



**THE MATERNAL AND NEONATAL HEALTH PROGRAM'S
“CHAMPIONS FOR CHANGE: IMPROVING
MATERNAL AND NEWBORN SURVIVAL”**

Meeting Proceedings

**Accra, Ghana
25–30 July 2004**

TABLE OF CONTENTS

Abbreviations and Acronyms

Overview

Catalyzing Change in Healthcare for Women: Reflections from 50 Years as a Change Agent
Keynote Address by Dr. Fred Sai

Taking Innovations to Scale: The Role of Champions
Harshad Sanghvi

Champions Ignite Shared Responsibility for Sustainable Change
Nancy Russell

Managing Newborn Problems Reference Manual
Robert H. Johnson and Marisabel Gouverneur

Care of the Newborn Reference Manual
Frances Ganges

Performance and Quality Improvement: An Example from Guatemala
Gloria Metcalfe

Emergency Obstetric Care
Harshad Sanghvi and Marisabel Gouverneur

Prevention of Mother to Child Transmission of HIV
‘Dipo Otolorin and Patricia Gomez

Update in Contraceptive Technology
Ricky Lu, Gloria Metcalfe and ‘Dipo Otolorin

Malaria in Pregnancy
Barbara Kinzie and Patricia Gomez

WHO Reproductive Health Library
Matthews Mathai

Where There Are No Skilled Providers
Donna Vivio

Prevention of Mortality from PPH
Donna Vivio and Harshad Sanghvi

Changing Preservice Education
Robert H. Johnson and Asmuyeni Muchtar

Healthcare Provider Responsibilities in Generating and Using Monitoring Data
Joy Fishel

Introduction to the *Basic Maternal and Newborn Care* Reference Manual
Patricia Gomez and Barbara Kinzie

Champions for Change: Regional Maternal and Newborn Health Experts
Barbara Kinzie and Harshad Sanghvi

CHAMPIONS FOR CHANGE—SESSION ONE

Improving the Quality of Antenatal Care at a District Hospital in Ghana. Outcomes, Challenges, and Lessons Learned
Sylvia Deganus, Ghana

Implementing Focused Antenatal Care in Community Maternity Homes
Keziah Kapesa, Tanzania

Strengthening Infection Prevention Practices
Mary Jonazi, Malawi

The Road to Evidence-Based Maternal and Neonatal Care
Vicente Bataglia, Paraguay

Strengthening Service Delivery and Training at an Indonesian Maternity Hospital
Mohammed Baharuddin, Indonesia

Discussion

CHAMPIONS FOR CHANGE—SESSION TWO

Setting and Implementing Standards for Maternal Care at a Rural Community Hospital
Pung Purnama, Indonesia

Strengthening Preservice Midwifery Education in Zambia
Theresa Kafula, Zambia

Challenges in Introducing Active Management of Third Stage of Labor at a Peripheral Hospital
Kusum Thapa, Nepal

The Process of Improving Performance and Quality at the National Hospital of Sololá
Estuardo Recinos Flores, Guatemala

Updating the Essential Maternal and Neonatal Care Curriculum at Nursing Schools in Guatemala
Ilse Santizo Salazar, Guatemala

Working Across Borders. Establishing Quality Services in East Timor
Rajshree Jha, Nepal

Discussion

Prevention of Cervical Cancer. Why a new approach (SVA) is needed.
Sylvia Deganus and Sydney Adedevoh

Prevention of Cervical Cancer. Challenges and Opportunities
Harshad Sanghvi

Future Directions for Maternal and Newborn Care
Harshad Sanghvi

CHAMPIONS FOR CHANGE—SESSION THREE

Creation of the Latin American and Caribbean Network for the Humanization of Childbirth
(RELACAHUPAN)
Delia Vergaus Segura, Chile

Improving the Quality of Normal Delivery Care through Standardization of Midwives
Heru Erdiawati, Indonesia

Integration of Best Practices in Maternal and Neonatal Health in Preservice Education.
Experiences from the midwifery school of Burkina Faso
Aoua Zerbo, Burkina Faso

Alternate Positions in Delivery: A Nepalese experience
Meeta Singh, Nepal

Expanding Emergency Obstetric Care in Nepal
Meera Thapa Upadhyay, Nepal

Establishing Postabortion Care Services in a Faith-based Private Sector Setting
Pancho Kaslam, Indonesia

CHAMPIONS FOR CHANGE—SESSION FOUR

Care Standards. Incomplete abortion without complications
Gerardo Viturera, Uruguay

Implementation of Restrictive Episiotomy at the Hospital of Amatitlan, Guatemala
Jose Fredy Chuy Mancilla, Guatemala

Meeting the Challenge. Policy change for basic emergency obstetric care training
Duptho Wangmo, Bhutan
Training Within and Without
Gonzalo Sotero, Uruguay

Improving Quality of Care and Professionalism of Indonesian Private Practice Midwives through
the *Bidan Delima* Recognition Program
Asmuyeni Muchtar, Indonesia

Performance Improvement in Antenatal Care and Malaria in Pregnancy
Alice Mutungi, Uganda

Discussion

Linking Programs to Experts

Lessons Learned: Launching the Maternal and Newborn Champions Network
Harshad Sanghvi

ABBREVIATIONS AND ACRONYMS

| | |
|----------|---|
| AMTSL | Active management of the third stage of labor |
| ANC | Antenatal care |
| ARV | Antiretroviral |
| ART | Antiretroviral therapy |
| AVSC | Association for Voluntary Surgical Contraception (now EngenderHealth) |
| BCI | Behavior Change Initiative |
| BF | Breastfeeding |
| BP/CR | Birth preparedness/complication readiness |
| CBT | Competency-based training |
| COC | Combined oral contraceptive |
| CSS | Clinical skills standardization |
| CT | Counseling and testing |
| DFID | Department for International Development (UK) |
| DHS | Demographic and Health Survey |
| DOT | Directly observed therapy |
| EFV | Efavirenz |
| EMNC | Essential maternal and newborn care |
| EmOC | Emergency obstetric care |
| FANC | Focused antenatal care |
| FIGO | International Federation of Gynecology and Obstetrics |
| FP | Family planning |
| HAART | Highly active antiretroviral therapy |
| HBLSS | Home-based life saving skills |
| HIV/AIDS | Human immunodeficiency virus/acquired immune deficiency syndrome |
| HR | Human resources |
| IAWC | Incomplete abortion without complications |
| IBP | Implementing best practices |
| ICM | International Confederation of Midwives |
| IEC | Information, education, and communication |
| IMPAC | Integrated management of pregnancy and childbirth |
| IP | Infection prevention |
| IPA | International Paediatrics Association |
| IPT | Intermittent preventive treatment |
| ITN | Insecticide-treated net |
| IUD | Intrauterine device |
| MCH | Maternal and child health |
| MCPC | <i>Managing Complications in Pregnancy and Childbirth</i> |
| MEC | Medical eligibility criteria |
| MIP | Malaria in pregnancy |
| ML/LA | Minilaparotomy under local anesthesia |
| MMR | Maternal mortality ratio/rate |
| MNH | Maternal and Newborn Health |
| MNP | <i>Managing Newborn Problems</i> |

| | |
|-------|---|
| MOH | Ministry of Health |
| MPS | Making Pregnancy Safer |
| MTCT | Mother to child transmission |
| NGO | Nongovernmental organization |
| NVP | Nevirapine |
| OC | Oral contraceptive |
| PAC | Post-abortion care |
| PAR | Participatory action research |
| PIA | Performance improvement in antenatal care |
| PCPNC | <i>Pregnancy, Childbirth, Postpartum and Newborn Care</i> |
| PID | Pelvic inflammatory disease |
| PMTCT | Prevention of mother-to-child transmission |
| PPH | Postpartum hemorrhage |
| PQI | Performance and Quality Improvement |
| RCQHC | Regional Center for Quality Health Care |
| RH | Reproductive health |
| SDM | Standard days method |
| SM | Safe motherhood |
| SNL | Saving Newborn Lives |
| SOWN | State of the World's Newborns |
| SP | Sulfadoxine-pyrimethamine |
| SPR | Selected practice recommendations |
| STI | Sexually transmitted infection |
| TBA | Traditional birth attendant |
| USAID | United States Agency for International Development |
| VCT | Voluntary counseling and testing |
| VHW | Village health worker |
| VIA | Visual inspection of the cervix with acetic acid wash |
| WHO | World Health Organization |
| WRA | White Ribbon Alliance |
| ZDV | Zidovudine |

OVERVIEW

I am delighted to present the report of a meeting of maternal and neonatal care regional experts that was held in Accra, Ghana between 25th and 30th July 2004. The meeting, “Champions for Change: Increasing Maternal and Newborn Survival,” was organized by JHPIEGO’s Maternal and Neonatal Health (MNH) Program and brought together 71 participants representing 29 countries and 16 organizations.

Five years ago, when the MNH Program began the journey of creating champions for change, we could not have imagined enough how very gratifying the results would be. This meeting saw midwives and doctors—leading experts, program managers, safe motherhood professionals, policymakers, and researchers—coming together to demonstrate that there are workable solutions for increasing maternal and newborn survival; that these solutions are safe, acceptable, feasible, and effective; and that we can indeed bring about these changes rapidly and efficiently. It was impressive to hear how these everyday heroes and heroines work on the front lines and how, for them, the battle for maternal and newborn survival is often a daily occurrence. The journey has been hard. The journey has been long. But we all recognize that the effort was well worth it in terms of the results achieved.

Regional experts have undergone a long and difficult process of development, from understanding the evidence basis for changes in our care practices, to learning and standardizing their skills in a wide range of life- saving procedures, to being able to effectively teach those skills to others, and most important, to applying their advocacy and leadership training to solve problems on the ground in their own institutions, in their countries, and across borders.

Their teachers and mentors* were often tough, making them work late in the night and on weekends, cajoling them into making that extra effort, they pursued them to their own institutions in 20 countries. They helped them overcome the resistance from skeptical professionals and policymakers and managers. They provided them examples of global best practices and kept them abreast with emerging new learning and evolving state of the art. Every champion will agree that this effort was worth it and the teachers and the mentors deserve a very special commendation.

During this meeting, participants had the opportunity to hear about state-of- the-art interventions and explore innovative approaches. They discussed challenges in bringing care to vulnerable populations and debated program approaches. Participants were able to enhance their professional skills and network with colleagues. But most importantly, it was an opportunity to renew our commitment and plan to take bold steps together.

Specifically, the objectives of the meeting were to:

- update each other on emerging evidence and technologies that lead to increased maternal and newborn survival, not only in health institutions but also for births that occur at home,
- examine recently developed global maternal and newborn resource materials so that we work from the best available information, and

- share experiences in implementing changes in maternal and newborn care practices as we celebrate the success and learn from those who have already demonstrated effective and workable strategies

Participants reported that they left the meeting energized to persist in the face of difficulties, persevere in the face of resistance, and become innovative in the face of intractable and often complex situations. All those present expressed their desire to make these changes happen—to ignite and catalyze institutions, programs, ministries of health, and development partners to make changes that will result in eliminating preventable causes of maternal and newborn death.

None of this would have been possible without the unwavering support of USAID under whose sponsorship the flagship Maternal and Neonatal Health Program operates. In particular, Patricia Stephenson and Mary Ellen Stanton deserve a very special commendation for their personal support for this initiative. Very special thanks go to the Ministry of Health of Ghana for allowing this meeting to be held in Ghana. Finally, the presence of many donors and technical assistance agencies was very gratifying because it demonstrated that they are fully committed to increasing maternal and newborn survival.

Harshad Sanghvi
Medical Director, MNH Program
JHPIEGO

*JHPIEGO Staff: D. Bossemeyer, S. Engelbrecht, P. Gomez, A. Hyre, E. Kehoe, B. Kinzie, R. Lu, G. Metcalfe, E. Otolorin, Z. Qureshi, C. Ruparelia, H. Sanghvi, L. Schaefer, J. Smith, R. Sullivan

Consultants: G. Allison, G. Adriaansz, J. Aguilar, R. Bishop, A. Davenport, Djoko, M. Espinoza, F. Ganges, S. Kishore, N. Kusi-Yeboah, Omo, R. Transgrud

CATALYZING CHANGE IN HEALTHCARE FOR WOMEN: REFLECTIONS FROM 50 YEARS AS A CHANGE AGENT

Keynote Address by Dr. Fred Sai, Presidential Advisor on Population, HIV/AIDS

Introduction

Distinguished current and future leaders of women's health practitioners, ladies and gentlemen. Let me first of all thank you all for choosing to come to Accra, Ghana for this very important conference, and secondly for choosing to get me out of my re-retirement to give the keynote address of the conference. I count it both as an honour and a privilege for the current and future leadership of the health professionals caring for women and newborns to count on us still and include us in their deliberations. For you to go a step further and ask for my reflections on the 50 or so years that I have been working in these fields I believe could be a dangerous request. I may embark on a speaking journey that may sound like one of those tales without ending or may degenerate into what Shakespeare described as "a tale told by an idiot, full of sound and fury but signifying nothing". I can assure you that on this odyssey I have had reason to shout well above my size, and I have had many occasions to be furious. My only satisfaction was that I was furious and shouting about the inequities of life and the social and other injustices meted out to women and children in many parts of the world but particularly in my own continent, Africa.

The Beginning

As you have already been told I celebrated my 80th birthday last month. So the beginning of my story goes back more than 50 years. It goes back to my birth in the fishing village of Osu behind the Castle, Ghana's seat of government. Despite its location it was and still is one of the poorer areas of Accra. My family had its share of poverty, as an illiterate mother widowed very early struggled to bring up two children.

Looking back on this period, and the circumstances which dictated that I stayed longer in my mother's compound (up to age 9 rather than 5 or 6) longer than custom normally demanded, meant that I was exposed to the happenings among the women more than other boys. During this time it was common to hear the wailings at night on the loss of a woman in childbirth, or a child or of both. I can say without fear of contradiction that at that point in time there was no home, either in my paternal neighbourhood or of my mother's, which had not suffered the loss of a mother or child in childbirth. As I grew up I began to notice some of the telltale signs of pregnancy among the malnourished, cheilosis and angular stomatitis especially. Swelling of the feet and legs were so common that they were thought to be almost normal.

Then there were the children, looking so wonderful in the first few months of life, playing and smiling. From six months onward many of them would gradually become rather listless. Some would go on to show obvious loss of weight. Others would develop oedema and other signs of full blown Kwashiorkor. Yes, that is the name my people gave to a condition they believed developed around the time of another pregnancy. The name is meant to signify that number two is on the way. So firm was the belief that Kwashiorkor is "the jealousy shown by the child about to be deposed" that when I went into clinical nutrition it was common to get the response "but doctor, I am not pregnant" when I told a mother the child had Kwashiorkor. Of course I did not

know then that it was a nutritional deficiency condition either, but I knew it and I knew it was a feared cause of death of children.

The Middle

Some luck and the timing of changes which made the British Raj expand the scholarships and training programmes for Africans made it possible for me to get into a good secondary school and continue to train as a doctor in the UK, London to be precise. While writing a major paper for my first degree in physiology I found out about the low consumption of milk and milk products in Africa and its consequent malnutrition in babies, children, and even adults. This must have created such a strong impression on me that when I finished my medical course and went on to study tropical medicine, I chose to concentrate on nutrition as my area of special study. Inevitably, as the first Ghanaian doctor to be interested in this field I quickly assumed the responsibility for nutrition in the Ministry of Health. This time I was working directly with Kwashiorkor and other paediatric nutritional problems and came face to face with the problems of the mothers of my patients. They were mostly poor, very poor but rather fertile. And they had no idea about any scientific ways of controlling their fertility. Fortunately for me I had to leave and continue my internal medicine training. This was followed with a year in Harvard for the MPH. I was lucky enough to meet Dr. Gamble the founder of Pathfinder. The family planning field had got a small apostle. I returned to Ghana and started clandestinely helping my patient's mothers with the diaphragm, and the safe period, and the condom for the occasional interested father. It was clandestine because the then head of state, President Kwame Nkrumah, had a stated policy of "no importation of contraceptives and no family planning"; Ghana needed a larger population according to him.

With my dieticians and nutritionists too, we helped some of the women who were traders with small sums of money and with supplies of oil, sugar, and flour donated from outside, to boost their trade. In a small way this helped some of them to care reasonably well for their children. By keeping them in the hospital and making them prepare nutritious and balanced feed for their children, we helped them appreciate that the cure was food and not medicine. So it was from nutrition that I made my move into family planning and population, having acquired a clear appreciation of the important role of poverty in health and disease.

Family Planning

To me family planning is the most important tool for women's health. It is almost silly to say that if a woman does not get pregnant she would not die a maternal death. Apart from this, though, family planning ensures that births are properly timed, properly spaced and ended by choice. At least in the developing countries today some of the major problems of maternal health could be avoided if family planning advice and services were available and accessible to all women who need them. The evidence about the reduction in maternal mortality with adequate family planning is too substantial to warrant discussion. Family planning frees women to plan their lives and to use their time for development purposes. To me, therefore, the founding of the Population Council (PC) and the International Planned Parenthood Federation (IPPF) in 1992 signaled a very significant period for women's health.

The PC was established to undertake research into population and family planning issues, while the IPPF was to advocate for family planning and make services available everywhere. Under the

auspices of the PC, research led to the discovery and development of the scientific contraceptive methods: the IUD, the pill, and other hormonal methods that are still the scientific basis for most contraceptives in use today. The leaders at the time were pilloried, and some were even jailed. Today the world has accepted that “every couple and individual has the right to decide freely the number and spacing of their children.” This groundbreaking consensus was reached in Bucharest in 1974, emphasized in Mexico in 1984, and has been accepted by all subsequent population meetings and reviews.

In practically all the advanced countries, family planning is taken as a matter of course by the health care and other service systems. Unfortunately, even in these there are minorities and special groups who find services difficult to access. These include adolescents and youth, as well as persons in deprived areas. Since special family planning programmes were initiated in the late 1950's and early 60's, contraceptive prevalence rates have increased rapidly in many developing countries, particularly those of East and South Asia. Africa remains problematic. A few countries in Southern Africa, mentioned later, are doing better, with rates between 30% and 50%. West Africa is still to respond. Rates for the use of modern contraceptives are in double digits for only Ghana.

The infusion of development aid money that went into the family planning fields from the 1970's until recently and the gains made must count as some of the best investments in development made for women's health and general social and economic development. Governments were assisted to develop population and family planning policies and programmes. Scientific and other institutions for training and research (such as your own JHPIEGO) were sponsored. An understandable anxiety to make family planning readily accessible to all, including poor rural communities, led to some corner cutting and questionable ethical approaches which in the end created problems of acceptance and legitimacy for the population and family planning field as a whole. The International Conference on Population and Development fortunately provided the platform for examining the problems and reaching solutions acceptable to practically all stakeholders in women's health.

As Assistant Secretary General for Forward Planning and Technical Affairs for the IPPF from 1972 to 1978, I was intimately involved in many of the efforts to make FP more easily accessible. We helped develop and expand community-based methods of delivery. We did advocate the demedicalization of contraceptive services. I still maintain that these were basically good approaches, although they should not have been considered as adequate by themselves for the health of women. My only excuse is that it was better to start some kind of service for the needy rather than to wait and do nothing until all services were available. Of course, I would be the first or among the first to fight against low quality of services, unethical practices and human rights abuses such as forced sterilizations, enforced targeting, and inducements that were just a shade from coercion. IPPF stood against all these bad practices. We must agree though, that while family planning received high visibility and a great deal of support in these years, many vital health and development needs of women were receiving scant attention. Such was the case with pregnancy-related mortality.

Women's Health Needs and Safe Motherhood

In 1985 the WHO announced the results of a survey on maternal mortality and reported that some 585,000 women world-wide were dying each year from maternal mortality. The figure was upsetting but did not raise the furor that one might have expected. Allan Rosenfield and Deborah Maine also wrote a challenging paper entitled "Where is the M in MCH?" The paper's central thesis was that in making maternal health a part of the programmes termed maternal and child health, women and even mothers were being short changed. The natural emotional attachment to the needs of children and the presence of UNICEF as a leadership organization devoted solely to the needs of children, plus the fact that identifiable technologies for intervention, e.g. immunizations, ORT and complementary feeding products were readily available for health workers partly accounted for this. Women were being considered largely as mothers and mainly in terms of their contribution to the survival and health of infants and young children.

The Safe Motherhood Initiative (SMI)

If maternal mortality was to be drastically reduced in the developing countries special action was needed. The challenge was taken up by the World Bank, WHO UNDP, IPPF and other agencies. Their deliberations led to the meeting on safe motherhood that was held in Nairobi in 1987.

The Nairobi meeting discussed the health needs of women generally and maternal mortality in particular. It came out with a declaration calling for an International Safe Motherhood Initiative aimed at reducing the current level of maternal mortality by half within the following ten years. It also produced a very comprehensive report outlining ways to deal with all the background causes of high maternal death rates and associated ill health in the developing countries. One cause of maternal mortality that did not receive too much visibility at the time was "unsafe abortion". As the conference moderator, I personally developed the declaration, and until today I cannot be sure why so little attention was given to the subject. It is a source of satisfaction though that since the SMI was launched, women's health needs have been receiving proper attention in many parts of the world, and all developing countries are being challenged to provide the maximum possible response within their limited resources.

The political rhetoric and support has been tremendous. Many countries have developed specific policies and programmes. Training activities have been improved and expanded. Here in Ghana our postgraduate programme in OBG, with the technical support of the ACOG and RCOG of the UK, and financial aid from Carnegie has been most successful in adding to our numbers of qualified OBGs. A cadre of OBG technologists is also being considered.

Sad to say, by the end of ten years our review showed that we were nowhere near attaining the target set. Judging by the statistics alone may not do the countries justice. It is possible that the awareness created has led to better statistics.

