adequately prepared to cope with increased minor discomforts that are predictable after misoprostol use. The study also provides evidence that pregnant women are likely to continue to seek childbirth care with a skilled provider, and are not more inclined to home birth because they have access to a drug that prevent PPH. It is an indication that the counseling given to pregnant women and their support persons have successfully increase the number of women attended by health providers.

Table 3. Place of delivery before and during the study

	Previous delivery	During study delivery
Patient's Home	**54.8% (475)**	**47.1% (408)**
Midwife's Home	**28.2% (244)**	**37.9% (328)**
TBA's home	**7.7% (67)**	**5.4% (47)**
Health facility	**8.9% (77)**	**9.4% (81)**
Other	**0.3% (3)**	**0.2% (2)**

Information related to uterotonic coverage among PPH Study participants includes 900 women who had deliveries at home. Of these home deliveries, 575 were in the intervention area among women offered misoprostol to prevent postpartum hemorrhage. Almost 90% (514 / 575) of those women experiencing home births took misoprostol.

Regression analysis showed that women in the experimental area were 25% less likely to perceive excessive bleeding, 30% less likely to need an emergency referral, and 45% less likely to need an emergency referral for postpartum hemorrhage when compared to the control area.

Overall, the combination of the use of active management of third stage using oxytocin provided by the midwife and the use of misoprostol by the woman if a midwife is not available at home birth has the greatest potential for expanding prevention of PPH.

MOH Misoprostol Demonstration Program

Recognizing that PPH is a major cause of maternal mortality in Indonesia and that this intervention results in an expanded coverage of a safe PPH prevention strategy, the National steering committee and MOH has decided to disseminate results widely in Indonesia, finalize and distribute program implementation guidelines and training, counseling, and monitoring materials and incorporate PPH prevention into national health strategy.

In June 2004, the MOH has allocated around 500 million Rupiah for implementing the community-based misoprostol PPH prevention demonstration program in 4 Provinces in Indonesia. In each province the program was implemented in one district, and in each districts 4 puskesmas (community health center) were then selected.

In July 2004 the program was socialized to the selected districts and puskesmas, and during July to September 2004 the midwives and kaders (community volunteers) were trained. But because of technical and policy issues the drug was not successfully purchased by MOH untill the beginning of December 2004. So there was a 3 month gap between the training and the receiving of drugs by district MOHs. Fortunately, the district MOHs have instructed the

midwives coordinator in each puskesmas to refresh the knowledge and skill of other midwives, and then the midwives refresh the knowledge and skill of kaders they supervised.

In Bandung district, West Java province, there is one puskesmas, namely Ciparay puskesmas (4 villages) that implement the demonstration program by using its own money and supported by district MOH budget.

The MNH program was closed at the end of September 2004. Since October 2004 there was no more technical assisstance given from MNH / JHPIEGO. Consequently, the supervision and monitoring of the demonstration program have been fully under the responsibility of MOH.

Because the district MOHs had to put the drug into a specially designed package, so that effectively the program were started at the end of January or at the beginning of February 2005. Even in some puskesmas in Banyuasin district, the program were started at the end of June 2005.

In December 12, 2005, Central MOH conducted a meeting with all representatives from 5 District MOHs (4 Provinces) which are implementing the demonstration program. The purposes were to have reports about the results of the misoprostol implementation in each district, identify problems at the field and discuss the alternative solutions.

The meeting was also attended by an NGO: "International Organization for Migration", who wanted to know the possibility for supporting the implementation of misoprostol program in two districts in Aceh Province.

From the meeting some important informations were collected:

1. All districts have successfully implementing the program. But the starting time for each district is different. Banyuasin District in South Sumatra Province is the latest one.
2. Until October 2005, the drug have been distributed to 3,890 women.

3. From 1798 women who took the drug, no one took the drug before the birth of the baby.
4. The most frequent side effect is shivering, which is experienced by 91 women (5.1%).
5. Coordinator Midwives concluded that the program is more important and most effective in villages with no midwife (because most of the distributed drugs were used by the women, so that the recollection rate is low).
6. All districts reported that the number of deliveries attended by health providers is increase.
7. In Serang District, in addition to the increase of deliveries attended by health providers, they also had enough data to conclude that the number of PPH and maternal mortality cases were also decrease. Before the demonstration program (2004) there were 19 PPH cases and 7 maternal death in the demonstration areas, but during the demonstration program (end of October 2005) there were only 8 PPH cases and 2 maternal death.
8. In Ciparay, they have only 200 packages of drug, because they use they own money. So they ask that the central MOH can also help them with more drugs. They have also allocated Rp. 133,881,000 ($ 14,092) for implementing the program in Cililin health centre (5 villages) in 2006.

CURRENT ACTIVITIES

Expanding the community based PPH prevention throughout the country especially in remote areas, to ensure that women who are unable to access or be accessed by skilled birth care providers are protected from PPH

Referrences

1. Central Bureau of Statistics (CBS), 1991. *Household Health Survey 1991*, Ministry of Health, Jakarta, Indonesia
2. Central Bureau of Statistics (CBS), 1996. *Indonesia Demographic and Health Survey 1995*, CBS and Macro International and Calverton, MD.
3. Central Bureau of Statistics (CBS), 1998. *Indonesia Demographic and Health Survey 1997*, CBS and Macro International and Calverton, MD.
4. Central Bureau of Statistics (CBS), 2001. *Household Health Survey 2001*, Ministry of Health, Jakarta, Indonesia
5. Central Bureau of Statistics (CBS), 2003. *Indonesia Demographic and Health Survey 2002 - 2003*, CBS and Macro International, Calverton, MD.
6. Sanghvi H et al, 2004. Prevention of postpartum hemorrhage study, West Java, Indonesia. *Maternal Neonatal Health, JHPIEGO,* Baltimore, Maryland, USA.