Happily though, the other major conferences held in the 1990's endorsed or took over the recommendation of the SMI. And I would suggest that throughout the period of this conference and when discussing the way forward you reflect on the recommendations of the International Conference on Population and Development, Cairo 1994, and the Women's Conference, Beijing 1995, and the subsequent reviews of progress, as well as the various conferences on social issues held during the last decade. These conferences recognized the centrality of women as the

principal stakeholders in all reproductive health issues. They went even further and stressed the importance of women to overall development.

All these conferences emphasized that the rights and status of women should really inform all programmes and activities aimed at improving women's health. Let me remind you of these rights, as distilled for the world by the International Planned Parenthood Federation while I was President. These are:

1. Right to life
2. Right to physical integrity
3. Right to equality in all forms
4. Right to privacy
5. Right to freedom of thought
6. Right to information/education
7. Right to choose whether to marry or not to marry
8. Right to postpone childbearing
9. Right to health care
10. Right to enjoy the benefits of scientific progress
11. Right to freedom of assembly, e.g., women's right to meet and influence their futures
12. Right to be free from torture and ill treatment

Reproductive health is an area of health in which nature itself can be accused of being sexist, of being truly biased against the female. WHO and the World Bank reported in 1993 that the burden of disease was far higher in women in their reproductive years than in men, and in the less developed countries the differential is truly great.

Extreme poverty, lack of education and a growing disrespect of the basic human rights to shelter, food and water are factors producing unhealthy living conditions for many women. The historic/cultural and social bondage that restrict and diminish women's role in general development, and the lack of control over their own bodies are remote contributors to the health disparity.

Women have a "right to life", but do they? Every year some 515,000 women worldwide die in pregnancy and childbirth, about 1,400 pregnancy-related deaths per day. One woman dies every minute somewhere in the world because of a complication related to pregnancy or childbirth. Maternal mortality ratios vary widely around the world but they are highest in the developing countries, with Africa and South Asia having the worst ratios. The average for sub-Saharan Africa is about 900 per 100,000 live births. The maternal mortality differential between the less advanced and industrialized countries is the worst of any health statistic. When we consider the differences in the lifetime risk of maternal death, we truly confront the true extent of the disparity. The average Africa risk is between 1 in 12 and 1 in 16. The risk in Europe and much of North America is around 1 in 4,000. In all parts of the world the causes of maternal deaths are the same—haemorrhage, hypertensive disorders, prolonged and obstructed labour leading to rupture of the uterus, infections and complications of unsafe abortion. Women are not dying because of something the medical practitioners do not know, or from causes they cannot prevent, or unavailability of the technology to help them. Deaths occur because of delays in seeking help,

in getting to the place where help can be obtained, in the help available not being trained, in the facility not being equipped, or in the right supplies not being available. Deaths are occurring because the political will to give women's health the deserved priority has been absent in many countries. Cuba and Sri Lanka, relatively poor countries, have demonstrated how much can be achieved with small resources.

Apart from deaths, many women suffer serious ill health as a result of pregnancy and childbirth. It has been estimated that for every woman who dies, 50 to 100 sustain serious medium or long-term illnesses. These include chronic pelvic pain, vaginal discharge, menstrual problems, problems with gait and walking, psychological problems, vesico-vaginal fistulae and recto-vaginal fistulae. This is both a travesty of justice and a tragedy. These women could be treated and saved, and society must make the necessary investments to save their lives. The projects and programmes of groups like yours are making a difference in many parts of the world. The package of antenatal care, delivery with properly trained birth attendants, and post delivery care, including emergency obstetric care has to be made available everywhere. Such efforts must include strong community involvement if they are to be completely successful.

Violence and Physical Integrity

In a world where violence seems endemic, both men and women experience it in many forms and both suffer considerable damage to their health and well being because of it. But the nature of the violence women are exposed to is almost always different, the causes of it are usually different, and the impact on their lives is different. Most violence against women is domestic. Violence against women includes any hardship that physically or mentally affects a woman's body and endangers her life and that of her family and/or which deprives her of basic health services. Lack of resources, particularly denial of education and access to cash income are a form of social violence against girls and women. Violence against women can result in long-term mental, physical and sexual problems. Domestic violence is not a private or family matter and it is not acceptable, whatever the setting.

Women have a right to physical integrity; female genital mutilation infringes on this right. They have the right to choose whether or not to marry and child marriage infringes on this right. Violence against women exists in all societies and all social classes throughout the world and even some pregnant women are at risk of domestic violence. The dangers are greater in pregnancy where both the mother and her child are placed in jeopardy. It is essential, therefore, that the diagnosis and approaches to the elimination of violence against women be included in the specialist training curriculum of every obstetrician and gynaecologist and every care-giver of women, so that those at risk can be identified at the earliest opportunity. Women seldom volunteer such information.

In the last two decades or so, but especially since the ICPD, both of these threats to the health and well-being of women have been receiving serious international attention. Laws are being repealed and new ones passed making violence and cultural practices which infringe on the exercise of physical autonomy and integrity illegal in many countries. Implementation varies, but the effort is in the right direction.

Unsafe Abortion

Abortion is such an emotional and controversial issue that it almost always dominates reproductive health discussions. With abortion, the Holy See and a handful of countries ambushed, waylaid and almost hijacked the ICPD. Unfortunately, the time spent on this meant that other issues, including strategies for implementing and funding the Programme of Action, received rather little attention. While one has sympathy for religious views, one also **must** respect public health realities and professional ethics.

Complications of unsafe abortions continue to kill many women. Africa, with 12% of world population contributes 40% of total abortion mortality. In some countries 10%-50% of maternal deaths are due to unsafe abortion. Most such abortions are in countries with restrictive abortion laws. In the more advanced countries with less restrictive laws, unsafe abortions hardly contribute to the maternal death statistics. Comprehensive, client-oriented family planning, including emergency contraception, will reduce the need for induced abortion by preventing unwanted pregnancies. Women have the right to enjoy the benefit of scientific progress. They must have access to a wide range of contraceptives, including emergency contraception. I get very surprised to find many individuals and groups who are opposed to liberalization of abortion legislation also opposing easy access to family planning and emergency contraception.

Sexually Transmitted Infections and HIV/AIDS

The advent of the HIV/AIDS pandemic since the 1970's has led the world into thinking more seriously about STIs. Suddenly, STIs, which were so very serious for women, had now a variety that caused severe problems and deaths in men, too. I do not intend to deal with the mind-boggling statistics of this here, but once again let me emphasize that the brunt is being borne in Africa, and on the African scene women are more likely to be infected than men. In fact, for various social and cultural reasons, the younger African woman may be several times as likely to be infected as a similar aged male. Currently 60% of all infected with HIV in Africa are female. Among some communities, the infection rate among 15-19 year-olds may be 6 females to 1 male.

The AIDS pandemic has been a wake-up call for many countries and their leaders. For many the initial denial has given place to strong advocacy. Programmes have obtained impressive donor assistance for many so far. Unfortunately, many of the programmes and projects are too narrowly focused and separate even from reproductive health activities. It must be accepted even then that the use of condoms has increased markedly in some parts of Africa. Unfortunately, the pandemic is generally getting worse and there are few signs that, in Africa at least, serious economic and cultural damage to many regions can be forestalled.

Adolescents and Youth

Since 1970 adolescents and youth have been receiving special attention in reproductive health programmes. By convention, adolescents are aged 10-19 and youth 15-24. Studies have pointed to the special problems around adolescent and youth sexuality and childbearing. Globally, 15 million children are born to adolescent mothers each year. Maternal mortality is high in adolescents and perinatal mortality is higher among children of adolescent mothers. There is about 30% risk of children born to adolescent mothers dying in infancy. Pregnancies among women aged 15-19 are common in this country. Overall, 22.9% of such pregnancies end in an

early loss—either spontaneous or induced abortion, i.e., nearly 1 in 4 pregnancies to women aged 15-19 are lost early, and early pregnancy losses are especially high among urban women aged 15-19, with about 2 in 5 pregnancies to women in this age group ending in early loss.

Among many leaders, and even service providers, judgmental and moralistic approaches keep many youngsters from accessing the advice and service they need. Recognition of special needs has led to many youth-to-youth programmes and youth-friendly approaches which are very promising. To me this is one of the important developments in the last two decades or so. Not only is this grouping the future of all societies, but in demographic terms we are dealing with the largest and fastest growing group in history. We should be ready to make everyone know that while we do not countenance immorality, we are not moralists.

The Lifetime Approach. The Menopause and Reproductive Tract Cancers

From all the above, one should say that a proper handling of the health needs of women should be based on the lifetime approach. Biological and social influences of the mother affect her children. For the female child in particular such influences may be of great importance to her healthy development and her reproductive health. A malnourished woman may give birth to a malnourished infant female. The infant herself will suffer from poor nutrition, she may be discriminated against in many ways. She does not attain her full stature before she is given out in marriage. She starts having her children early and may be lucky to escape with her life during her first and subsequent pregnancies. At the other end of life, after the children have been born, health care givers need to consider some other important conditions, especially the cancers and the menopause.

Cervical, breast and other reproductive system cancers are major causes of death among adult women, especially in developing countries. Screening for these is not widespread in the developing countries. With some low cost technologies being promoted now, there is no reason why cervical cancer screening should not be made available in the poor countries. I believe the evidence-based advice being given by the WHO and IPPF should be field-tested.

Until very recently the menopause and its problems were not given the serious attention necessary. The problems of this period in the lives of women deserve our utmost attention and compassionate care. The development and application of HRT has been of immense help, despite the recent questioning of the links with cancer. Compassionate peri-menopause counseling could go a long way to helping women cope better.

General Development Issues

The definition of health as given in the WHO Charter leads to an appreciation of the importance of many economic development and socio-cultural factors in the attainment of health in its truest sense. For full women's health we now know that vulnerabilities and risk factors beyond the realm of pure health must be addressed. The educational, physical, financial and social vulnerabilities of women are fundamentally harmful to the future of society. Not redressing them fails to prevent harm to subsequent generations. Among the main challenges facing women's health practitioners today are how they work together with other society organs and support:

- The expansion of education of quality to all girl children
- Advocacy for equity and equality for women in all social and cultural spheres
- Affirmation of women's right to be free from physical and psychological violence
- Advocacy for the application of new scientific advances which open the way to improve women's health
- Making sure the knowledge and care that is available currently to few reaches those who need it most, but do not get it—such as the rural poor
- Redefining the role of obstetrics and gynaecology to doing more than delivering babies and fixing problems in the pelvis. This is not all that women want, important though it is. Women need a comprehensive type of health service, which will look at them beyond carrying and delivering babies, beyond endocrine changes and cancers

The obstetricians, gynaecologists and other health care givers of women are advocates for women's health in the 21st century and must set standards to improve women's health. Women need to be empowered. The health care givers, especially the OBGNs, could act as their social advocates. You can do this by:

- Being team leaders working with women to make sure women have reproductive and sexual health, i.e., whether they are achieving or avoiding pregnancy or protecting themselves against sexually transmitted diseases including HIV/AIDS
- Specializing in preventing and treating gynaecological problems
- Promoting women's health and preventing disease at every opportunity
- Getting involved in training of doctors, postgraduate doctors and other health personnel
- By researching into women's problems
- Above all, you must ensure that women's general health receives attention in a social and cultural context that empowers them to make their own decisions and respects all their rights

I truly believe that we, as doctors and health workers, have for too long been isolationists in our thinking and actions. As ICPD pointed out, women are not simply mono-purpose baby factories or worse, baby incubators. They are full human beings with lives of their own with individual hopes and aspirations. Their total development needs should also be our concern, knowing that it is only by a holistic approach that we can help them attain health in the truest sense of the WHO Charter. Whilst the application of our technological and other expertise could help us solve some of the technical problems impinging on health in general and reproductive health in particular, we should appreciate that it is only within the context of equitable overall social, economic and cultural development that the gains we make today could be maintained tomorrow.

Thank you for your attention.

TAKING SOUND INNOVATIONS TO SCALE: THE ROLE OF CHAMPIONS

Harshad Sanghvi, Medical Director, MNH Program, JHPIEGO

Objectives

- Why we need to continually search for new approaches and innovations
- Describe how sound innovations go to scale
- Describe some innovations and how they have fared in scale up

Taking innovations to scale means taking new ideas and making them work not only in our own practice, but country wide, nationwide, and world wide. Spreading new innovations is one of the most important challenges that we as champions have to take on in the next few years.

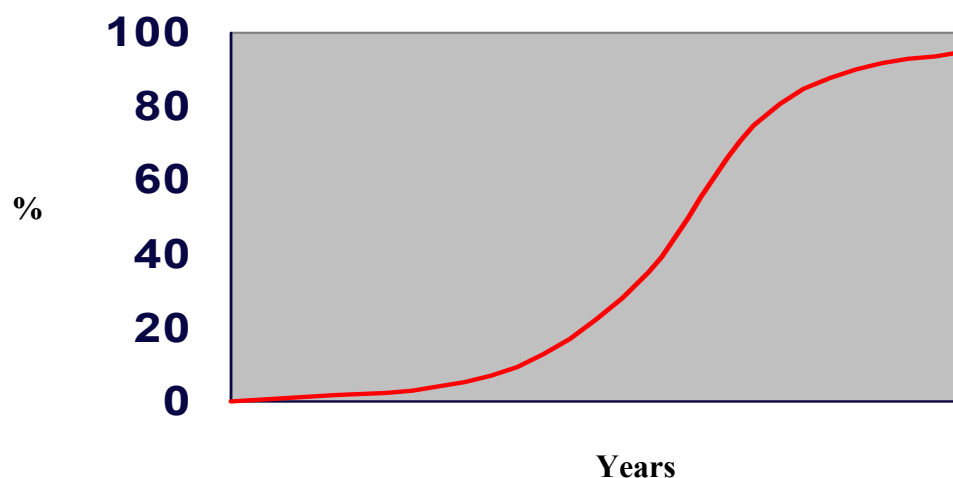
As champions for change, we have many challenges but we are also innovative. We have many problems, but we also have good solutions. For example, in Africa, there are several known challenges: standards and guidelines are available, but not used; there is inadequate training, lack of job aids, and limited supervision; services are overcrowded; and communities that never or very rarely demand better quality.

Many years ago, there was also a proven innovation that failed to be adopted quickly. In 1601, Captain James Lancaster conducted an experiment with sailors and lemon juice. The men on the ships in the intervention group all survived long ocean journeys, whereas 40% of those in the ships without the lemon juice died of scurvy. It was not until 1865, more than 250 years later, that the British Board of Trade made a policy requiring that lemon juice be given to sailors on long journeys. Two reasons for the lag were that communication of these results was limited, and many of Captain James's compatriots did not believe the results. Ultimately, there was no champion for the intervention until 1747 when James Lind repeated the experiment. Even so, it took another 48 years for the British Navy to react to the findings and another 70 years for the intervention to become standard policy.

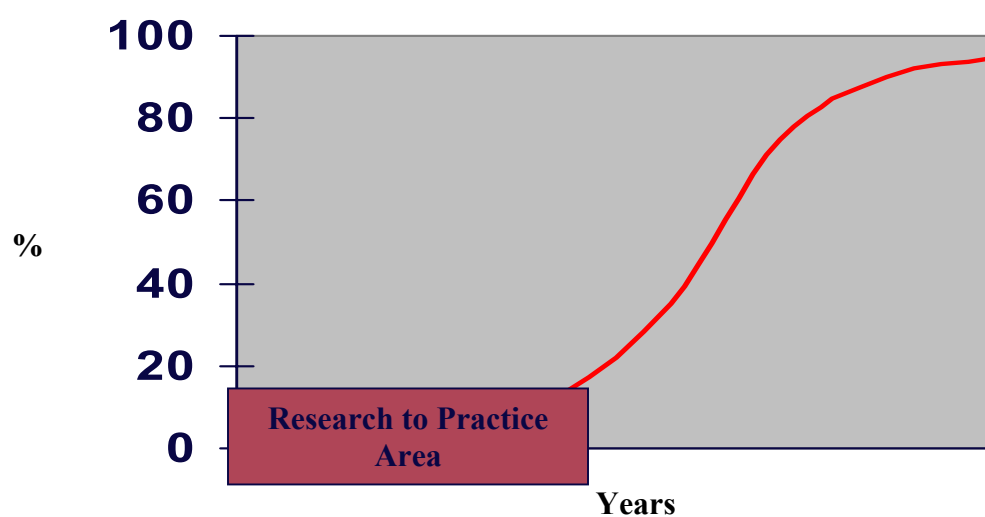
Why do sound innovations take so long to spread? There are several reasons. First, there are often no effective systems for communication and dissemination of findings. Second, there is resistance to change. Third there is often a lack of a champion – someone willing to take risks and answer the questions—and, lastly, there isn't a systematic method of taking good knowledge and making it work for an entire nation. Another detriment to the scaling up of innovation is hoarding of knowledge—an unwillingness to share.

New innovations that ultimately reach widespread use generally follow a typical pattern over time. This pattern is characterized by a start-up phase that may take several years before the innovation begins to be accepted or used. During this early phase only a small percentage of potential users may be reached. With time, however, as more people become familiar with the innovation, the percentage of users starts to rise very rapidly. The point between the slow and rapid phases, which usually occurs when usage or acceptance is at the 15% to 20% level, is called the tipping point (Gladwell, 2000). From then on, the rate of increase is usually quite rapid, finally slowing when adoption is at 80% to 95%.

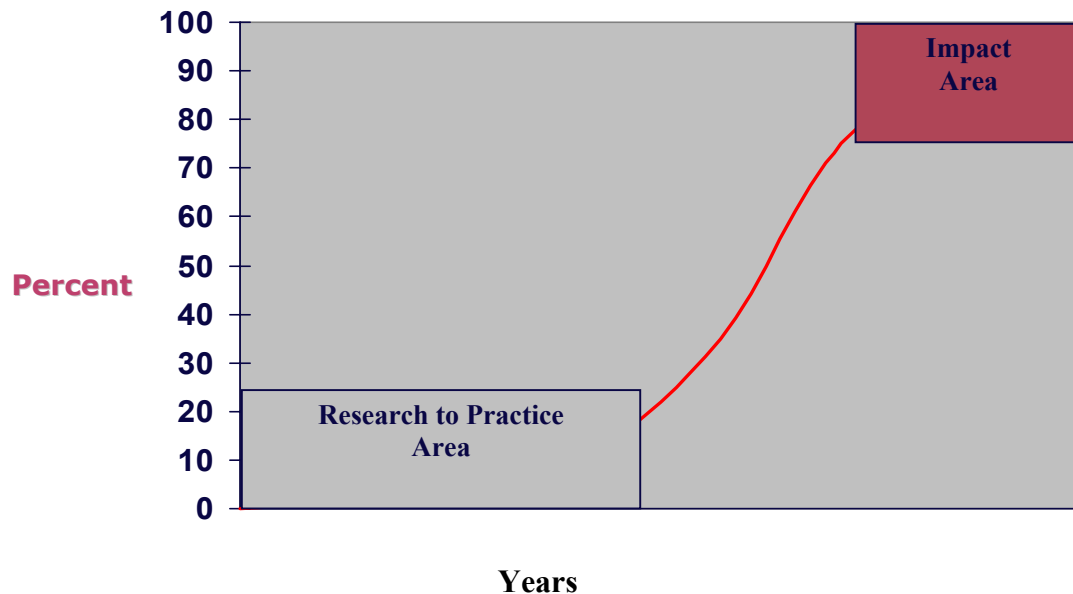
Another way of looking at this problem is that taking innovations to scale is very much like the labor curve:



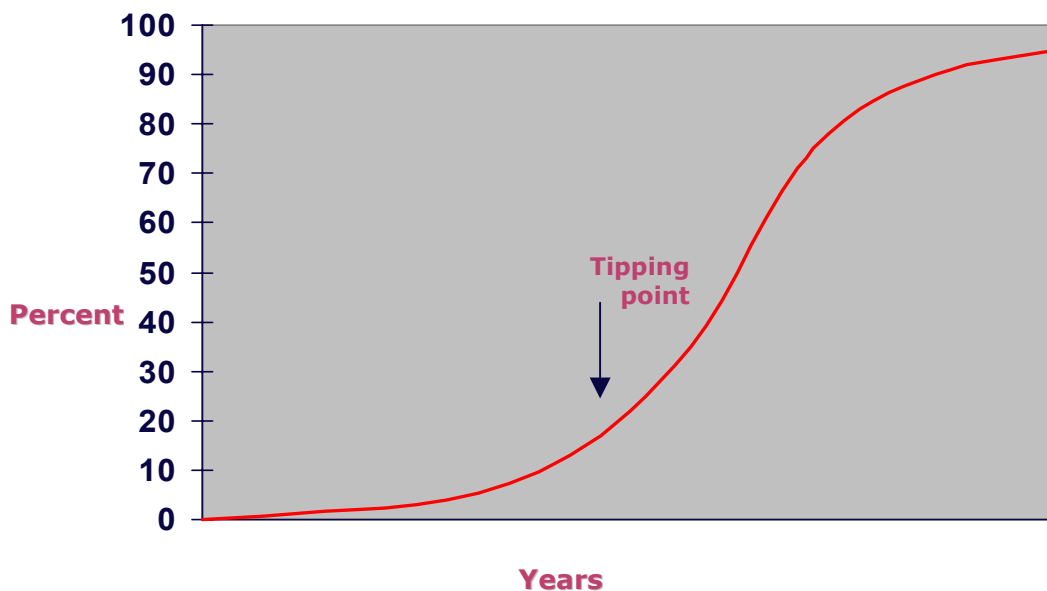
The bottom of the curve is the research to practice area – slow start, resistance, skepticism, and criticism – a risky time for people attempting to take innovations to another level.



Suddenly something happens and there seems to be a spontaneous uptake of that innovation (active phase). The challenge is to get innovations to 80% - the impact point.



What makes an intervention that was in a latent phase suddenly become active? That is, what causes the scales to tip in favor of the innovation? Maybe there are champions talking about it, maybe it has been demonstrated to not be risky. How do we move innovations to and beyond the tipping point? Each one of us needs to work to get beyond this tipping point so we can get impact.



One very common problem in many countries is that upon graduation, many graduates of medical, nursing and midwifery schools do not have the appropriate skills required in their jobs. How do we address this problem? Let's look at one example—training for ML/LA for surgical contraception in Kenya.

Since 1983, AVSC and JHPIEGO trained people in minilaparotomy under local anesthesia (ML/LA) during in-service training. This training was not enough to meet the need for surgical

contraception in the country, however. In 1987 Kenya asked donors to support teaching of ML/LA in pre-service training during the internship year of medical training, so all interns were trained in this procedure before being posted out after graduation. The move from in-service training to pre-service training increased the number of providers trained in the procedure and moved Kenya beyond the tipping point. In 1994 donor support ended but the training continued.

In order for this change to occur, the registrar of doctors had to be convinced to include ML/LA as a compulsory skill that interns had to be proficient in before being registered as doctors. When this occurred everyone had to learn this skill before graduating. Since ML/LA was added to pre-service training, other skills have been introduced into pre-service training for medical students and interns (see box).

| Reproductive Health Skills Required of Medical Students and Interns, since 1987 | |
|--|---|
| <i>Medical Students</i> | <i>Interns</i> |
| | |
| IUD insertion and removal | Minilap tubal ligation under local anesthesia |
| Norplant insertion and removal | Emergency resuscitation, suturing, homeostasis |
| Counseling for FP | Emergency obstetric care including vacuum extraction, caesarian section, manual removal of placenta, management of eclampsia and sepsis |
| Managing Contraceptive referrals | Emergency gynecological care including MVA, dilatation and evacuation, laparotomy for ectopic gestation and pelvic abscess |
| MVA, PAC | |
| Emergency resuscitation | |
| Antenatal care, labor monitoring using partograph, normal delivery, basic newborn care | |
| Infection prevention, appropriate antibiotic therapy | |
| Basic laboratory techniques | |

An evaluation of the program in Kenya found that two years after completing their internship, 40% of graduates provided ML/LA to 10 or more clients in the last 6 months. Another 26% performed less than 10 cases. Only 71% had maintained competency, showing the need for continued supervision. Best of all, 51% were providing on the job training in ML/LA to others (Lacoste, et al., 1994).

What can we learn from this? One lesson is that if you want to take certain aspects of training to scale, we need to move away from in-service to pre-service trainings. Developing countries need

a different kind of doctor than developed countries--they need to be immediately capable to deal with problems.

Another lesson can be found in the story of cervical cancer prevention in Ghana. The problem was that Pap smear screening was largely unavailable and treatment of precancer was only available at large hospitals. One program trained 8 rural midwives in visual inspection of the cervix with acetic acid wash (VIA) and cryotherapy—the single visit approach. As a result, in 36 months, 14,539 women were screened, 1,265 (8.7%) were identified as having a precancerous condition and of these, 1,144 (90%) received cryotherapy immediately or on a return visit (JHPIEGO, 2004).

Strategies for taking innovations to scale

As a champion for change, you must be able to take innovations in maternal and newborn health and share them with your colleagues and ultimately throughout your country. You need to be an advocate for the intervention and design an effective communication/dissemination strategy. To do this you need to target appropriate messages to different audiences (see box).

| Appropriate Messages for Different Audiences | |
|---|--|
| <i>Audience</i> | <i>Message</i> |
| Group of in-country donor and bilateral agencies | Local burden of disease, cost effectiveness |
| Service and philanthropic organizations (e.g., Zakat) | Story of Mrs. X, link with champions |
| Ministry of Health decision makers, HMOs and insurance companies | Numbers needed to treat, implementation details, strategy |
| Professional associations, especially midwives, nurses and general physicians | Address perceptions, effect on their practice, professional responsibility |
| Global donors, e.g., EU | Impact data |
| Women's groups, health advocates | Social mobilization strategies |

You should expect some resistance to the change you are proposing. Remember, getting people to change established practice is part science, part art, part reasoning and part coercion. People will raise questions—you should anticipate them and have a strategy to answer them (see box).

| Frequently Raised Issues Around VIA and Cryotherapy | |
|---|---|
| Issue | Response |
| But we must confirm the disease with a biopsy before treating | Pathology is costly, unavailable mostly and may not necessarily be accurate |
| But there will be too much over treatment | Yes indeed, but the treatment is largely safe, side effects minimal and the benefits overall are immense |
| It would be terrible if we did cryotherapy on a case of cervical cancer | A persistent lesion and bleeding that persists will alert us to this. Most of these women would not have been identified if we waited for routine Pap screening |
| Our regulations will not allow nurses to take this responsibility | Evidence shows that trained nurses are very competent. Moreover they are available where care is needed. |
| It is unethical not to confirm the diagnosis before treatment | It is unethical not to seek solutions for most of our women |
| Is this test approved by FDA, WHO? | |
| Women do not want to be examined | All evidence points to the contrary |

Remember, our responsibility is to all women and all of their babies – not just the ones who come to the hospital. We need to think outside the box to bring healthcare to these women and their families.

Why is the gap between research and practice so large? There are many reasons. For example, most specialists cannot believe how simple visual inspection or cryotherapy is until they try it.

“Knowing is not enough; we must apply. Willing is not enough; we must do.” –Johann van Goethe, poet and scientist (1749-1832).

Champions need to implement a systematic method of taking good innovations and sound practices to novices and learners. One way to do that is to develop more champions. These people tend to be innovators or risk takers. The trick is to identify these potential champions.

The characteristics of adopters of a new innovation have been studied quite extensively. Five types of adopters have been identified:

Innovators—a small group who will experiment, invent and adopt a new approach if they believe it has merit. In the health sector they are considered mavericks.

Early adopters—show interest in an innovation already tested by an innovator and will be quick to adopt it. Generally they are opinion leaders, socially well connected and respected. This is the group the remaining three groups will watch and follow.

Early majority adopters—look to early adopters for reassurance that an innovation is safe to use.

Late majority adopters—adopt an innovation only when it becomes standard of practice. They generally do not trust outside sources of knowledge so they require local proof of a new practice.

Laggards—this group accepts change slowly. They are wise and useful to the community.

Champions are most often early adopters. They need opportunities for followup and feedback, however. How can you identify new champions? Look for mid-career midwives and physicians with the following characteristics:

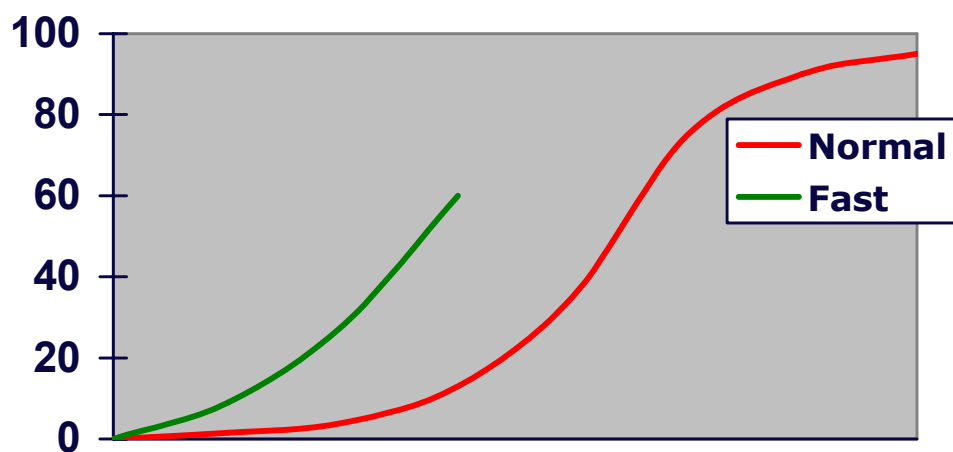
- Understand the evidence base
- Have introduced and practice the innovation in their institutions
- Can demonstrate and teach the skill
- Have advocacy and leadership skills

For example, look at the MNH regional experts:

- 43 regional experts from 18 countries
- Providing technical assistance and leadership in 48 countries
- Developing a second generation of regional experts (42) from 12 countries
- Developing a large number of incountry trainers and service providers
- Scaling up adoption of evidence-based practices

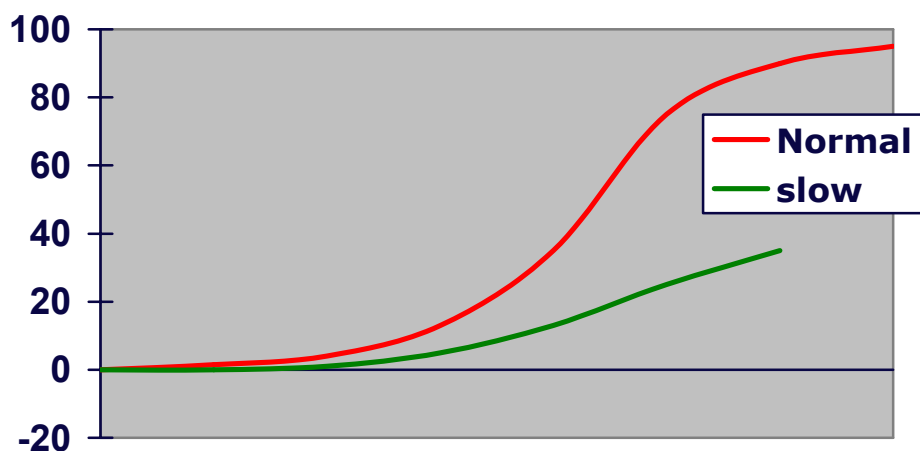
Now let's look at two more innovations: (1) preventing perinatal transmission of HIV with nevirapine (NVP), an innovation that has taken off quickly and (2) the active management of the third stage of labor to prevent postpartum hemorrhage, an innovation that has moved very slowly. Why is this? Do we care about babies more than mothers? Is it because lots of money is being put into HIV/AIDS and not into safe motherhood? More mothers are dying from maternal causes than HIV/AIDS in many countries. This is a fundamental issue and problem – as champions we need to champion for the right things.

First let's look at NVP and the prevention of perinatal transmission of HIV. In 1999 a randomized clinical trial showed that a single dose of NVP to mother and baby reduced perinatal transmission of HIV by 35%. By 2002 over 50 NVP programs were established in 17 countries. By 2003 NVP was considered standard treatment for the prevention of mother to child transmission of HIV.



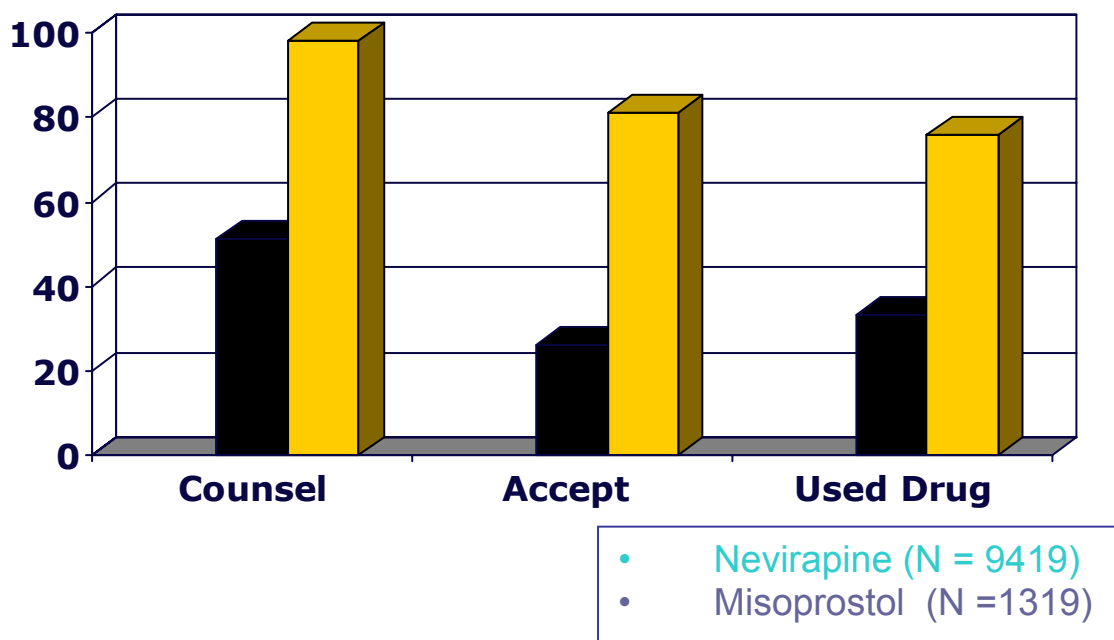
Nevirapine Results Quickly Put Into Practice

Now we will examine the adoption of active management of the third stage of labor to prevent postpartum hemorrhage (PPH). In 1988 Bristol and Hitcinbrooke demonstrated that active management of the third stage of labor prevented 60% of PPH. By 2003 only 25% of births at 14 institutions had active management of the third stage of labor, 33% of institutions did not practice it at all. In that same year, FIGO-ICM issued a joint statement supporting active management of the third stage of labor. Yet in 2004 less than 15 countries have programs to promote the practice.



Slow pace of adoption of active management of the third stage of labor

A comparison of the acceptability of NVP versus misoprostol finds that although it is difficult to determine eligibility for NVP and the stigma attached to HIV/AIDS, NVP is better accepted.



This is a comparison of the acceptance of 2 different interventions, one to prevent MTCT of HIV using NVP and the other to prevent PPH using misoprostol. The chart shows that a bigger proportion of women were reached and counseled for use of misoprostol than NVP. The main reason for this difference is that the misoprostol intervention took care (counseling drug distribution) to the women in the home, where the NVP program only those women who attended a static facility

So, if you really want to scale up a good intervention, you are not going to be able to do it sitting in your hospital. You have to take the services to rural areas and to people who are unable to come to the institutions.

In conclusion, what is required to take good innovations to scale? First you must identify the best practice/innovation. It should be based on evidence and other people's experiences.

Next, develop an effective communication and dissemination plan to all the necessary stakeholders who will invest in scaling up the intervention.

You must also have a strategy for addressing resistance to change. Help your colleagues understand why it is important to adopt the innovation and be prepared for their questions.

As you move forward, continue to develop other champions.

Lastly, you need to implement this in a systematic and strategic manner. Stop relying on external funds and start to increasingly rely on internal funds. Ultimately, developing countries have to solve their own problems. They need donors' help to get started, but government has to take over in order to save lives.

Remember to move strategically from providing in-service training to strengthening pre-service training and skill requirements, and, lastly, integrate all of this into your planning, management and supervision.

“Masters of our destiny, not victims of fate.”

CHAMPIONS IGNITE SHARED RESPONSIBILITY FOR SUSTAINABLE CHANGE

Nancy Russell

Director, Social Mobilization, MNH Program/CEDPA

Objectives

By the end of this session, participants will:

- Understand their role in behavior change interventions – including media, messages and mobilizing
- Learn the importance of personal/shared responsibility, shared understanding and collective action for lasting change
- Understand how to use the birth preparedness/complication readiness (BP/CR) matrix as a planning tool to ignite collective action and
- Experience the reality of sharing responsibility and planning collectively.

“Further progress in improving maternal health will require outspoken and determined champions from within the health system and the medical community...and from and among decision-makers and politicians.” – Carla AbouZahr, WHO

To be a champion for change, you need to take some risks. It only takes one champion to make a difference. The first recorded example of an issue that was changed through community organization was slavery. In 1787 two-thirds of the people of the world were slaves. It is important for medical professionals to realize that they need to be community organizers, in addition to their other responsibilities, and that they may need to learn this skill.

For medical professionals, the first step is to collect evidence and share it. The next step is to engage and enlist supporters. The last step is to create a critical mass that will demand change.

There is a need to move beyond a medical model to improve maternal and newborn health. Behavior change demands a more ecological model. The underlying concepts of this model are as follows:

- Change requires more than knowledge
- The readiness to change must be developed
- To change individual behavior it is necessary to change the environment
- Changed behavior and changed environment results in new social norms
- Power of social networks to encourage and sustain change is critical

Behavior change actions include:

- A communication plan with appropriate materials and messages
- Community and social mobilization to build networks of support
- An advocacy strategy that includes good evidence and
- Alliance building—formal or informal
-

Health professionals have a very important role in behavior change initiatives (BCI). This role includes:

- Advocating for change within health facilities
- Advocating for equitable human resources
- Advocating for and demanding political action
- Working collectively to educate and engage the community, policy makers and health services and
- Initiating partnerships between stakeholders

In the safe motherhood arena, the paradigm has been shifted away from the individual woman to a broader group of stakeholders: policymakers, communities, facilities and providers, and families. Everyone needs to be part of BP/CR.

| A Paradigm Shift in Safe Motherhood Evidence-based Shifts | |
|--|---|
| <i>Away from:</i> | <i>To:</i> |
| <ul style="list-style-type: none"> • Placement of responsibility on women alone • Individual risk • Prediction of complications • TBAs as primary care provider • Just danger signs | <ul style="list-style-type: none"> • Generalized Risk • Skilled care at each birth • Focus on birth and postpartum with attention to the newborn • BP/CR, informed demand and collective action |

BP/CR is a framework for collective action. The concept promotes commitment by all stakeholders by acknowledging that while each woman should prepare for a normal birth, every woman is at risk of suffering a life-threatening obstetric complication. It motivates each player to act rapidly in case of an emergency and the need for life-saving care during pregnancy, labor, childbirth and the immediate postpartum and newborn periods by focusing on the specific actions each player needs to accomplish. Thus it stimulates personal responsibility while at the same time it facilitates shared responsibility and collective action because each player has a unique role to play in safe motherhood. As a planning tool, it promotes focused actions and is a tool for choosing priority interventions (see box).

| BP/CR Matrix as a Planning Tool for Choosing Priority Interventions | |
|--|---|
| <i>Stakeholder</i> | <i>Action</i> |
| Policymaker | Creates an environment that supports the survival pregnant women and newborns |
| Facility | Is equipped, staffed and managed to provide skilled care for the pregnant woman and newborn |
| Provider | Provides skilled care for normal and complicated pregnancies, birth and the postpartum and newborn period |
| Community | Advocates and facilitates preparedness and readiness actions |
| Family | Supports pregnant woman's plans during pregnancy, childbirth and the postpartum and newborn period |
| Woman | Prepares for birth, values and seeks skilled care during pregnancy, childbirth and the postpartum and newborn period. |

The healthcare facility also needs to see its role as receiving information (listening to) from the community, not just informing the community.

Champions for change have their own actions to take, depending on where they fall on the matrix (see box).

| Champions for Change Take Action | |
|---|--|
| <i>Champion</i> | <i>Action</i> |
| Policymaker | Listen and respond to needs of other stakeholders Formulate new policies or activate dormant policies Join and lead White Ribbon Alliance (WRA) activities |
| Facility | Can respond to advocacy from community |
| Provider | Respect and listen to the cultural beliefs in the community Negotiate with family and individuals Can become partners in WRA or other community groups |
| Community | Form support groups Initiate preparedness schemes Supports efforts of provider champions Become advocates for better health services as well as community involvement |
| Family | Support woman and listen to her and encourage others to do the same Become advocates for better health services as well as community services |
| Woman | Lead discussion group with other women Share knowledge with others Become an advocate for better health services as well as community services |

Champions for change can:

- Increase knowledge through dialogue and critical debate – these help people understand and own the issue
- Stimulate changes in practice
- Develop reciprocal relationships
- Forge partnerships that stimulate political will and lasting change as demonstrated in the UK and other countries
- Be a catalyst for lasting change
- Be a role model for others to take action
- Reinforce IEC materials, messages and communication strategies
- Initiate forums for exchanges of ideas
- Continue to explore new solutions

Where does a champion for change begin? To ignite change a champion must:

- Take the lead and be willing to take risks
- Have evidence and be confident in our demands

- Share information and communicate to facilitate dialogue and build understanding with influentials inside and outside of their facilities or office
- Be systematic, leverage assets and build the enabling environment needed for innovation and change

Sustained change requires an enabling environment with support at all levels, from the community to the national level. The environment must value cultural beliefs, lead to increased debate about and ownership of an issue and increase influence and control by all stakeholders. The more information people have, the more they feel confident asking for what they deserve. Once change begins, it will continue and new ideas and issues will keep coming up. Champions need to be flexible and recognize when additional initiatives are needed and keep moving things forward. A champion must also build on the positives and not the negatives.

One example of a champion for change is a midwife in Burkina Faso. She had trouble getting women to come back for postpartum care. So she started taking photos of the babies at birth and invited the mother to come back at 7 days to pick up her photo and get care. Why is she a champion? She:

- Took leadership and initiative beyond her scope of work and
- Initiated an innovation that had a double result—women came back for care and soon the community became involved in the issue.

Activities such as these can lead to broad change by building broad community support and increasing advocacy.

Partnerships and alliances can also ignite change. The White Ribbon Alliance was founded to bring attention to the problem of maternal mortality. The international organization disseminates technical information to multiple levels, promotes dialogue and debate from grassroots to the policy level and is an international forum for discussing best practices. The WRA also produced *Igniting change!*—a toolkit for countries interested in developing country-level alliances as well as field guides.

WRAs can be powerful forces for change. The WRA in India successfully advocated for the government to declare a national safe motherhood day. In addition the government adopted a best practices guide with a focus on BP/CR—a non-clinical description of what is necessary to save maternal and newborn lives.

In conclusion, one champion in Afghanistan said it best:

“It is really good to be able to start something new in my country. If we are really committed we can move others with a few sentences—from people on the street to the highest level of government. The WRA gives me energy to move forward.”

MANAGING NEWBORN PROBLEMS

Robert Johnson, Senior MCH Advisor, MNH Program, JHPIEGO

Marisabel Gouverneur, Midwifery Advisor, MNH Program, JHPIEGO

Objectives

By the end of the session, participants will be able to:

- Describe the MNP manual, the rationale for its development and a summary of its contents
- State how the MNP manual differs from other manuals and textbooks of neonatology and
- Summarize the challenges of producing a sign-based manual on newborn care.

The integrated management of pregnancy and childbirth (IMPAC) was designed to respond to the need for integrated, practical and operational guidance for care. IMPAC focuses at three levels of health care—home, primary and secondary care levels. It is for both the mother and infant and for normal care as well as complications and endemic conditions such as malaria, HIV/AIDS, sexually transmitted infections (STIs), severe anemia, etc. The materials created under the initiative include communication, recording and reporting tools.

At the home and primary care levels, IMPAC focuses on:

- Essential care for all women and newborns
- Timely detection, initial treatment and safe referral as well as care and support
- Birth planning and complication readiness
- Information and counseling for home care

At the secondary care level, it focuses on:

- Management of maternal complications
- Managing newborn problems

The tools produced include a series of WHO genetic guidelines for pregnancy, childbirth, postpartum, postabortion and newborn care. There are technical reviews, guidelines (manuals), and ongoing research information. The three manuals that are most important for this discussion are:

- *Pregnancy, Childbirth, Postpartum and Newborn Care* (PCPNC)
- *Managing Complications in Pregnancy and Childbirth* (MCPC) and
- *Managing Newborn Problems* (MNP)

The latter two were developed jointly by WHO and JHPIEGO. This discussion focuses on the *Managing Newborn Problems* (MNP) manual.

Background and General Description

The MNP manual was developed in response to the need for very clear, precise, practical guidance in dealing with newborn problems, especially in lower resource settings. This need was not being met by any existing manuals or textbooks of pediatrics or neonatology. The manual was developed based on lessons learned from the development of the MCPC by an international editorial group. The audience is physicians (generalists), nurses and midwives who work in a

referral hospital with basic laboratory facilities, essential drugs and supplies and blood transfusion facilities

The MNP manual was published in 2004 and has been endorsed by UNFPA, UNICEF, World Bank, FIGO, International Confederation of Midwives (ICM) and the International Paediatric Association (IPA). It was funded with contributions from USAID, Australia, Japan and the World Bank.

The information in the manual is evidence-based and updated. The most important complications are listed first – asphyxia, sepsis, low birth weight and prematurity. The manual assumes that the reader has 24 hour service, a lab that can do hematocrit and hemoglobin and other tests. It also contains a list of essential drugs and assumes that you have these in your setting, with essential equipment and supplies, and that you can give safe blood transfusions

Contents

The manual has three sections and an appendix:

Section 1: Newborns with problems and/or baby born to a mother with complications or diseases (symptomatic or asymptomatic)

Section 2: Principles of good newborn care

Section 3 and Appendix: Procedures, equipment, supplies, drugs, records

The first page of any section gives you management information and prioritizes the information. For example, Section 1 has bold text, italic text and plain text – plain text gives supportive information. Information is prioritized to give effective care – most effective medication and most economical medication given in section on medications. The information is NOT presented by disease category – though there is a table of diagnoses, which gives reference pages. The manual is designed to help a health care worker do rapid assessments.

Contents of Section 1: Assessment, Findings, Management

- Assessment
- Small baby
- Multiple findings
- Breathing difficulty
- Mother with history of infection or fever
- Convulsions, spasms
- Abnormal body temperature
- Jaundice
- Lethargy
- Low blood glucose
- Feeding difficulty
- Vomiting, abdominal distension
- Diarrhoea
- Bleeding and/or pallor
- Swelling of scalp
- Skin, mucous membrane problems
- Umbilicus red, swollen, draining pus or foul smelling
- Eyes red, swollen or draining pus
- Birth injury, birth defects
- Asymptomatic baby of mother with problems (HIV, hepatitis B, tuberculosis, diabetes, syphilis)

Contents of Section 2: Principles of Newborn Baby Care

- Maintaining normal body temperature
- Feeding and fluid management
- Oxygen therapy
- Antibiotics
- Infection prevention
- Clinical use of blood
- Immunization
- Assessing growth
- Communication and emotional support
- Transfer and referral
- Discharge and follow-up

Contents of Section 3: Procedures

- Resuscitating a baby who was breathing
- Measuring body temperature
- Taking blood samples
- Measuring blood glucose
- Giving injections
- Establishing an intravenous line
- Transfusing blood
- Inserting a gastric tube
- Performing a lumbar puncture
- Administering rectal paraldehyde
- Draining an abscess

Contents of Section 4: Appendix

- Record keeping
- Essential equipment, supplies, drugs
- Index

Challenges to creating a newborn manual for low-resource settings

The creators of the manual faced several challenges in creating the MNP manual. The fact that one sign may indicate many diagnoses, while one diagnosis may be indicated by many signs made it a challenge to create a manual that is based on signs, rather than on diagnoses. Another challenge was how to prevent antibiotic overuse without compromising quality of care, especially with only limited lab facilities. Also, the creators wanted to avoid relying on the instruction to “use your judgment” because they assumed that at the district hospital level the practitioners will most often be relatively inexperienced people, often just out of school, without enough clinical experience to develop judgment.

The editorial committee had many debates on the following topics:

- How much laboratory support is “essential”?
- Should bacteriology be available?
- Is X-ray support needed? Is it realistic? If X-rays are taken, can they be read correctly?
- What are appropriate treatment durations? The editors looked for some kind of consensus on how long to treat the various conditions and discovered that there is no consensus, and no good evidence for treatment durations. Each condition had to be debated on its own merits to decide treatment duration.
- What therapies, among the various therapeutic options, should be recommended?
- Should exchange transfusion be included? The Indonesian version of this book will be produced simultaneously; it will include exchange transfusion but the topic will not be included in the global version since in most countries there will not be a trained pediatrician in charge. The implementation of this manual in each country should involve some adaptation to local conditions.

Innovative Solutions to These Challenges

The editorial committee resolved many of these challenges in innovative ways.

First, they started with a **signs-based approach**. This approach is different than the approach in most medical texts, which are organized by diagnosis or by disease. In this traditional approach, the practitioner, when confronted by an ill infant, has to review (by reading or by memory) all the chapters that mention the signs that the sick baby demonstrates and decide which diagnosis best applies.

The MNP manual is organized according to the signs that the baby demonstrates. It then guides the practitioner from those signs to the most likely cause of them, and from there to the appropriate treatment. Arriving at a precise diagnosis is not always required and is thus sometimes omitted as long as the appropriate treatment is chosen.

The signs-based approach **emphasizes clinical assessment**. While, ideally, all district hospitals should have functioning medical laboratories and radiology services, in reality, many have neither. Should the manual insist that these services be in place as a minimum standard, should it accept the status quo, or should it aim for a point somewhere between the two extremes? The editorial committee chose the middle road. It put primary emphasis on making decisions based on clinical assessment, but insisting that certain, basic laboratory procedures also be available. The committee decided that x-ray services were too expensive to install and maintain and reading them required some expertise, so they were not included.

The committee also decided to **limit the number of treatment options**. Members were divided on which treatment to recommend when evidence supported more than one treatment for a specific illness. In these instances, the committee came to consensus on a single treatment for each condition. The decision as to which treatment to include, when evidence supported more than one, was based on cost, simplicity of application, ease of training providers to use it and logistical considerations.

The **treatments options recommended were all specific, detailed and directive**. Nearly all neonatology and pediatric textbooks offer multiple treatment options, recommend drug treatment in ranges (mg per kg, x to x hours, x to x days), rely heavily on the clinical judgment of the practitioner, and omit mention of specific instructions (such as, inject the drug *slowly*). The MNP editorial committee recognized that many practitioners are working in rural areas with little backup and/or are newly qualified and have not had enough experience to develop clinical judgment. Therefore, the manual gives one preferred treatment, one specific dose for one specific duration along with any specific administration instructions that may apply.

The committee **also recognized that antibiotic overuse is a major problem** in developing countries and resistance to antibiotics is one of the biggest challenges that practitioners face. Ultimately this leads to the need for more and more sophisticated antibiotics that are often not affordable in low-resource settings. In newborns, this is a particular challenge, given that most signs manifested by sick babies are non-specific, and that almost every sign that a baby might demonstrate could be a sign of infection. For example, a baby with poor feeding and low body temperature could have been left uncovered for a time, or he could have sepsis. The editorial committee worked hard to avoid antibiotic overuse by finding a middle-of-the road approach.

The committee made the following decisions:

- Bacteriology laboratory facilities were a must in order to avoid use of antibiotics for non-bacterial illness and to choose appropriate antibiotics
- For possible bacterial illness where the clinical evidence was not highly compelling, close observation is recommended as a first step
- A system of weighted clinical signs that might indicate infection was adopted. These weighted clinical signs (Category A: highly suspicious of infection; Category B: possibly indicative of infection), while logical, intuitive and agreed to by a committee of experts, have not been tested in controlled clinical trials. This needs to be done before a final validation of the system can be made.

Summary of the Characteristics of MNP

- Signs-based approach
- Emphasis on clinical assessment and decision making
- Limited use of diagnostic methods
- Limited number of treatment options
- Least invasive treatment options for the shortest possible period
- Treatment is specific, detailed and directive
- Respects communication, privacy and dignity
- Includes the role of parents
- Includes tools for recording and reporting

Dissemination plan

The MNP manual is being disseminated through WHO to all countries, agencies, organizations, donors, publishers, etc. It is also being disseminated through JHPIEGO programs. Translations are planned in French, Spanish, Chinese, Arabic and Russian, and national translations, such as the version in Indonesia, are also expected. An interactive version is also available at www.who.int.

Ongoing activities include promotion through WHO activities, partnerships and major events. Capacity-building activities in regions and countries will continue. Next steps include the development of managerial guidelines, evaluation of the manual's effectiveness and impact, the development of a mechanism for continuously updating the evidence and operations research on unresolved issues.

Conclusions

Managing Newborn Problems is a manual that offers clinicians clear, precise and specific guidance in the care of the sick or small newborn and the newborn whose mother has an illness. It guides the practitioner by starting with the signs the baby demonstrates and leads to appropriate treatment. Further dissemination and translations remain and the effectiveness and impact need to be studied.

Q&A on MNP

Q: We already have the emergency obstetric neonatal care manual – what does the MNP manual add to this?

A: MNP goes into more detail about the newborn who is not well – the initial management of the sick newborn at the moment of delivery is covered in other material, but information about the newborn who becomes sick after some time (due to infection, etc.) is not typically covered in these other essential obstetric/neonatal care manuals

Q: Who manages the newborn? Most facilities do not have pediatricians. Does the manual address who will deliver care?

A: The rationale for developing the manual was based on those issues. The neonatal mortality rate has not been decreasing, and the proportion of childhood deaths attributable to the newborn period is increasing. In many cases, the newborn has fallen between the cracks. This manual was written for health providers at the district hospital level. In most countries where this manual will be used there will not be a wide array of providers—most likely a general physician and a midwife who will be doing delivery care and newborn care. In cases where there is both an ob/gyn and a pediatrician attached to a hospital we have not said who should do what in this manual; it is up to the site to decide.

For further information contact:

Dr. Jelka Zupan

World Health Organization

20, Avenue Appia

1211 Geneva 27

Switzerland

+41-22-791-4221

zupanj@who.int

CARE OF THE NEWBORN REFERENCE MANUAL

Frances Ganges, Senior Newborn Health Advisor, Saving Newborn Lives, Save the Children

Objectives

- To provide an introduction to the SNL basic newborn care manual, *Care of the Newborn*
- To provide an overview of how this manual complements other materials
- To explain to participants why they should use this manual

The Saving Newborn Lives (SNL) initiative is a global project funded by the Gates Foundation and led by Save the Children/US. Its aim is to improve health and survival of newborns in the developing world. SNL is working with governments, NGOs and partner agencies in 12 different countries. SNL is also the secretariat for the Healthy Newborn Partnership and it has developed the *State of the World's Newborns* (SOWN) report and specific SOWN reports for 8 countries.

SNL provides service delivery and training. The initiative is conducting in-service activities in 9 countries including neonatal IMCI in Bolivia, a Kangaroo Mother Care learning center in Malawi and Home-Based Life Saving Skills training in Ethiopia for TBAs, communities and families. It is also conducting pre-service activities in Malawi, Nepal and Bolivia. In all these countries, the *Care of the Newborn* reference manual has been used as a resource in developing or strengthening training materials or adapted for use as a separate training.

SNL training materials include:

- *Every Newborn's Health*--fact sheets used as job aids to guide counseling, etc.
- *Care of the Newborn* Training Package which includes a reference manual, trainer's guide and participant's manual
- *Home-based Neonatal Care*--a manual for training village health providers and TBAs.

Background

SNL met with WHO and JHPIEGO early on to discuss needed materials and development of the *Care of the Newborn* manual. SNL wanted to produce materials that focused on very basic care for all newborns--not just sick newborns--that every provider could undertake, regardless of setting. It wanted to support skilled care in low-resource settings, recognizing that all levels of health workers who care for newborns need knowledge and skills to provide good care. The materials also had to educate and support the family and community as the main caretakers of the newborn.

Care of the Newborn Table of Contents:

- Newborn Care Starts Before Birth (antenatal care)
- Essential Newborn Care (birth up until 28 days of life)
- Successful breastfeeding
- Resuscitation (basic information; nothing on drugs or complex procedures)
- Low Birth Weight (emphasizing skin to skin contact)
- Common Newborn Problems

Appendices:

- Infection prevention
- Communication and counseling
- Drugs and immunizations for newborns and mothers
- Basic skills – e.g., injection
- References – at the end of each chapter, list of references that support the evidence-based info in that chapter (text references as well as web-sites)
- Resources

Draft manuals have been distributed to experts and providers all around the world for review. The information in the manual was compared to WHO and JHPIEGO materials to make sure information was consistent.

Why use this manual?

This manual can be considered a complementary resource. It fills a need for basic newborn care because:

- The majority of newborns need only basic care
- Most causes of death are preventable or easily treated
- The manual outlines basic (essential) care with some guidance on common problems and referral
- It uses an easy-to-follow step-by-step approach to decision-making for all the problems presented and
- It can be used for training or as a technical resource.

Care of the Newborn has a simplified format that was designed for skilled providers to train other skilled workers or community providers. The manual has gone through many drafts field-testing. The variety of uses includes:

- In-service training
- Use of selected topics or modules
- Strengthening the newborn component of existing training
- Integration of newborn information into existing training (safe motherhood, child survival, etc.)
- Technical resource for providers
- Technical resource for pre-service programs.

Care of the Newborn is not intended for use as an exclusive resource it complements other resource packages (IMPAC series, Basic Maternal and Newborn Care, etc.).

Next steps for the manual include dissemination, translation (initially into Spanish and French) and web access (PDF version). SNL is also working to develop a trainer's manual and participant's guide.

For more information contact:

Frances Ganges

(fganges@dc.savechildren.org)

If you use the manual, please give feedback to Frances. It will help in the preparation of a second edition.

Saving Newborn Lives Initiative

Save the Children

www.savethechildren.org

Healthy Newborn Partnership

www.healthynewborns.org

Q&A

Q: What experiences do you have from the manual's use in Ethiopia (skills of saving newborn lives at home)?

A: In the back of each chapter, there is a section listing tasks for health workers – those who are training can look at the appropriate skills and be able to train those who are working at home (mothers and families, in particular) – this was not developed specifically for facility-based providers, but all levels of providers, wherever that birth might take place.

Q: I am really pleased with the book's integral approach – in rural areas, there is no specialist to perform life-saving procedures – have you thought about pitching this book to the TBAs, who are working in the communities?

A: Yes, we recognize that in many settings it will be decades before skilled care is available for every mother and baby. This manual has been used to develop the newborn care component of a course on Home-Based Life Saving Skills (HBLSS). Three hundred TBAs are being trained in Ethiopia using this HBLSS approach. We are waiting to see how that program works and how successful it is. It is difficult to develop a global set of materials for TBAs, as the situation varies from country to country. We are assessing whether it might be feasible to develop some general guidelines for TBAs, however, this may have to be done on a country-by-country basis.

Comment: We have to be really careful about what we are expecting TBAs to do; A large survey of TBA programs has demonstrated what TBAs can do and can't do. We should not expect them to provide skilled care. They can provide social support and education. There is an opportunity to develop partnerships with TBAs as entry into communities, as a method of getting good information into the community, but a large body of evidence already exists that we have not been effective in transferring required skills for newborn or maternal health through TBAs.

Response: SNL agrees that we are not trying to make skilled attendants out of TBAs – often the mothers and communities are the ones who decide what role the TBAs will play.

PERFORMANCE AND QUALITY IMPROVEMENT (PQI)—AN EXAMPLE FROM GUATEMALA

Gloria Metcalfe, Midwifery Advisor, MNH Program, JHPIEGO

Objectives:

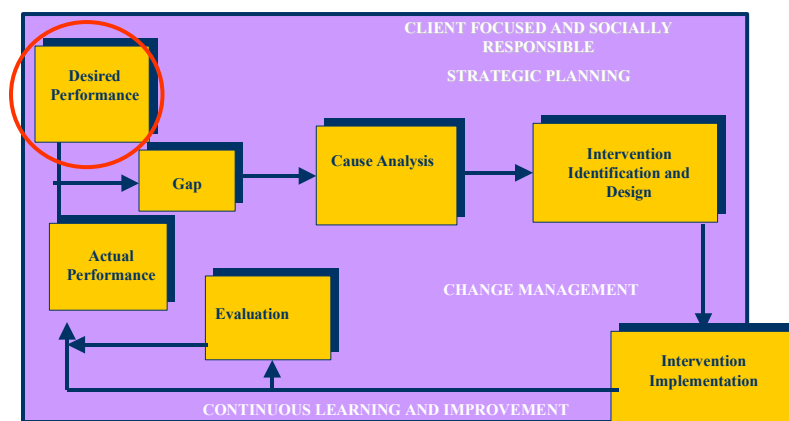
- Describe a comprehensive and systemic approach to improve quality and performance
- Share the Guatemala experience using the PQI process at the Maternal and Neonatal Health network (CaliRed)
- Share indicators and results of the PQI process

Guatemala, a small country located in Central America, is multiethnic, multilingual and multicultural. The population is 11 million people; 35% urban, 65% rural. There are 23 spoken languages and 60% of women are illiterate. Maternal mortality in Guatemala is third highest in the region

A performance and quality improvement (PQI) process approach was implemented to increase the adoption of practices and use of services that are key for maternal and neonatal survival. An accreditation program for MNH services networks was established and the MOH, health personnel and communities worked together to define quality criteria that would be used to measure achievements. Between 2001 and 2004, the MNH Program has worked with the MOH to implement this initiative in 153 facilities in 7 departments around the country.

The first step of the PQI model used in Guatemala involved **defining desired performance** in maternal and neonatal care. The standards were based on: (1) national policies and priorities, (2) service delivery guidelines, (3) provider input and (4) community input/client preference. Quality assessment tools were developed by stakeholders at each level of services in the network: health posts, health centers, community maternities and hospitals.

Performance and Quality Improvement Model



Model Adapted from the International Society for Performance Improvement

The hospital PQI instrument, for example, contained 104 total criteria in seven technical areas including emergency care during pregnancy; labor, childbirth, postpartum and newborn care; support services; infection prevention; IEC and demand promotion; HR, materials and logistics; and management systems.

Standards are defined for each criteria and the criteria is considered met when all the conditions are met. The tool makes it easy to see where the gaps are because they are very objective. The standards are also useful as a learning tool.

Community involvement is important to the PQI process. It is crucial to know what they think and what they want. In this project, participatory action research (PAR) was used to gain the community's perspective. The community helped identify the barriers and facilitators for using health services in normal times and during emergencies. Community members also helped define quality of care criteria such as birthing position and accompaniment by a TBA.

The next steps in PQI are **cause analysis** to determine the performance factors and **intervention design** to bridge the gaps. If the gap is lack of knowledge or skills, the appropriate intervention is training or communication. If the gap is due to insufficient resources or is a capacity issue, the intervention is to strengthen the management system and provide resources. If the gap is due to lack of motivation, consider incentives (appreciation, recognition) for health care workers.

Incentives played a role in Guatemala. When facilities achieved a score of 85% overall and 100% in clinical areas (emergency care during pregnancy and labor, postpartum and newborn care) they received official accreditation from the MOH and a campaign to inform the community of the facility's success and to encourage women to go there for care. Guatemala is now considering designs for an official logo for facilities that achieve accreditation.

Implementation of the interventions is the next step in the process. Two support teams are needed—one team of providers to support the PQI process and another team that can serve as a technical support group (e.g., ob/gyn, expert in HIV, etc.). In Guatemala activities included a redesign and reorganization of essential maternal and newborn care (EMNC) services, resource mobilization, community participation (establishment of an emergency plan) and inclusion of interventions to reduce quality gaps in MOH local workplan activities and budgets. The redesign and reorganization of EMNC services included:

- Permitting a companion to accompany woman during childbirth
- Attending birth in different positions
- Ensuring correct drugs available in the proper place
- Providing immediate postpartum and newborn care (min. 2 hours)
- Improving physical conditions of health care facilities
- Revising job descriptions and protocols.

The community was heavily involved in PQI. Health committee members became outreach workers to assure that all pregnant women and their families knew about prenatal care and household emergency plans. Communities established better linkages with the health services to improve quality of care and became certified by having Planes de Apoyo de la Vida for the

community. To date, more than 80 to 90 persons have used this emergency plan to get to the hospital.

Training and communication is an important part of PQI. Administrators and hospital staff need training in communication and change management skills. Local and regional quality teams to need training in how to implement the PQI process (design, implement and evaluate interventions). The program facilitated meetings to share info about quality gaps (continuity of care, clinical supplies and equipment). The program also developed a learning package to conduct competency-based training and follow-up in four areas: Knowledge update and skills standardization in EMNC; infection prevention; interpersonal communication and intercultural relations; and instructional design of pre-service and in-service curricula. Nursing schools have been trained in the content and process as well.

The next step is **evaluation**. The PQI process measures performance through PQI instruments, service statistics and clinical records, and client and provider satisfaction exit interviews. See box for several key PQI indicators.

| Facility Type | Indicator | 2001 | 2003 |
|---------------|---|------|-------|
| All | EMNC norms and protocols available onsite | 3% | 44% |
| Hospitals | Perform adequate decontamination of instruments | 0% | 100 % |
| | <i>Adequate supplies and equipment for EMNC in labor & delivery rooms</i> | 29% | 63% |
| | Linkage to a community health committee | 14% | 63% |

A major advantage of the PQI process is that improvements can be shown quantitatively. Between October 2003 and March 2004, in seven hospitals with PQI interventions, the episiotomy rate in primiparous women was 38% compared to 69% to 92% in Latin American hospitals, 67% of births used a partograph, 81% of vaginal births had active management of the third stage of labor and 64% of newborns were placed in immediate skin-to-skin contact with their mothers. The goal for these three later practices is 100%. EMNC training and the PQI process introduced these practices on a wide scale. While no pre-intervention data are available since these indicators were not measured, rates were likely low.

As mentioned, the MNH program implemented the PQI process initiative in 153 facilities in 99 communities within 7 departments. Eighteen of these facilities have received accreditation. PQI has been scaled up to an additional 222 facilities in 10 departments by the MOH, other donors, CAs and NGOs – and up to an additional 250 communities. There is a new government in place in Guatemala (as of January 2004). It is reviewing the PQI process and deciding its future. Aside from Guatemala, the PQI process has been utilized in Honduras, Jamaica, Brazil, Burkina Faso, Malawi, Afghanistan and Mozambique.

Q&A

Q: Clarification on PQI accreditation--why is there such a small number of accredited facilities? What do the other sites need?

A: PQI has only been used in Guatemala for two years and the standard for achieving accreditation is very high. The clinical standards need to be accomplished 100% for accreditation and, as is well known, provider behavior is difficult to change and it is not easy to make all these changes. It is important to note that all facilities have improved since baseline.

Q: Are you able to make any link between quality improvement and increased utilization of services?

A: There has been an increase in women attending facilities (10% increase in one hospital in the past year) – women are now coming to the hospitals, but there are no specific numbers available on this right now. In another hospital, 50% of women in the catchment area were coming to the hospital for care; after PQI, attendance has increased to 80% of these women.

Q: How do you mobilize the community?

A: Guatemala has a concrete and specific approach to community mobilization. It is a five step process similar to PQI.

Q: Did you do a near miss review/audit as part of this process in Guatemala?

A: PQI tools include how to manage complications, etc. – tools rely on records to review clinical cases. If the case does not present itself during the external review the team can rely on records to look at management and make an assessment of the treatment.

EMERGENCY OBSTETRIC CARE (EMOC)

Harshad Sanghvi, Medical Director, MNH Program, JHPIEGO

Marisabel Gouverneur, Midwifery Advisor, MNH Program, JHPIEGO

This discussion will focus on how to implement an EmOC training program. This course was designed for training a midwife, a doctor and an anesthetist. Anesthesia provider training is very new and unique – most anesthetists learned on the job and were not exposed to this type of training approach. This course is for 5 weeks, and participants are expected to be competent by the end of the training, but to develop proficiency a participant will need to work for 12 weeks at a site with high obstetric caseload.

Areas of focus

The EmOC training focuses on:

- Technical and clinical decision-making skills
- Organizational and management issues
- Emergency preparedness
- Mother-friendly and baby-friendly practices
- Infection prevention (IP) practices
- Equipment and supplies
- Documentation practices
- Training facilities

Training materials

The training materials needed include the *Managing Complications in Pregnancy and Childbirth* (MCPC) manual, which is considered the global standard, the EmOC participant's guide (based on the MCPC), the EmOC trainer's guide (again based on the MCPC) which contains objectives, course outlines, learning guides, checklists, emergency drills--everything that is needed (including information on c-section and complicated subdural hysterectomy). All training materials have been field-tested. Other materials include:

- Participant log book
- Site assessment tool for the participant– participants can use this tool before coming to the course and make an assessment of their own site to determine whether that site is ready to provide emergency obstetric care
- Job aids
- Training site preparation guidelines—the training site must model behaviors you want participant to learn and
- Participant follow-up tools

Proposed steps for maximizing the investment in training

Begin by reviewing country assessments – find out what kind of health facilities there are, who runs them, etc. Next, secure stakeholder consensus. One of the main issues that usually surfaces is delegation of responsibilities (e.g., which providers can provide which services). Trainers need to come up with consensus on these policies—for instance, all stakeholders have to agree that midwives can perform certain tasks.

Next, identify training sites. Look for sites with high volume, where the staff is willing to do training and where the site models the correct behaviors. If necessary, strengthen the training sites.

Before the training begins, conduct an EmOC course to standardize clinical skills for candidate trainers. This will help you select the right participants. Provide follow-up, coaching and assessment during the training. Also conduct a clinical training skills course for candidate trainers. Then the candidate trainers can conduct the EmOC course under supervision. Qualified trainers can then conduct EmOC courses on their own and provide supervision and onsite support. Lastly, evaluate the training.

Common problems identified at EmOC training sites

- Lack of guidelines and standards
- Inadequate supervision
- Overcrowding, lack of privacy
- Dangerous practices
- Barriers to access
- Poor management or shortage of supplies
- Lack of preparedness for emergencies

To address these issues, you need to prioritize which problems to deal with first. Have a stakeholders' meeting within the institution to prioritize the problems. Address easily solvable problems first. Develop a timeline for addressing the problem, assign responsibilities and identify a point person to oversee the process.

Sites can be strengthened by:

- Establishing evidence-based protocols
- Improving IP practices
- Strengthening emergency preparedness
- Upholding women's rights to privacy, dignity, care and respect
- Developing a coordinated EmOC team.

It is also important to have the commitment of the MOH.

Training tips

- At beginning of training, do a questionnaire on current practices as well as a pre-course skill assessment
- Do role-plays—scenarios are available in the training materials. These influence the attitudes of those performing the role-plays and those who are watching.
- Practice on models
- Do a midcourse assessment to see if course goals have been achieved
- Do a clinical assessment

Personal commitment to change

The participants need to make a personal commitment to change. This decision is often made during the training. Examples of the commitment to introduce change include:

| | |
|--------------|---|
| Afghanistan: | Introduce spinal anesthesia |
| Bangladesh: | Establish EmOC 24/7 at MCHTI |
| Bhutan: | Improve infection control |
| India: | Establish an emergency response team |
| Nepal: | Arrange for support person during childbirth |
| Pakistan | Practice active management of third stage of labor for all deliveries |

Conclusion

Obstetrical emergencies occur very rarely, so providers need to maintain their skills even though cases don't occur that frequently. Providers can practice on a model, review a video, visit the main hospital and observe procedures, call others and talk to them about it, etc.

This session has been more programmatic than technical because before you start on any training program, you need to address all of these issues (supplies, equipment, management, behavior modeling). Once you start training you want your sites to be good models for the trainees.

PREVENTION OF MOTHER-TO-CHILD TRANSMISSION OF HIV

'Dipo Otolorin, Regional Senior Technical Advisor, Zambia, JHPIEGO

Gloria Metcalfe, Midwifery Advisor, MNH Program, JHPIEGO

Objectives

- Outline WHO's 4-prong strategic approach to the prevention of mother-to-child-transmission (PMTCT) of HIV
- Describe core PMTCT interventions during pregnancy, labour and delivery
- Describe safer feeding options for the HIV-exposed infant and young child
- List essential components of care and support for the HIV-infected mother and her family

Let's begin with the story of two sisters – Mary and Anne.

The Story of Mary and Anne

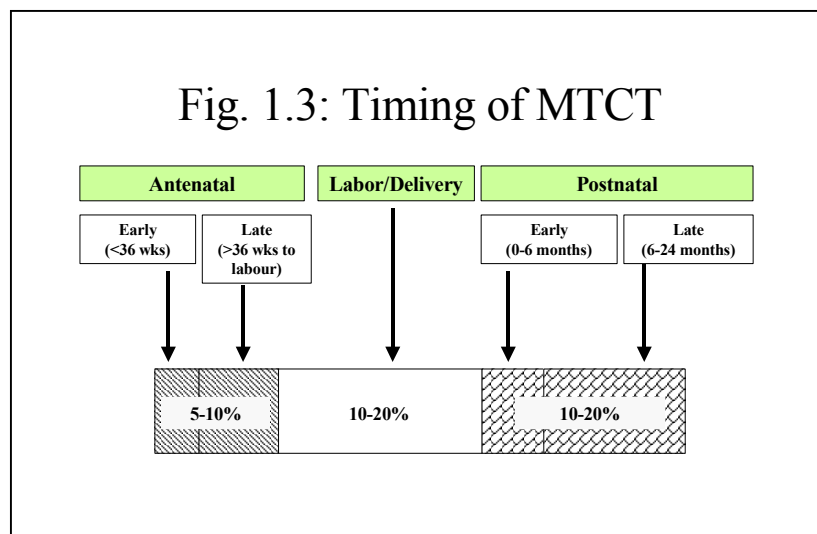
Anne is 14 years old. She is an orphan and lives with her sister Mary who is 25 years old and 20 weeks into her second pregnancy. Mary's husband, John, is 30 years old and has been unwell in the last 3 months. He is currently being treated for a *troublesome cough*. Mary has come to the antenatal clinic to register for care.

Many questions come to mind after hearing this story. What is the effect of John's sickness on the family? Will his condition affect the family? What is wrong with John? Are John's symptoms indicative of a more serious illness? Can John's illness affect Mary and/or the baby?

Background

In 2003 approximately 700,000 children became infected with HIV through their mothers. In the absence of any intervention, the mother-to-child transmission (MTCT) rate is 15-30% without breastfeeding and 30-45% with prolonged breastfeeding. With intensive intervention, the MTCT rates can be reduced to two percent or less.

A baby is at highest risk of acquiring HIV during labor and delivery (see box).



There is no evidence that pregnancy on its own worsens HIV infection or hastens its progression. The CD4+ cell count declines during pregnancy of both HIV positive and HIV negative women due to increased plasma volume. However, HIV infection can lead to adverse pregnancy outcomes – while pregnancy does not alter HIV, HIV can alter the outcome of pregnancy in the following ways:

- Spontaneous abortion or miscarriage
- Intrauterine growth retardation
- Low birth weight
- Preterm delivery, especially with more advanced disease
- Increased stillbirth, perinatal and newborn mortality

Overview of PMTCT

What can we do to prevent MTCT? WHO has a four-pronged approach:\

- If uninfected – primary prevention
- When infected -- prevention of unintended pregnancy
- When infected and pregnant – specific PMTCT interventions
- When infected and delivers baby – linkages to care and support

Prong 1, primary prevention, includes

- Abstinence
- Being faithful
- Safer sex, using condoms
- Avoid alcohol/drugs
- Early treatment of STIs
- Use sterile injecting equipment or equipment cleaned with bleach.

Prong 2, prevention of unintended pregnancy, involves:

- Use of effective contraceptive methods—hormonal contraception, IUDs, consistent and correct use of condoms or male/female sterilization
- Dual protection is recommended (only condoms protect against HIV infection)

Prong 3, core PMTCT interventions include:

- Antiretroviral prophylaxis
- Safer obstetric practices
- Safer infant feeding practices

Prong 4, provision of care and support includes:

- Regular post-delivery medical check-ups (mother and infant)
- Medical/nursing care
- Nutritional support
- Regular exercise
- Safer sex practices
- Avoidance of tobacco, alcohol and drugs
- Stress management
- Avoiding infections and illnesses
- Psychotherapy

Counseling and testing

Knowing one's HIV status is the crucial first step to accessing PMTCT. Voluntary counseling and testing (VCT) services are an entry point to PMTCT. VCT can link women to other services such as:

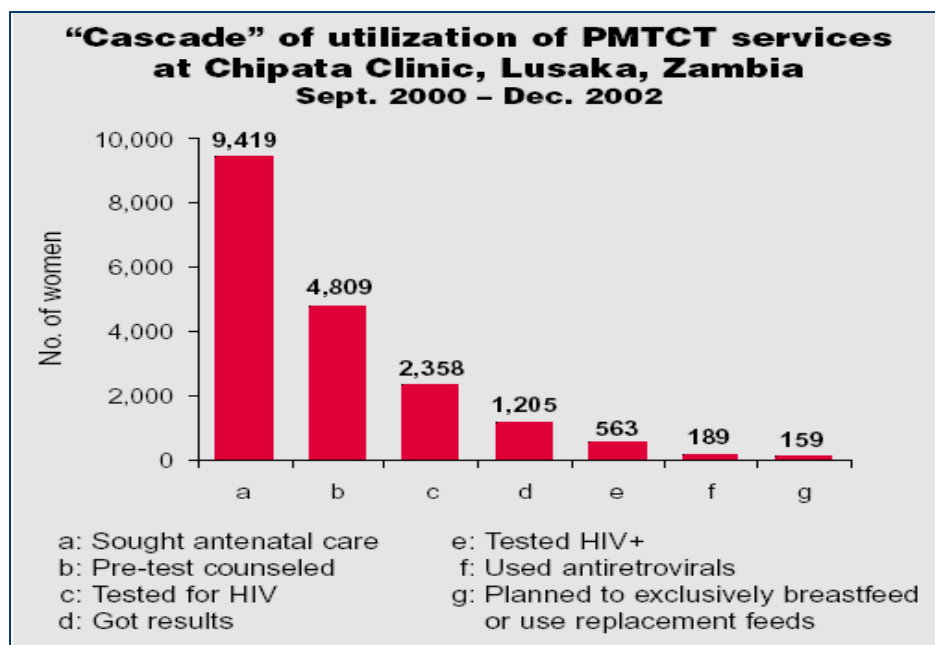
- Primary prevention of new HIV infection
- Prevention of unintended pregnancy (family planning)
- Safer obstetric practices
- Antiretroviral prophylaxis
- Safer infant feeding
- Post-delivery care and support
- Community action to reduce stigma and discrimination

There are two approaches used to counsel and test pregnant women— the “opt-in” and “opt-out” approaches. In the opt-in approach, when a pregnant woman comes to antenatal care (ANC), she receives education about HIV, MTCT and HIV testing. She is then asked to indicate if she would like to be tested. The acceptance rate for the opt-in approach ranges from 36% to 86%. In the opt-out approach—now the recommended approach—HIV testing is offered to every pregnant woman as a routine service. Every pregnant woman is informed that she should get an HIV test, hemoglobin, urinalysis, etc. The HIV test is not done only if she refuses the test. The acceptance rate for this approach ranges from 81% to 98%--the women think that if they refuse the test, providers will think they are HIV positive, so they “go along with the crowd.”

The Story of Mary and Anne, continued

- During the ANC visit, the **midwife talked about HIV testing and counseling**. She offered all pregnant women the opportunity to know their HIV status.
- 90% of the pregnant women attending the ANC, including **Mary, agreed to have an HIV test**. This was done and the results were available within 2 hours.
- **Mary was one of the 25% of patients whose test results were positive**. She had post-test counseling with the healthcare provider. During counseling, Mary expressed her concern about the possible effect of her illness on the baby.
- **John, Mary's husband, was later diagnosed as HIV positive**, complicated by pulmonary tuberculosis. He was **referred** for additional evaluation and possible antiretroviral (ARV) therapy.

If you are running a PMTCT program and have a target for the number of woman to put on ARVs, you will need to start with a very significant number of women. You will lose some of them all along the way. This cascade effect can be seen in the data from the Chipata Clinic in Zambia:



Why does this cascade effect exist? The reasons vary by facility but may include the shortage of trained staff to handle the high client load due to resignations/brain drain, sickness/death, redeployment to other services/facilities, or a government freeze on employment; accessibility issues (distance, transportation, poverty); fear of stigma and discrimination; opposition by male partners; shortage of HIV test kits; shortage or lack of ARVs; fear of results. PMTCT programs need to address the above issues to increase the yield of people coming through the system.

The current international recommendations for CT to prevent MTCT include:

- Routine, opt-out testing
- Group pre-test information, with or without individual counseling
- Rapid testing with same day results
- Post-test counseling
- Routine, rapid testing at labor and delivery

Antiretroviral prophylaxis and therapy

ARV prophylaxis is the use of ARV drugs to prevent vertical HIV transmission to the HIV-exposed infant. It is different from ARV therapy, which is the use of ARV's in HIV infected persons to reduce their viral load in order to improve the immune system and prolong life. Examples of antiretroviral prophylaxis include zidovudine (ZDV) or AZT (short or long course), nevirapine (NVP), and ZDV/lamivudine (ZDV/3TC).

There is a controversy as to whether nevirapine should be used for ARV prophylaxis. There are several advantages of single-dose nevirapine. It is:

- Simple
- Cheap
- Can be taken at home
- Long-acting, non-nucleoside reverse transcriptase inhibitor

- Rapidly absorbed
- Crosses placentas
- Produces a rapid drop in viral load.

There is concern, however, that one single dose of NVP given to the mother in labor can lead to NVP resistance. This is a concern because most of the combination ARV therapy that might be given to the mother later includes NVP as a component. If NVP resistance develops, the ARV therapy program will be thrown into disarray.

Currently, one dose of NVP is the recommendation for prophylaxis. One 200mg tablet of NVP is taken orally at the onset of labor. It is best taken at least two hours before birth. One dose of 2mg/kg oral suspension is given to the infant within 72 hours of birth. NVP should be substituted for efavirenz-containing regimes in women on HAART who get pregnant because efavirenz (EFV) has potential teratogenic effects on the fetus.

The Story of Mary and Anne, continued

Mary and her infant received NVP.

HAART

HAART stands for Highly Active Antiretroviral Therapy. It is a treatment strategy that uses at least three drugs from two classes of ARVs to decrease the amount of HIV in the body as much as possible for as long as possible. HAART can also be used as prophylaxis. Advantages of HAART include:

- Decrease in MTCT compared to short-course ARV
- Decrease in MTCT due to breastfeeding probable
- Decrease in morbidity and mortality in women
- Decrease in number of orphans
- Decrease in infant mortality
- Possible decrease in pregnancy-related complications
- Resistance of less concern (hopefully).

Disadvantages of HAART include its cost, potential toxicity on mother and fetus and adherence issues.

WHO Recommendations:

Indications for ARV Treatment in Pregnancy

- WHO Stage IV
- WHO Stage III with CD4<350/mm³ or CD4 N/A
- WHO Stage II with CD4<200/mm³ or TLC <1200/mm³
- WHO Stage I with CD4<200/mm³

Regimens: ZDV/3TC/NVP or d4T/3TC/NVP; consider starting after first trimester

If newly diagnosed and pregnant with no indication for ARV treatment:

There is a hierarchy of ARV regimens for prophylaxis:

- ZDV/3TC/NVP beginning at 32 wks-3 days Postpartum (minus NVP postpartum)
- ZDV/3TC from 34-36 wk + Single Dose NVP at onset of labour (mother) plus NVP to infant within 72 hours
- ZDV from 34-36 wk + Single Dose NVP (mother/infant)+ ZDV 1 wk (infant)
- Single Dose NVP (mother/infant)
- If breastfeeding, consider 2 wk ZDV/additional dose NVP 5-7 days after initial dose

If newly diagnosed at the time of childbirth:

Single Dose NVP + ZDV bid x 1 week in infant-begin immediately (no later than 72 hrs).

If pregnant and already on ARV treatment:

Continue treatment, but substitute NVP for EFV in 1st or 2nd trimester. Consider temporary discontinuation of all drugs if significant nausea and vomiting occurs.

If not pregnant but at risk of pregnancy and has indications for ARV treatment:

d4T/3TC/NVP or ZDV/3TC/NVP

Part II

MTCT and Caesarean Section

C-sections performed before the onset of labour and membrane rupture can decrease risk of MTCT by 50-80%. There is additional benefit in women not using ARV drugs or who are taking ZDV alone. Once a woman is in labor and/or has ruptured membranes, however, the value of a c-section is nil.

Resources are not always available to do a c-section and there are risks associated with the procedure. In limited-resource settings there are concerns about:

- Increased maternal morbidity and possibly mortality
- The availability of blood and blood safety
- Iatrogenic prematurity
- Antibiotic prophylaxis
- Anesthesia availability
- Limited human resources—Obs, medical officers, nursing care, time.

Infant feeding options

To breastfeed or not to breastfeed is one of the greatest dilemmas for HIV infected women. There is often stigma or discrimination of non-breastfeeding women. The greatest increase in MTCT occurs when breastfeeding is prolonged to 18 to 24 months of age.

Global recommendations for infant feeding by HIV infected mothers

- **All HIV-infected women should receive counseling and support** to be able to choose the infant feeding option most appropriate to their situation
- **When replacement feeding is acceptable, feasible, affordable, sustainable and safe,** avoidance of all breastfeeding by HIV-infected mothers is recommended
- **Otherwise, exclusive breastfeeding is recommended during the first months of life**
- To minimize HIV transmission risk, **breastfeeding should be discontinued as soon as feasible (4-6 months)**, taking into account local circumstances, the individual woman's situation and the risks of replacement feeding
- HIV-infected women who breastfeed should be assisted to ensure that they **use a good breastfeeding technique to prevent breast pathologies**, which should be treated promptly if they occur

It is important to remember that the decision whether or not to breastfeed is the mother's, not the health care worker's. Also, it is important that either one option or the other—exclusive breastfeeding or exclusive formula feeding—be chosen. A little bit of both is not best for the baby.

Replacement feeding options include commercial infant formula or home-prepared modified animal milk with micronutrient supplementation. Breastfeeding (BF) options include exclusive BF, early BF cessation, expressed heat-treated breast milk (boiling), and wet nursing.

Women who choose replacement feeding should be encouraged to use cups instead of bottles because they are easier to keep clean; they are less likely than bottles to be carried around for a long time and give bacteria the opportunity to multiply. Cup feeding requires more contact between the mother or caregiver and the baby and cup feeding is better than cup and spoon feeding because spoon feeding takes longer and the mother may stop before the infant has had enough.

Linking HIV-infected women to care and support services

PMTCT can be viewed as an entry point to existing care and support services including:

- Psychosocial support
- Basic clinical care for mother and infant
- Prevention and treatment of opportunistic infections
- Access to ARVs
- Nutritional support
- Income support
- Planning for the future, including family planning
- Palliative care

Health care providers working in PMTCT programs should help link infected mothers and their families to existing care and support services in the community. HIV infected mothers should be seen regularly and be monitored for disease progression. They should be put on relevant prophylaxis for opportunistic infections. HIV infected mothers who meet WHO's criteria for initiating ARV therapy should be put on HAART.

HIV-exposed infants should also be regularly monitored and assessed for HIV infection using the viral assays at birth or HIV antibody testing at 18 months of age. Confirmed HIV infected children should also be evaluated for ARV therapy.

Other types of social support such as nutritional support, linkage to peer groups and psychosocial support are important for prolonging the health and survival of the patients.

The Story of Mary and Anne, continued

- By agreeing to undergo HIV testing, Mary became aware of her HIV status. Her diagnosis led to John knowing his HIV status as well.
- Mary benefited from a variety of PMTCT interventions, including ARV prophylaxis (WHO prong #3).
- Even though she chose to breast feed her infant, she weaned him abruptly at 6 months to reduce the risk of vertical transmission (WHO prong #3).
- Mary, her HIV-exposed infant and her HIV-infected husband have since been linked to existing HIV care and support services in the community (WHO prong #4).
- Because John was classified as WHO Stage 3 disease and his CD4+ count was <200 cells/mm³, he was started on HAART (WHO prong #4).
- Since Mary was classified as WHO Stage 1 disease, she was not put on HAART but her disease progression is being closely monitored (WHO prong #4).
- Their baby will have his HIV status determined by an HIV antibody test at 18 months of age. If positive, he will also be evaluated for ARV therapy (WHO prong #4).
- Mary has since been advising Anne about how to stay HIV negative (WHO prong #1), so as to protect her future children from the risk of HIV infection. Mary also talked about preventing unintended pregnancies (WHO prong #2).

Summary and conclusions

WHO's four-pronged approach to PMTCT includes:

- Primary prevention of HIV
- Prevention of unintended pregnancies
- Core interventions for PMTCT and
- Linkages to care and support for HIV-infected women and babies.

The core interventions for PMTCT include:

- Use of antiretroviral prophylaxis
- Safer obstetric practices and
- Safer infant feeding practices.

There are PMTCT learning resources available. These include a generic learning resource package that can be adapted to country programs. WHO, UMDNJ and JHPIEGO collaborated on this. The expected release date is August 2004. There are also HIV/AIDS Reprolearn tutorials on CD-ROM.

Q&A

Q: Women have difficulty telling their husband that they are positive because they are afraid of being thrown out of their home. How do you link these women to services when they do not tell their partners?

A: In Tanzania, social support programs function as link between the facility and the hospital. They first help women deal with the shock of finding out they have this illness, then connect them with women who have had these experiences, and with services. A requirement for many of these social support programs is that women disclose their status, and they offer women social

support in this process. For example someone will accompany a woman to her house to discuss the illness with her family. These social support services are a crucial complement to clinical services.

Q: How early can you test the baby for HIV infection?

A: This depends on what test is being used. If PCR (a genetic test which requires sophisticated lab facilities) is used, it can be done within first week or two after birth. If antibody testing (rapid testing) is used, the baby must be 18 months because the antibodies cannot be seen until that age.

Q: What about the rights of the mother versus the rights of the baby? What is the mother's right not to get tested versus the baby's right to treatment should the mother be HIV positive?

A: The more we treat HIV as "normal", that is, like it is any other disease we need to test for, the more the women will accept the test.

Q: If you don't know the mother's status, how do you treat her and the baby? If she refuses to be tested, do you follow the prophylactic route?

A: Probably not in most countries, as there are risks attached. Most countries will probably opt to treat an unknown as HIV negative, unless rates are very high in that country. Each country needs to set its own policies/procedures. See the ReproLine CD-ROM for more information.

For more information, contact:

'Dipo Otolorin: eotolorin@jhpiego.net

Patricia Gomez: pgomez@jhpiego.net

UPDATE ON CONTRACEPTIVE TECHNOLOGY

Ricky Lu, Technical Advisor, Reproductive Health, STARH Project, JHPIEGO

‘Dipo Otolorin, Regional Senior Technical Advisor, Zambia, JHPIEGO

Gloria Metcalfe, Midwifery Advisor, MNH Program, JHPIEGO

Objectives

- Identify medical barriers to access and quality of family planning (FP) services
- Apply the WHO Medical Eligibility Criteria in FP services to improve FP provision
- Use *Essentials of Contraceptive Technology* manual as a reference document
- List major changes in the use of selected contraceptives
- Identify recently introduced contraceptive methods

Part 1: Optimal Birth Spacing Interval and MCH and WHO Eligibility Criteria

Optimal birth spacing

Births are risky when there are too many and they are too close together, or when they occur among women who are too young or too old. One solution is to avoid births that are too close together by applying an optimal birth spacing interval.

Optimal birth spacing is the length of time needed between births to minimize the risks for adverse health outcomes. New research indicates that this is three years or longer. Optimal birth spacing is a fundamental but often underemphasized part of FP/RH. It is also a way to address FP that does not interfere with cultural norms.

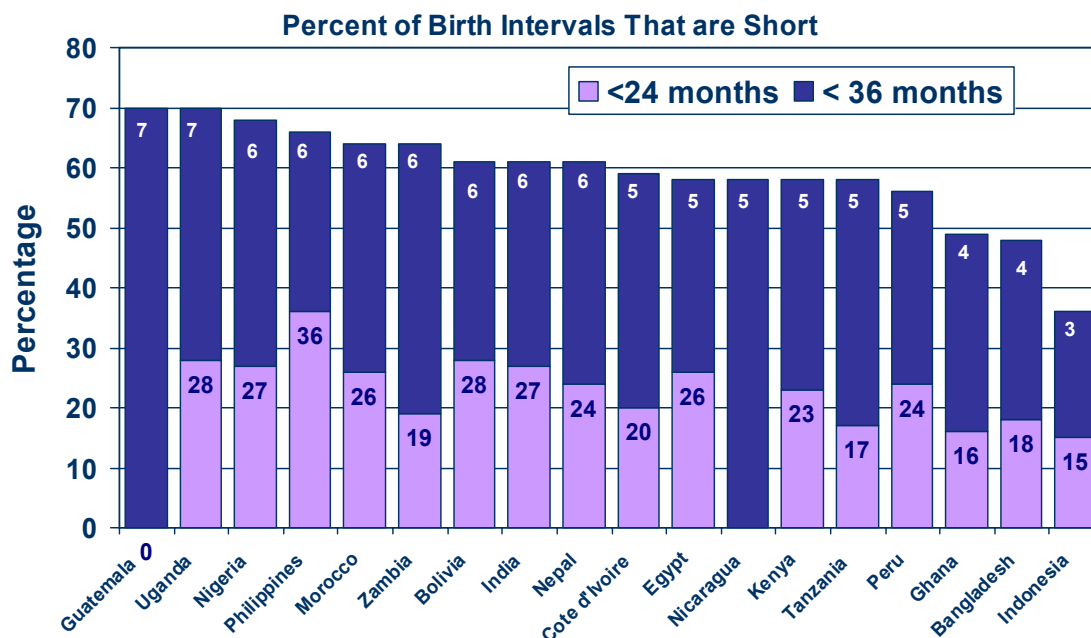
Optimal birth spacing provides significant health benefits for children and for mothers. Children are at lower risk of:

- Stunting and underweight
- Low birth weight
- Preterm birth
- Child death
- Infant death
- Neonatal death
- Fetal death

Mothers are at lower risk of:

- Malnutrition from the overlap of pregnancy and breastfeeding
- Puerperal endometritis
- Premature rupture of membranes
- Anemia
- Third trimester bleeding
- Maternal death
-

Many young women in developing countries have births that are too close together.



Source: Venugopal, V. and Setty Upadhyay, V.D. 2002.

Also, many women want longer birth intervals than they are achieving. Of postpartum women, only 3% want births within two years, yet, on average, only 40% are actually using a FP method.

Women and couples should be counseled about the health and economic benefits of spacing their children. They have a right to know that optimal birth spacing is associated with:

- Lower risk for perinatal, neonatal and infant mortality
- Lower risk for poor nutritional outcomes
- Lower risk for maternal morbidity and mortality.

There are simple programmatic strategies that can help women achieve the birth intervals that they desire and that contribute to healthy outcomes for themselves and their children.

Increasing contraceptive access: what's new with WHO guidelines

Barriers that affect access to FP include:

- Clinic location
- Social/cultural/religious beliefs
- Legal issues
- Time of operation
- Gender of provider
- Cost
- Knowledge and skills
- Provider bias
- Eligibility criteria
- Process

These barriers affect access to services, contraceptive choice and the quality of the services provided.

There are also medical barriers to contraceptive access. These are practices that are derived from a medical rationale and result in scientifically not justifiable impediment to obtaining or denial of contraception. Medical barriers include eligibility restrictions, process barriers, contraindications and provider limitations/biases. Some examples of medical barriers include:

- Unnecessary barriers to initiation such as menstruation
- Inappropriate contraindications
- Other client eligibility criteria such as age, parity, or marital status
- Inappropriate follow-up schedule such as IUD follow-up every six months
- Rest periods required, such as every 2 to 3 years for the pill
- Unnecessary procedures such as a pelvic exam or a pregnancy test
- Provider bias, for example the belief that DMPA is better for thin women.

Requiring a woman to be menstruating is a major barrier to oral contraceptive (OC) access. In Ghana, for example, 46% of providers give OCs only to menstruating. In Kenya it is 71%. In Kenya, 78% of non-menstruating clients are sent home. Checklists to rule out pregnancy can improve FP access for non-menstruating clients. Providers can be reasonably sure that a woman is not pregnant if she has no signs and symptoms of pregnancy AND meets any of the following criteria:

- No intercourse since last menses
- Correctly and consistently using reliable method of contraception
- Is within the first 7 days after normal menses
- Is within 4 weeks postpartum for non-lactating women
- Is within 7 days post-abortion or post miscarriage
- Is fully or nearly fully breastfeeding, amenorrheic and less than 6 months postpartum.

Addressing medical barriers: WHO medical eligibility criteria

Medical eligibility criteria (MEC) are recommendations on the specific conditions (medical and non-medical) necessary to safely use contraceptive methods (initiation and continuation). These are evidence-based from direct studies on users with and without the conditions, theoretical considerations and expert opinions. Conditions represent either an individual's characteristics such as age or parity, known pre-existing medical conditions, e.g., hypertension, and use of medications.

Ghana has developed a job aid on medical eligibility criteria. It is a wheel that can be used to determine suitability of methods given certain disease conditions.

WHO guidelines include MEC—who can use contraceptives; selected practice recommendations (SPR)—how to use contraceptives; and *Essentials of Contraceptive Technology*—the handbook for clinic staff.

The new 2003 edition of *Essentials of Contraceptive Technology* is available. It was designed for FP/RH providers based on WHO recommendations. It provides practical information on FP

methods, how to provide FP and how to help clients use FP. The FP method chapters have a standard format:

- Key Point
- Table of Content
- Introduction
- Deciding about the method
- Starting the method
- Following up
- Important information for the user
- Question and Answer

Part 2: What's New with Family Planning Updated WHO guidelines

In 2002, WHO held a meeting to update MECs. Women fall into one of four categories:

- Category 1: use without concern
- Category 2: Advantages outweigh risks
- Category 3: Risks outweigh advantages, only use if no other method is appropriate/available
- Category 4: Do not use

COCs: For combined oral contraceptives, there are generally no restrictions—WHO categories 1 and 2. For COCs, the only addition to Category 4 (women who cannot use) is women with known thrombogenic mutations (a rare condition) which dispose them to thrombosis. Women on ARV are now in category 2 (this is new). Griseofulvin use is now category 2 instead of 3 (category 3 is women who can use with precautions). AIDS remains category 1, but a 2 if woman is on ARVs. Depressive disorders in category 1 (this is new).

PICs: There are no women in category 4, that is there is no condition in which you should not use PIC. Women on ARVs are in category 2 (this is new). Women with known thrombogenic mutations are in category 2. Obesity is now in category 1 (from category 2). Griseofulvin use is now in category 1 (from 2). AIDS stays in category 1, but a 2 if on ARVs. Depressive disorders are in category 1 (this is new).

IUDs: The only category 4 condition is fibroids with uterine cavity distortion. This was revised from category 2. Initiating use with HIV/AIDS is under category 3. ARV treatment is category 2/3. Category 2 now includes current IUD users developing pelvic inflammatory disease (PID) or purulent STI (after counseling and on antibiotic treatment); current IUD users with increased risk of STIs; new users at high risk of STIs; women at high risk of HIV (revised from 3); HIV positive women without full blown AIDS; and HIV/AIDS developing in a current IUD user who is clinically well and on ARV therapy.

Women in category 1 for IUD use include those with known thrombogenic mutations; fibroids without uterine cavity distortion (revised from category 2); women with AIDS (2 if on ART) and those with depressive disorders.

Standard days method

The standard days method (SDM) is a simple fertility awareness based approach to FP. It is based on the probabilities of becoming pregnant during the menstrual cycle. It is for women with cycles between 26 and 32 days long, who are not at risk of STIs and who can avoid unprotected intercourse on days 8 through 19, the fertile days. Women using SDM use a string of beads (CycleBeads) to represent the cycle and identify days 8 to 19.

The failure rate is 4.7 pregnancies in the first year per 100 women when used correctly and with abstinence during fertile period. If another method is used during the fertile period the failure rate is 5.6.

Contraceptive technology – new products

The contraceptive patch: OrthoEvra®

The patch is also known as trans-dermal hormonal contraception. It releases norelgestromin 150µg and ethinyl estradiol 20µg everyday. One patch is worn for one week (7 days). Three consecutive patches (21 days) are followed by one patch-free week. The patch can be worn on the buttock, lower abdomen, upper outer arm or upper torso. The main advantage of this method is its high rate of compliance.

The vaginal ring: NuvaRing®

The NuvaRing is vaginal hormonal contraception. It delivers etonogestrel 120µg and ethinyl estradiol 15µg daily. One ring is worn for three weeks (21 days), followed by one ring-free week. A new ring is used for each cycle. The main advantage of this method is its high rate of compliance.

Implants: There are three choices of contraceptive implants: Jadelle® (levonorgestrel, 2 rods, 5 years), Implanon® (etonogestrel, 1 rod, 3 years), and Norplant (levonorgestrel, 6 capsules, now 7 years). Jadelle is inserted just under the skin on an upper arm. It works by suppressing ovulation, decreasing tubal motility, changing the endometrium and thickening cervical mucus. Implanon is a single rod that contains 68mg of etonogestrel (3-keto-desogestrel), the active metabolite of desogestrel. It inhibits ovulation during the entire treatment period.

IUD: A new IUD, Mirena, can be used for five years. It is highly effective—the pregnancy rate is 0.5 in 5 years. It contains levonorgestrel. It causes less menstrual bleeding. The cost is approximately US\$450, plus insertion.

The extended cycle OC. This new low-dose COC is called Seasonale. One pack contains 91 pills (84 active, and 7 inactive) and lasts for three months. The pills contain 30µg ethinyl estradiol and 150µg levonorgestrel. It was approved in September 2003 by the FDA. Women taking Seasonale menstruate 4 times per year versus 13 times per year on a 28 pill pack. The cost is approximately US\$165 per pack.

Cervical cap – Lea’s Shield is a reusable silicone cervical cap. The cap provides a physical barrier to sperm entry. It has an effectiveness rate of 85 to 90%, depending on parity and spermicide use. It is inserted before intercourse and then left in place for eight hours.

Non-surgical permanent method – Essure.

This new, permanent, non-hormonal contraceptive method is inserted into the fallopian tube through an endoscope inserted into the uterus. The device creates a tissue barrier through the creation of scarification within the fallopian tube. The scarification process takes three months to block the tubes. Advantages include no need for incisions or anesthesia, the insertion procedure takes less than one hour and it is 99.8% effective after 2 years. Limitations to use include the need to wait 3 months for it to become effective, the possibility of unsuccessful placement of the microinsert and surgery to remove it, it requires gynecologist trained in hysteroscopy and it is expensive (around US\$2,500).

Conclusion

There are several promising new contraceptive products that are now available on the market but most are difficult to access in low-resource settings. Barriers to accessing the new methods include cost, lack of providers trained in use of the methods and lack of awareness in the community about the existence of such methods.

MALARIA DURING PREGNANCY

Barbara Kinzie, Senior Midwifery Advisor, MNH Program, JHPIEGO

Patricia Gomez, Director, Midwifery Services, MNH Program, JHPIEGO

Objectives

- Define malaria and its epidemiology
- Understand the effects of malaria in pregnancy (MIP) on the mother, fetus, and newborn; describe the effect of HIV on malaria in pregnancy
- Discuss evidence-based guidelines for prevention and treatment of malaria in pregnancy
- List country-specific examples of programs that address MIP - Kenya
- Discuss global and regional malaria control programs
- Contribute to a discussion about lessons learned, challenges and the way forward in specific regions.

Epidemiology

Malaria transmitted by a female *Anopheles* mosquito infected with the parasite *plasmodium falciparum*. When the mosquito bites she injects saliva that contains these parasites into the blood. The parasites then travel to the liver cells.

One to two weeks after being bitten, the parasites enter the blood at which time the person starts showing signs of malaria (fever, chills, etc.). The parasites then attacks red blood cells and begin consuming hemoglobin, destroying the red blood cells and causing anemia.

Every ten seconds a person in Africa dies from malaria. About 70% of malaria deaths occur in children under five years of age. Pregnant women are twice as likely to contract malaria as non-pregnant women. Women in their first and second pregnancies are at higher risk from the effects of malaria.

The effects of malaria on pregnancy

Pregnant women are at higher risk of infection if they are adolescents, in their first or second pregnancies, are immigrants or visitors from an area of low transmission and are infected with HIV. Many pregnant women carry *p. falciparum* but have no symptoms; asymptomatic placental sequestration is very common. About 23 million pregnant women live in areas where malaria is endemic; this results in as many as 10,000 maternal deaths per year. The case fatality rate for cerebral malaria in pregnant women approaches 50%.

Pregnant HIV-infected women who have malaria are much more likely to transmit HIV to their fetus, as opposed to those without malaria.

Maternal malaria infection increases the risk of spontaneous abortion, stillbirth, preterm birth, and low birth weight. Up to 14% of all low birth weight babies are born to mothers infected with malaria, and an estimated three to five percent of all infant deaths can be traced to maternal infection. Malaria parasites can cross the placenta and cause anemia in the newborn.

At the Africa Summit on Roll Back Malaria in April 2000, regional leaders outlined the commitment to reduce the incidence of malaria during pregnancy in the Abuja Declaration. The goal is to reach 60% of pregnant women in malaria endemic communities by 2005 by:

- Preventing and controlling malaria in pregnant women
- Encouraging the use of insecticide-treated nets
- Providing prompt access to treatment and
- Responding to malaria epidemics and emergencies

WHO guidelines for the prevention and treatment of malaria during pregnancy include:

- The use of preventive measures such as chemoprophylaxis and/or intermittent preventive treatment (IPT) for pregnant women, especially those in their first pregnancies
- Access to a suitable combination of personal and community protective measures, such as insecticide-treated bednets (ITNs).
- Correct, affordable, and appropriate treatment within 24 hours of the onset of symptoms

WHO presently recommends an optimal schedule of four antenatal clinic visits, with three after quickening. The delivery of IPT by directly observed therapy (DOT) with each scheduled visit will likely assure that a high proportion of women receive at least two doses. There is no evidence that receiving more than 3 doses of IPT during pregnancy offers extra protection, nor any data that receiving more than 3 doses harms the fetus. IPT should not be given more than once a month.

Malaria in pregnancy interventions

There are several interventions that can be implemented to help reduce the mortality and morbidity:

- Increase public awareness about malaria in pregnancy, its consequences and prevention
- Introduce routine intermittent preventive treatment – sulfadoxine-pyrimethamine (SP), given by DOT after quickening, (now no restriction on timing of last dose)
- Encourage early diagnosis and prompt treatment of malaria
- Promote use of insecticide treated materials especially nets (ITNs)

Opportunities for intervention include:

- Program opportunities – 60% of pregnant women make four or more antenatal care visits. Many more make at least one.
- Drugs – IPT and case management
- ITNs
- Treatment of anemia – iron/folate tablets and nutritional counseling

Antenatal care provides an opportunity to:

- Help clients recognize the danger signs in pregnancy and during and after delivery.
- Encourage the provision of SP as IPT to antenatal clients in endemic areas
- Improve the provision of iron, folate and tetanus toxoid
- Improve interpersonal communication between provider and client
- Improve record keeping in the antenatal clinic

Studies in Malawi and Kenya show significant reduction following IPT with SP in the second and third trimesters. Studies in Siaya show ITNs may confer protection against malaria infection among pregnant women, confirming findings from southeast Asia and the Gambia.

Kenya's experience

Maternal mortality in Kenya is estimated at 590 deaths per 100,000 live births, and there are indications that this may be worsening (KDHS 1998). In order to improve maternal and neonatal health in Kenya, DfID, in conjunction with the MOH through JHPIEGO, sought to disseminate focused antenatal care MIP guidelines in 19 malaria endemic districts with a particular focus on IPT for pregnant women. The goal is that by 2006, 60% of pregnant women will have 2 doses of IPT (SP) in the second and third trimesters, 80% of women with fever or anemia will be appropriately managed at ANC clinics and 60% of pregnant women will be sleeping under ITNs.

In a study in Kilifi, IPT significantly increased mean hemoglobin and decreased maternal parasitemia, placental parasitemia and low birth weight (see box). The protective efficacy of IPT with SP was 85% for peripheral parasitemia, and for severe anemia, the protective efficacy was 39%. Even women who booked late and received only one dose of SP benefited significantly. The effects were seen in women who owned ITNs as well as those who did not (Shulman, et al., 1999)..

| | Case management | Two-dose SP | Monthly SP | p |
|--------------------------|--------------------|----------------|---------------|---------|
| | N=472 | N=432 | N=431 | |
| Mean Hb. | 9.9 | 10.2 | 10.4 | < 0.05 |
| Maternal parasitemia | 27% | 9% | 7% | 0.004 |
| Placental parasitemia | 27% | 12% | 9% | < 0.001 |
| LBW | 14% | 8% | 8% | 0.01 |

Source: Steketee 2001

In Western Kenya, a study of the impact of ITNs on maternal and newborn health found that ITNs were associated with positive reductions during pregnancy and at delivery. During pregnancy, among gravidae 1 to 4, ITNs were associated with a 38% reduction in peripheral parasitemia, 21% reduction in all causes of anemia and a 47% reduction in severe malarial anemia. At delivery, a 23% reduction in placental malaria, 28% reduction in low birth weight and a 25% reduction in adverse birth outcomes was observed (Shulman, 2001).

Kenya chose ANC as the programmatic vehicle for promotion of SP and ITNs because ANC attendance tends to be very high in Kenya: over 90% of women go for at least one ANC visit.

Kenya developed orientation materials and job aids for service providers and an orientation package and brochure for the community.

Implementation activities included:

- Advocacy at the central and district levels
- A baseline/situational analysis in 4 districts
- Adaptation, pretesting and reproduction of orientation materials
- Training of providers
- Dissemination of focused ANC packages and national malaria control guidelines in the 19 districts
- Support supervision in approximately 25% of the facilities
- Repeat of baseline data collection
- Evaluation and report writing, and
- Dissemination

Overall, there were improvements in baseline statistics:

- The number of women getting at least 1 dose of IPT increased from 66 to 77% The number of service providers giving IPT increased from 67 to 93%.
- There was an increase in the number of women discussing warning signs during pregnancy, during delivery and postpartum
- An increase in the proportion of women receiving iron and folate (56% to 59%)
- An increase in women attending ANC and making a birth plan (48% to 53.3%)
- A slight increase in women expressing satisfaction with services (74% to 75%)
- An increase in ANC providers receiving an update in RH and malaria (27.5% to 52.5%) and
- An increase in the number of service providers who know seven or more warning signs during pregnancy, labor and delivery and who are able to manage malaria

There are several reasons why this program worked. These include:

- The fact that national guidelines already existed and SP was an accepted intervention
- Simplified, user-friendly guidelines were developed
- Advocacy at the district and community levels
- There was reinforcement and support supervision
- A simple orientation package and job aid for health care workers
- A very lively and interactive training approach
- The project used an already-existing decentralized training system
- Trainers were already prepared in training skills and
- There was collaboration at different levels of the health system and among different types of health workers

The program did face a number of constraints at the national and facility levels. At the national level:

- The challenge of getting 2 vertical programmes (RH and Malaria Control) to work together

- Advocacy and support gathering from stakeholders took a large amount of time and effort, but was essential
- Material finalization, adoption and agreement with stakeholders took longer than expected
- Availability of staff was hampered due to other national activities, e.g. immunization drives
- There was a disconnect between the national policy on free provision of SP and actual practice at health facilities.
- TBAs still play a crucial role in care for birth, even though recommendations are that women give birth in facilities with trained providers

At the facility level:

- It is difficult to change provider practices
- The lack of clean drinking water and cups made it difficult to provide SP using DOT
- The cost of routine laboratory testing is beyond the reach of the average ANC client
- Record keeping practices are often poor – need revised ANC cards to encourage record keeping compliance

Since the implementation of this project, the MOH has adopted the FANC/MIP approach into the National Reproductive Health Curriculum. FANC/MIP materials have been accepted by the MOH as standard materials for training in FANC/MIP and are available at health facilities. FANC/MIP has been incorporated into district work plans. Lastly, the program is proving sustainable—the MOH is undertaking the FANC/MIP program with minimal technical assistance.

The Kenya program is one example that shows that ANC and malaria in pregnancy can be addressed efficiently, extensively and effectively. Even with this success, several issues remain to be addressed as the program continues. For example, an effective way to distribute ITNs through ANC is still needed; the community needs to be involved more effectively and policies and guidelines need to be revised as resistance to SP increases. Next steps include continuing to strengthen the PMTCT part of the package and launching a new emphasis on FP in ANC. ANC is seen as a platform for delivering many interventions.

There was a group discussion on malaria in pregnancy:

Indonesia. Indonesia is now thinking about having a malaria in pregnancy policy. The government is now aware of its importance and is doing an assessment on MIP in 4 countries – India, Bangladesh, Myanmar and Indonesia. This will give baseline data about the situation and then the country will undertake MIP activities. A planning meeting is set for January 2005 to share the baseline data and plans and to develop a MIP strategy.

Tanzania. In Tanzania, guidelines for MIP are in place. There is a lot of education of women on MIP--posters in ANC clinics (a woman 5-6 months pregnant taking SP, and a picture underneath of another pregnant woman taking second dose at 7-8 months). Everyone working in ANC knows the MIP guidelines and ITNs are sold at a subsidized price in the ANC clinic. Every woman coming to the under five clinic is told about ITNs. A monthly chloroquine program was already in place so it was easy to change to SP with 2 doses

Ghana. Ghana has recently included MIP prevention, with SP, into the national ANC protocol. There has been a national level training that trained regional resource teams who are training service providers (this is ongoing). There is social marketing of ITNs and ITNs are subsidized or free for pregnant women. The biggest challenge is that although ANC is free, women have to pay for their drugs and it is difficult to get SP to the service delivery points.

Malawi – IPT has been in place for a number of years as part of the national malaria control program. DOT is now a national policy. ITNs are socially marketed, sold at a very low cost to pregnant women.

For more information:

Patricia Gomez (Baltimore)
pgomez@jhpiego.net

Dr. Pamela Lynam (Nairobi)
plynam@jhpiego.net

WHERE THERE ARE NO SKILLED PROVIDERS

Donna Vivio, Deputy Director, MNH Program, JHPIEGO

Objectives

- Definitions
- History
- Increasing survival using unskilled providers
- Paradigms

The role of unskilled providers in preventing newborn and maternal mortality is a controversial topic. What do we mean by an unskilled provider? Let's start by defining a skilled provider. A skilled birth attendant is a midwife, physician or nurse who has completed nationally recognized professional training and is proficient in basic techniques for clean and safe delivery, recognition and management of prolonged labor, infection and hemorrhage; and recognition and resuscitation of neonates who fail to initiate respirations at birth (Institute of Medicine).

Who is an unskilled provider? Someone who is untrained, not a professional. It can be a family member, TBA, other community health provider, or a traditional healer.

A TBA is a layperson who assists women in many rural settings during labor and delivery. Has minimal formal education, minimal or no medical training, minimal or no medical oversight and generally a low caseload (Institute of Medicine).

Preventing maternal and neonatal mortality—the history of safe motherhood (SM)

After the 1987 conference in Nairobi, the world took notice and decided to act. The first SM initiative began. Following the above, TBA training took off, the focus was on the development of training models (e.g., life saving skills, etc.). In

1997 in Sri Lanka, we came together again to look at the effect SM programs were having on maternal and newborn mortality. We found that those births with skilled attendance seemed to result in improvement of newborn survival, but the training of TBAs had no effect on decreasing newborn/maternal mortality.

Thus our current paradigm. Best evidence indicates that use of a skilled attendant at birth is the most effective at decreasing maternal mortality. The investment of funds and effort in TBA training is not supported.

However, 60% of all births globally are attended by unskilled providers. It will take many years to have sufficient numbers of skilled providers to attend all births.

In terms of human rights and equity – all efforts in SM are benefiting the poor, but they are not benefiting the poorest of the poor, not getting into the most hard to reach areas where women are delivering, as most of these women do not have access to skilled providers. We will need to rethink how the poorest of the poor will be reached.

Why do women use unskilled providers?

In many cases it is the community/woman's preference. TBAs provide companionship during labor and delivery, they accept easy payments (in kind, rather than cash, etc.), there is less restriction when with the community midwife. Birth becomes a family event. TBAs are more accepted by the community because they come from the community--they share the same language and culture, women have confidence in them, and sometimes there are no alternatives. Also, the TBA respects privacy and freedom of movement.

In Zambia, a baseline study on active management of third stage of labor (AMTSL) asked women attending ANC questions about where they would deliver. The study found that women could be influenced by her provider as to where she wanted to deliver. In Indonesia, the government of Indonesia decided to provide skilled birth attendants in all communities, but women preferred a TBA to a community midwife. (In many cases, the community midwife was not from that community.) Eventually this resulted in a partnership between the two.

There are also issues of accessibility. In Mozambique, a study found that women preferred to give birth in a health facility as they perceived it to be safer. In Indonesia the SAFE study used community volunteers to deliver medication to prevent postpartum hemorrhage (PPH).

In some areas the paradigm is changing. There seems to be a transitional use of skilled providers. Their linkage to the community can provide increased access to skilled providers.

A meta-analysis on the effectiveness of TBA training found that TBAs weren't getting the right skills if the goal of the training was to lower mortality. A recent study on whether or not trained TBAs had effect on ANC initiation seemed to show a 30% increase in ANC uptake when women were counseled by TBAs. In India, village health workers (VHWs) were taught to diagnose and treat newborn respiratory infections. An evaluation found that newborn mortality decreased by 50%. The VHWs had 5 to 10 years of education and were supervised by physicians.

The SAFE study in Indonesia was a community intervention where community volunteers counseled and provided medication to prevent PPH (AMTSL in the community setting). The community volunteer (kader) counseled on the use of a skilled birth attendant (where possible), gave misoprostol with instructions for its use, and also followed up with mother and baby postpartum.

Unskilled providers can be used to promote health. They can:

- Distribute medications for malaria in pregnancy
- Assist with PMTCT
- Register pregnancies and births
- Help with birth preparedness/complications readiness
- Distribute Vitamin A

It is important to recognize the link between the community and the formal health system. We must consider the context, formalize partnerships and give appropriate knowledge and skills to the community and to unskilled providers.

Examples of incorporating TBAs into safe motherhood plans

Malaysia

Malaysia is a good model to look at. The country decided to tackle the issue of maternal mortality and made decision to have births (which were mostly occurring at home with TBAs) in facilities with skilled providers. TBAs were gradually incorporated into the system. For example, the skilled birth attendant went into the home with the TBA, and would bring the TBA to the hospital when there were complications. This midwife/TBA partnership resulted in a decrease in the maternal mortality ratio.

Guatemala

In the MNH program in Sololá, TBAs were welcomed into the health care facility to provide support to women. This increased women's satisfaction with the facility-based birth, and there was a slight increase in number of births within the facility.

Indonesia

In a partnership between the community midwives and TBAs, the TBA is there to do the birth, the midwife is there if there are any problems. If the mother needs to be transferred, the TBA will go with mother to the facility. The TBA provides postpartum support for mother and baby for first 40 days. Some districts have put regulations/sanctions in place if there is no partnership between the midwife and TBA (such as a financial penalty).

Ethiopia

In a child survival project in Ethiopia, TBAs were part of the village health team (Bridge to Health team). Community partnerships for maternal and newborn health were developed beginning in 2000. The local referral facility was strengthened and there were trainings in home based life saving skills. The program is still continuing – about 300 TBAs as well as other members of the village health teams have been trained. There are no preliminary results yet, but it seems that TBAs trained in basic delivery care and LSS such as resuscitation are doing very well.

Where are we now?

There is an increased recognition of the importance of community and an increased interest in and research on the potential of unskilled providers to further efforts at MNH and survival. There is an emerging paradigm:

- Communities have a right and responsibility to be involved in and to make decisions on ways to improve MNH and survival
- Unskilled providers are key to the linking community to the health care system
- There is an important role for unskilled providers to play in the prevention of maternal and newborn deaths.

Q&A

Q: What is the training and criteria for community midwives (CM) in Indonesia?

A: A CM in Indonesia is the midwife who lives in the village/community, and who provides ANC and postnatal care in the community. They have a place where they deliver babies. There is a government policy on 1 village, 1 midwife—the midwife joins with the TBA to take care of the mother. The TBA gives cultural and social support to mother and also helps the mother with household work after delivery. The TBA does not provide the ANC or intrapartum care.

PREVENTION OF MORTALITY FROM POSTPARTUM HEMORRHAGE

Donna Vivio, Deputy Director, MNH Program, JHPIEGO

Killian Like, Program Manager, Zambia, JHPIEGO

Harshad Sanghvi, Medical Director, MNH Program, JHPIEGO

Objectives

- Discuss the scope of potential interventions for PPH prevention and treatment
- Describe innovations
- Champions for change: global efforts – USAID PPH initiative and interventions in your own sites

What is postpartum hemorrhage (PPH)? PPH is excess blood loss after the birth of a baby. PPH is blood loss over 500ml, severe PPH is blood loss over 1,000ml.

Of the roughly 529,000 maternal deaths each year, 99% are women in developing world and 25-60% of these are due to PPH. Many more women experience long-term morbidity.

Up to 90% of women who experience PPH have no identifiable risk factors. Past teaching has included looking for signs, characteristics that increase the risk of PPH including multiparous women, those with previous PPH, polyhydramnios.

Now there are two approaches for reducing maternal mortality from PPH:

1. Prevention of PPH
 - AMTSL
 - Restricting episiotomy
 - IP practices
2. Management of PPH
 - Birth preparedness and complication readiness
 - Lifesaving skills
 - Emergency obstetric care

Putting the newborn baby to breast has not been shown to reduce the risk of PPH. It was postulated that putting the baby to the breast would stimulate the natural production of oxytocin and facilitate contraction of the uterus. A randomized controlled study of suckling immediately after birth with over 4,000 subjects in Malawi found no significant difference in the frequency of PPH, mean blood loss or retained placenta. (Bullough, Msuku and Karonde, 1989. Results should be viewed with caution because in the community which was examined, putting baby immediately to breast after birth was not custom, also women not assisted with attachment, so there are some reservations on the study's findings.) We should not avoid putting baby to breast, but we can't say that this is a good way (on its own) to prevent PPH.

USAID has a Special Initiative on Prevention of PPH 2002-2004. Program components include:

- R&D on new technologies
- Advocacy/policy
- Country-level implementation in:
- Policy

- National standards
- Training/human resources
- Quality improvement
- Logistics
- Birth preparedness
- Community mobilization
- Monitoring & evaluation

A joint statement on management of the 3rd stage of labor to prevent PPH was developed by ICM and FIGO and the USAID PPH initiative. This was the first joint statement on anything. It says that:

- Active management of the third stage of labor (AMTSL) should be offered to women since it reduces the incidence of PPH due to uterine atony
- Every attendant at birth needs to have the knowledge, skills and critical judgment needed to carry out AMTSL and access to needed supplies and equipment

The statement was launched at FIGO and ICM meetings, it was now being disseminated. An action plan was also developed. Bring this statement back to your own countries and organizations, as tools for further advocacy efforts on AMTSL.

The management of labor can be expectant or active. In the physiological (“expectant”) management of labor:

- Uterotonics are not used
- The placenta is delivered by gravity or maternal effort
- Cord is clamped after the delivery of the placenta

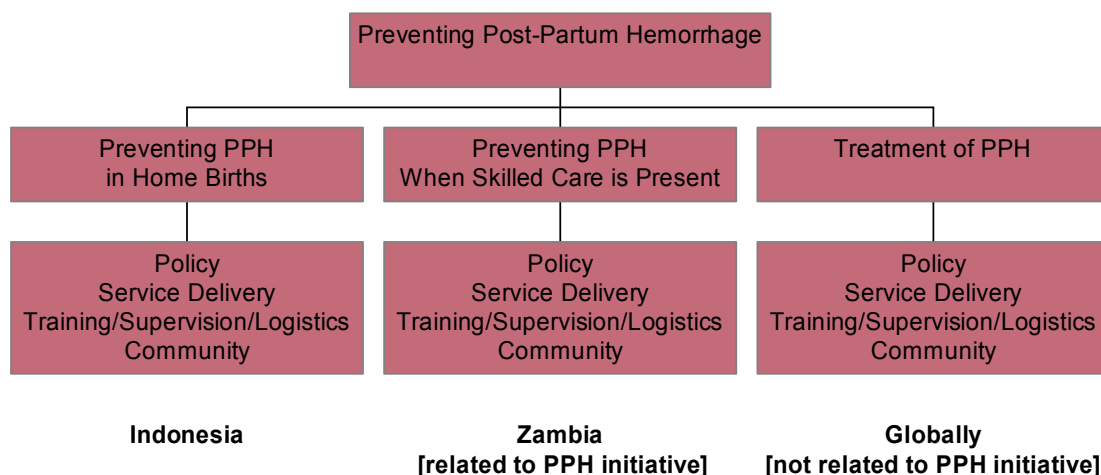
Active management includes:

- Uterotonic given after birth of baby
- Placenta is delivered by controlled cord traction (CCT) with counter-traction on the uterus
- Uterine massage is used to maintain uterus in contracted state (after placenta has been delivered). This may be an issue of having enough staff to check woman’s status every 15 minutes for first 2 hours after birth

It is estimated that to prevent one case of PPH, will need to perform AMTSL with 12 women; to prevent one case of severe PPH, will need to perform AMTSL with 57 women. A costing study in Zambia and Guatemala asked, “does routine AMTSL decrease health facility costs?”

Preliminary results for Zambia report that for each 10,000 births, the routine practice of AMTSL would result in an additional US \$5,200 in costs to the facilities. This would be offset, however, in cost savings of US \$12,700 for expenses related to the management of PPH and the complications averted by the use of AMTSL. 47 maternal deaths would be avoided.

MNH’s PPH intervention strategy includes preventing PPH at home births (Indonesia), preventing PPH where skilled care is present (Zambia), and treatment of PPH (globally) (see graph).



In Zambia, AMTSL was endorsed at the national level and adopted as part of midwifery curriculum. However, clinicians historically prefer ergometrine, data monitoring infrastructure is weak, and many give birth without a skilled attendant.

An intervention was designed to increase the use of AMTSL. Guiding principles of the intervention included:

- Involvement of key stakeholders from beginning
- Obtain stakeholder consensus on approach
- Help district-level stakeholders develop appropriate action plans
- Assess and strengthen existing AMTSL efforts
- Integrate new interventions in to existing structures
- Provide holistic, systems-level, PQI solutions at the policy, service delivery, logistics/training/supervision and community levels

The process included:

- Baseline data collection (4 districts)
- Data analysis and synthesis
- Strategic planning meetings with district stakeholders – one similar action plan was developed for all districts
- Implementation of plans (ongoing)
- Follow-up visits
- Follow-up data collection (just completed and data in process of analysis)

Problems and solutions

PROBLEM: AMTSL not being practiced

INTERVENTION: Orientation for stakeholders, knowledge update for doctors/midwives on AMTSL, follow-up visits, provide AMTSL job aids

PROBLEM: AMTSL records are incomplete. AMTSL records are not appearing on delivery records, only in patient's file.

INTERVENTION: Added 3 columns to the delivery record for oxytocics given, fundal massage performed and CCT performed

PROBLEM: Poor IP practices

INTERVENTIONS: Orientation for stakeholders, provision of IP guidelines to all facilities, procurement of IP supplies regularly

PROBLEM: Drug management system poor

INTERVENTIONS: Provision of guidelines on maintenance of the cold chain and storage, update for midwives on managing the inventory

Preliminary results

AMTSL procedures are now being performed at 93% of facilities, up from 45% at baseline (sample survey). IP practices are generally improved

Treatment of PPH: current approaches

Minor procedures—these are basic procedures, which every skilled provider must be able to do:

- Bimanual compression
- Suturing of lacerations
- Aortic compression
- Manual removal of placenta

Major procedures—for more highly trained personnel:

- Uterine artery ligation
- B-Lynch procedure
- Hysterectomy
- Management of shock—IV fluid and blood

Innovations for treatment of PPH

- Anti-shock garment. This was developed for treating war-related injuries. It is a pressure garment to help blood flow better. It buys transport time. Currently being tested in Tibet and Pakistan. The equipment is expensive.
- Medical management with misoprostol – several studies going on right now (treatment of PPH)
- Hydrostatic tamponade using a condom. Advantages to this approach: it is easily available, latex is quite resistant to pressure, inexpensive, quick to assemble and rapid results. To do this procedure:
 - A condom attached to a rubber catheter is introduced into the uterus under aseptic conditions
 - Condom is inflated between 250 to 500ml normal saline
 - When bleeding is reduced, stop further inflation and fold and tie outer end of the catheter to maintain pressure
 - Continue oxytocin infusion for 24 hours
 - Keep condom in uterine cavity for 24 hours, then deflate gradually over 2 hours and remove.

In Bangladesh, condom tamponade was used in 40 cases of PPH that did not respond to minor surgical procedures, avoided hysterectomy in 38 of these 40 cases.

There is also a need to look at new approaches for preventing and treating PPH that take into account the situations encountered in developing countries:

- Emergency care is largely unavailable for home and remote health facility level deliveries
- No cool/cold chain: oxytocin and other injectable uterotonics require refrigeration to maintain potency
- Ergometrine is contraindicated with hypertension in pregnancy
- Injection safety remains major problem
- Few women have access to skilled care

Seeking solutions for births that occur without skilled care

The SAFE study in Indonesia was designed to demonstrate that community-based distribution of misoprostol during the ANC period and use of the drug immediately after the home birth of a baby can:

- Lower the incidence of PPH,
- Is safe,
- Is acceptable to women and families,
- Is programmatically feasible

Misoprostol is a synthetic analog of prostaglandin E₁. It is also known as Cytotec®. It was used in the treatment and prevention of NSAID-induced peptic ulcer by is not mostly used for obstetric indications. It can be used orally, buccally, vaginally and rectally. It acts rapidly and one dose lasts for 20-40 minutes. Its predictable side effects include shivering and fever.

A comparison of the risk of postpartum hemorrhage by the type of management of the third stage of labor shows that misoprostol closely compares to AMTSL with oxytocin:

| Risk of Postpartum Hemorrhage | |
|--|---|
| <i>Type of Management of the Third Stage of Labor</i> | <i>Blood Loss of >1,000ml</i> |
| Physiologic (expectant) | 13% to 18% |
| Active (oxytocin) | 2.9% |
| Misoprostol | 4.0% |

Source: Prendiville et al 1988; Villar et al 2002

The intervention consisted of counseling about PPH by community volunteers during home visits to pregnant women and the giving of information on the safe use and distribution of misoprostol.

The community volunteers talked about PPH and how to prevent it. They told women about:

- The warning signs of dangerous bleeding
- What to do if hemorrhage occurs before or after the delivery
- Where to seek emergency medical care
- The role of the midwife in AMTSL
- Use of oxytocin injection and common side effects.

The volunteers also gave information on misoprostol and distributed it when a woman was 8 months pregnant. The woman was instructed on:

- The safe and correct timing for use of misoprostol
- Risks of taking the tablet prior to delivery,
- Common side effects and what to do about them,
- Where to go if PPH occurred, even after taking the medication

The PPH study successfully demonstrated that combination of AMTSL using oxytocin provided by a midwife and use of misoprostol by woman if a midwife is not available has the greatest potential for expanding the prevention of PPH.

This initiative is suitable for countries/regions where a large proportion of births are not attended by skilled providers. It is suitable for areas with an existing network of community workers or volunteers who are willing to visit all pregnant women. It is crucial to invest sufficiently in training and supervision and on monitoring progress.

Issues that need to be addressed include:

- Ensuring commitment at the national level to scale up, if introduction of intervention is successful in a small area
- The registration of misoprostol and authorization by appropriate regulatory body for its use for prevention of PPH
- Obtaining approval for the distribution of misoprostol by trained community workers/volunteers
- Home distribution of misoprostol versus outreach distribution. We can potentially reach women through ANC clinics, but it takes about 30 minutes to provide all the necessary information on this initiative. Providers at ANC may not have time for this

Are we at the tipping point for this intervention?

Q&A

Q: Given staff shortages, how are you managing to do uterine massage every 15 minutes?

A: Midwives do this as they pass through the ward – could woman be instructed to do the massage herself? In Burkina Faso they teach mothers to do this themselves and tell them the signs to look for when they need ask for help. The main issue is that the person who has just delivered needs to be monitored for the first 2 hours--not just uterine massage, other observations as well, so there is a need for a skilled provider.

Q: Any evaluation of the provider's perception of extra interventions (time and record keeping)?

A: No data on this.

COMMENT: Proper storage of oxytocin is very important, need to involve the pharmacy in this. Storage of oxytocin in main fridge, then it can be taken out and put in labor ward in a cool area for XX days.

COMMENT: This (condom tamponade) goes against the principle of trying to keep uterus contracted.

A: You are keeping the uterus enlarged but you are keeping a tamponade on it which allows the coagulation mechanism to work. There are some amazing results from these studies which show that this works really well.

Q: How do you put on the anti-shock garment?

A: Put on all the pieces. The first ones are the tightest, and the last ones are the loosest.

COMMENT: We're not quite at the tipping point.

COMMENT: In Nepal, new ways of looking at PPH are very important. Geography and culture are barriers. This (misoprostol distribution by community volunteers) is an alternative until we get more skilled providers. Nepal has asked donors to help fund this, and it will also be starting in Burkina Faso using TBAs to provide misoprostol at time of birth, and in Afghanistan. In Indonesia, it was felt that the person who should keep the medication is the one who will always be present at the birth—the mother herself--and also did not want to promote TBAs for treatment. It was thought that this was contrary to efforts to emphasize the need for a skilled attendant.

CHANGING PRE-SERVICE EDUCATION

Robert Johnson, Senior Maternal and Child Health Advisor, MNH Program, JHPIEGO
Asmuyeni Muchtar, Infection Prevention Specialist/Midwifery Advisor, STARH Project

Objectives

- Describe the continuum of professional development
- Identify the components of pre-service education
- Define core competencies and describe their role in pre-service education
- List the challenges to be faced in changing pre-service education

There are several guiding principles that underlie the education of health care providers. The education must:

- Address the priority health needs and problems within a society
- Identify national policies, guidelines and standards that are relevant to those needs and problems, and
- Define the expected role of healthcare providers

Education should prepare health care providers to be caregivers, decision-makers/problem-solvers, communicators, community leaders, and managers; the delivery of health care services is not the only function of the provider. Most of our institutions do a good job developing caregivers, some success in developing decision makers and communicators but most offer limited preparation as community leaders and managers.

In general, professional education begins with secondary or undergraduate education and continues throughout professional practice through in-service training and continuing education. Health care providers are expected to be life-long learners.

Pre-service education is the education one gets before going into service or practice. It is generally formal, broad and comprehensive. It should be based on the actual services that graduates are expected to perform once they leave the learning institution. In reality, this is often not the case, because:

- Curricula are outdated, often by many years
- Curricula designed by educators, not providers
- Clinical practice during training does not relate to required competencies upon graduation.

There are several challenges to changing pre-service education. These include:

- Difficult to ensure that students get all necessary skills in the clinical area
- Disconnect between classroom and real life situation
- Assessing students' competency is a challenge
- Teachers and training materials are not up to date
- Information overload (adding new materials to the curriculum without eliminating any old materials)
- Large numbers of students and insufficient numbers of teaching staff
- Limited opportunities to practice and master skills

- Poor monitoring of students' progress, leading to limited opportunities for providing feedback to students
- Facilities used for clinical practice that are not always representative of the facilities, such as outpatient clinics, where graduates will work
- The need to develop competencies that are difficult to teach, such as decision-making, problem solving, ethics and values
- The difference between the ideal world, where all resources are available, and the real world, where resources and technology are scarce
- Poor quality materials and equipment, and limited access to computers and up-to-date reference materials
- Little coordination between different teaching units and different levels of study, and between theoretical and practical portions of academic programs
- High turnover of teaching staff
- Practical experiences that are separated from, and do not always, reflect, the associated theoretical experiences

Core competencies

The best place to start with the pre-service education of health professionals is with core competencies. A core competency is a skill that every student has to learn. It is essential to practice, meaning that without it, the provider won't be able to deliver effective services. The skill must be mastered in order to graduate from an academic program and enter into practice. Each core competency for an academic program encompasses cognitive (knowledge), psychomotor (skills) and affective (values and behaviors) domains that are observable and can be appraised. These are called KSAs.

Core competencies are defined by answering the following questions:

- What is the job description for the position the student may hold after graduation?
- What knowledge, skills and attitudes are experienced health professionals in that cadre applying in the workplace?
- What are the licensing requirements in the related field?

Teaching core competencies requires a new way of thinking about teaching health professionals. It involves:

- Curriculum re-design
- Improved classroom teaching
- New clinical practice approaches and
- Revised student assessment methods

These are the essential elements of effective pre-service education. In order to learn effectively, students require opportunities for assessment and feedback as they integrate new KSAs. The practice environment must be conducive to learning and applying the new competencies.

Example from Indonesia—strengthening pre-service midwifery education

Midwives in Indonesia have a wide range of responsibility. The breadth of their practice includes maternity care, newborn care, FP, child health, and primary health care. In many areas a midwife

is the only health provider in the community. The core competencies a midwife needs are defined as follows:

- Psychomotor skills
- Clinical decision making skills
- Communication skills
- Leadership skills
- Administration skills

The clinical practice students receive often do not reflect these needs:

- Students practice with little or no supervision
- Students are supervised by whichever staff member is on duty – no one is able to monitor progress
- Practices at the clinical sites do not reflect practices that are taught in the classroom
- There is frequent rotation of clinical sites (two weeks at one site, two weeks at another)
- Large groups of students are assigned to one clinical site
- Clinical practice sites are often not representative of the types of clinical settings where students will work upon graduation

Two approaches were taken to strengthen pre-service education for midwives in Indonesia: strengthening the classroom component and strengthening the clinical practice component. The classroom-training component was strengthened by:

- Incorporating evidence-based practices into the curriculum and reference materials
- Updating the clinical knowledge of the faculty and improving teaching skills
- Ensuring students are competent in the lab before going to a clinic

The clinical practice component was strengthened by:

- Identifying and training clinical preceptors who are designated and available to supervise students at all times
- Identifying and strengthening new clinical practice sites, including private practice midwives and home-based practice settings
- Reviewing and modifying the clinical rotation schedule for students
- Reducing the preceptor-student ratio
- Defining objectives for clinical practice that reflect student progression from one semester to another

A trained preceptor is assigned to an individual or to a group of students through an entire clinical rotation. Students work in small groups in the early semesters and then work one-on-one with a preceptor in the last semester. If students work in groups, one preceptor works with no more than five students.

Throughout the entire semester, students remain in one clinical practice site. Sites include private midwife practices, home-based practices and community health centers. If it is necessary to change practice sites for more varied experience, the assigned preceptor moves with the student. To the extent possible, students are able to choose which type of practice site they prefer for training.

As a result of these changes in pre-service training, students felt that their learning was more directed, they felt safer and more confident and they felt that their preceptors were good role models. The preferred practice site was a combination of a health center and a private midwife practice. Improvements in clinical practices were noted including use of a partograph, infection prevention, active management of the third stage of labor, and documentation. The MOH is now encouraging all schools to implement this new approach.

Example from Egypt—strengthening pre-service medical education

Egypt has 17 government-recognized medical schools. Each school accepts between 500 and 1,200 new students annually. Before a decision was made to improve pre-service education in Egypt's medical schools, there was no standard curriculum among the schools and there was inadequate clinical training. (This was the biggest single challenge.). Oral and essay exams were used to evaluate students. All education was in English, yet students had weak English skills. A licensure and accreditation system was planned but not yet in place.

A four-pronged approach was taken to strengthen medical training:

1. Revise and standardize curricula in obstetrics/gynecology, pediatrics and community medicine
2. Improve the quality of classroom teaching
3. Strengthen clinical training
4. Implement more objective methods of student assessment

The curriculum revision was done by a national curriculum committee with representation from most of the medical schools. The new curriculum was completed in 2003 and is undergoing an approval process in 2004. The new curriculum includes listings of core competencies, developed with input from the Ministry of Health and Population.

Classroom teaching was improved as well. Educational Development Centers (EDCs) were established at each school. This was mandated by the Supreme Council. EDC staff were trained in modern classroom educational methods using the WHO/JHPIEGO manual *Effective Teaching: A Guide for Educating Healthcare Providers*. EDC staff is now doing second-generation training workshops with rest of faculty members.

The greatest challenge faced in strengthening clinical practice was the large number of students. The faculty/student ratio is 1 faculty for 4 to 5 students, but faculty members are only part-time—they work at the school for a few hours and then go off to their private practice. The medical students have a house officer year after graduation where they learn most of the hands-on skills; nurses have an internship year. To overcome this lack of clinical training, a skill lab was established for skill learning before students encounter patients. The number of clinical practice sites and the number of hours those sites are available to students was increased. Clinical practice sites were established at more primary health care sites and fewer inpatient wards.

In order to establish an objective student assessment system, the EDCs are training faculty in developing objective tests. They are setting up question banks at each school and, if security can be assured, a national on-line bank will be developed. Faculty members are being trained in the

use of computer-based software to develop objective tests. So far, EDCs have been trained in five schools and another five schools will begin training in September 2004.

So far, the results of this effort are encouraging. There is a high level of enthusiasm on the part of the schools, especially the EDC staff and the junior-and middle-level faculty. Second-generation training workshops have begun. The groundwork is being laid for a national system of accreditation of schools and the licensure of graduates.

Conclusions

Effective pre-service education should be based on core competencies and emphasize clinical practice combined with theory. Students should be aware of the core competencies they are expected to develop during their pre-service education. Faculty members require training to develop their own classroom and clinical teaching skills.

Still challenges remain. The remaining issues that need to be addressed include:

- How to implement changes in pre-service education in more schools and more countries?
- How to resolve the problems of inadequate clinical practice experience?
- How to ensure positive changes in pre-service education even in lowest-resourced situations?
- How to change faculty members' attitudes and beliefs, especially among senior faculty members?
- How to change antiquated standards of health professional education?

For further information:

Modern teaching methods: Rick Sullivan
rsullivan@jhpiego.net

Indonesia: Anne Hyre
ahyre@jhpiego.net

Egypt: Ron Magarick
rmagarick@jhpiego.net

HEALTHCARE PROVIDER RESPONSIBILITIES IN GENERATING AND USING MONITORING DATA

Joy Fishel, Monitoring and Evaluation Advisor, MNH Program, JHPIEGO

Why is monitoring and evaluation (M&E) so important? First, it helps improve program implementation. M&E provides data on program progress and implementation helps improve program management and decision-making and provides data for future resource needs. Second it allows a program to provide data to stakeholders (including funders). This allows for accountability and advocacy.

Or, to put it another way:

What gets measured gets done – choose to measure those things which we value most

- If you don't measure results, you can't tell success from failure
- If you can't see success, you can't reward it
- If you can't see success, you can't learn from it
- If you can't recognize failure, you can't correct it
- If you can demonstrate cost-effective results, you can win support and increase program scale

Monitoring helps answer two questions: are we doing the right things? and are we doing things right? What should you monitor? You should monitor what is most useful to you and your stakeholders.

When we ask if we are doing the right things, we can ask:

1. Is the program/MoH etc. developing the capacity of service providers and trainers in sufficient quantity and is that capacity distributed appropriately throughout each country? Data sources to answer this question include training forms and the Training Information Monitoring System (TIMS[®]) database.
2. Are providers offering antenatal, intrapartum, postpartum and newborn services? Data sources include log books, daily sheets, monthly reports and surveillance forms

Are we doing things right? For example,

1. When HCD interventions are provided, are they done according to protocol and with the appropriate training materials? Data sources include training checklists completed during direct observation, trainer qualification forms.
2. On a routine basis, are clients receiving ANC intrapartum, postpartum and newborn care in accordance with evidence-based standards? Data sources include patient records, birth registers, PQI checklists completed during direct observation, routine supervision of clinic activities (if reported on standard forms)

Indicators are markers that help to measure change in an event or in a process by showing the progress that is made towards meeting objectives. They need to be observable, measurable and agreed upon as valid markers of a less well-defined concept or objective. Indicators address specific criteria that will be used to judge the success of a project or program. For example, it is easy to observe hand washing, but it is difficult to observe decision-making process; easy to

measure numbers of episiotomies, but difficult to measure attitude or quality of care. It is much more difficult to come up with indicators for things that are hard to measure.

A well-designed indicator:

- Produces the same results when used more than once to measure the same phenomenon
- Measures only the specific phenomena it is intended to measure. We want indicators that link directly as possible to what we want to measure, so that we are not measuring other things. Then we know that our intervention is directly responsible for changes in the indicator
- Is sensitive to (will capture) changes in the state of the phenomenon under study
- Has operationalization that is practical and measurable with tested definitions, quality data and appropriate collection

It is important to calculate indicators correctly. To do so, you must define numerators and denominators. Specifying these will assist in identifying data sources. Sometimes it is difficult to figure out what the denominator is. For example, if the indicator is the percentage of doctors, nurses and midwives in the hospital trained in normal delivery care, the numerator is the number of doctors, nurses and midwives who have ever received in-service training in normal delivery care. The denominator is the total number of doctors, nurses and midwives on staff at the hospital. Tools to assist you in monitoring are in the following box:

| What to monitor | Tools available to monitor this |
|--|---|
| # trainers trained, # providers trained, # facilities/districts with competent trainer or provider | Training information management system (TIMS) |
| Training skills | Knowledge questionnaires, observation checklists in the Clinical Training Skills manual |
| Clinical knowledge and skills | Knowledge questionnaires, case studies, and checklists in "Guidelines for assessment of skilled providers" and "Monitoring BP/CR" |
| Quality of care meets established standards | PQI tools |
| Quality of care (general) | Quick investigation of quality, Service provision assessment |

Data quality is another important consideration. There are several ways to determine data quality including:

- Verify common sense answers, i.e. that interviewers are trained, surveys were tested, routine data is recorded on clear forms and reported on a regular, timely basis
- Maintain clarity in indicators -- phrasing, objective criteria in definitions, calculation
- Ensure that indicators appropriately match data
- Don't over interpret data or indicators when your data-quality confidence is low
- Don't under interpret data or indicators when your confidence is high

You can improve data quality by continuing to ask questions and reviewing processes (record-keeping, ongoing staff training, data analysis, etc.). You need to investigate anomalous results and don't trust answers you don't understand or that don't seem to make sense. Also remember to maintain a data quality paper trail.

One of the problems encountered when working with donors is that they want M&E to show an impact in a very short time. We need negotiate with and educate donors and others involved in decision-making, as they are not always involved in the data collection process so don't know the implications of what they are asking. It is also difficult when a donor's indicators are different from MOH indicators. Projects often must collect two different sets of data for two different stakeholders.

INTRODUCTION TO THE *BASIC MATERNAL AND NEWBORN CARE* MANUAL

Patricia Gomez, Director, Midwifery Services, MNH Program, JHPIEGO

Barbara Kinzie, Senior Midwifery Advisor, MNH Program, JHPIEGO

Objectives

- Become familiar with the contents of the BMNC manual and how to use it
- Understand how it can be used in pre-service and in-service settings
- Define ways to advocate for the use of evidence-based guidelines

The purpose of the *Basic Maternal and Newborn Care* (BMNC) manual is to provide an evidence-based manual describing basic care of the 85% of mothers and newborns experiencing normal pregnancies and childbirths, and postpartum and newborn periods. It serves as a guide to focused care that enables women to become participants in their own health care.

The manual is primarily used by skilled providers. It may also be used by facility managers, faculty and policymakers. Information in this manual can serve as the framework for providing good quality basic services. The emphasis in the manual is on “normal” but it has sections on stabilization, management, and referral of women and newborns with complications. It is intended for use with the WHO IMPAC manuals (MCPC and MNP). The authors of the manual realized that rigorous scientific evidence does not exist for every practice in basic care. In these instances, existing evidence and expert opinion was used. The manual was not written from the perspective of what a provider should do, rather it is written from the perspective of what the mother or newborn needs.

The BMNC manual is divided into four sections:

- Section 1:** Fundamentals of basic care (general principles, rationales, key skills)
- Section 2:** Core components of basic care (basic assessment and care in ANC, labor and birth, postpartum care and newborn care)
- Section 3:** Additional care (common discomforts, special needs, life-threatening complications)
- Section 4:** Annexes (IP, equipment/supplies, additional procedures, quick check, rapid initial assessment and referral/transfer, among other topics)

Chapter 1 Goals of Basic Care

- Promotion of health and prevention of disease
- Detection of existing diseases and treatment
- Early detection and management of complications – e.g., bleeding in pregnancy, the manual uses a signs and symptoms based approach (rather than diagnosis)
- Birth preparedness and complication readiness
- General principles of basic care
 - Skilled care provision – every woman needs skilled care, as every pregnancy has a risk
 - Woman and newborn-friendly care
 - Male involvement (ANC, labor and birth and postpartum care)
 - Culturally appropriate care
 - Individualization of care

- The care provision system (essential items/areas for basic care)
- Preparation of the care site – infrastructure, cleanliness and organization
- Emergency response system – identification, initial response, management or referral/transport
- Facility-community linkages – health committees, TBAs

Chapter 2 Rationales for Components of Basic Care

- Quick check
- Basic assessment (history, physical examination)
- Basic care provision
- Additional care provision (common discomforts, special needs, life-threatening complications)

Chapter 3 Key Tools in Basic Care

- Clinical decision-making – gathering and interpreting information; developing, implementing and evaluating care plan
- Interpersonal skills – effective communication, privacy and confidentiality, communication during the physical examination, counseling and health messages, encouragement and support
- Infection prevention – hand washing, use of gloves, antisepsis, personal protective equipment, instrument processing, housekeeping and waste disposal
- Record keeping – information and guidelines for accurate recording

Chapter 4 Conducting the Basic Maternal and Newborn Care Visit

This is the framework to follow for each visit (ANC, postpartum, newborn, etc.)

- Pre-visit activities
- Welcoming the woman and her family
- Conducting basic assessment – standardized protocol for every type of visit (gathering info, physical exam, lab exams, etc.)
- Providing basic care
- Scheduling a return visit

Chapter 5 Antenatal Care

- History – first and subsequent visits
- Physical exam – first and subsequent visits (how to perform abdominal, genital and vaginal exam)
- Testing
- Antenatal care provision (health messages and counseling)

Chapter 6 Labor/Childbirth Care

- Ongoing assessment
- History
- Physical exam
- Testing
- Care provision – key actions for the 4 stages of labor—ongoing supportive care, partograph, assist in pushing, assist in normal birth, immediate newborn care, active management of the third stage, immediate postpartum care and newborn care up to 2 hours post-delivery

Chapter 7 Postpartum care

Up to 6 hours after birth and up to 6 weeks postpartum

- Ongoing assessment
- History
- Physical assessment
- Testing
- Care provision

Chapter 8 Newborn care

Complementary to SNL and WHO manuals/documents

- Ongoing assessment
- History
- Physical exam
- Care provision

Chapter 9 Common Discomforts and Concerns

- Responds to woman's concerns – build trust
- Distinguishes common conditions from complications/illness
- Avoids unnecessary interventions if no pathology is present

Chapter 10 Special needs

- Maternal: adolescence, anemia, breasts and breastfeeding problems, female genital cutting, HIV, endemic diseases/conditions; violence against women
- Newborn – stillbirth or newborn death, low birth weight, mother with infections

Chapter 11 Life-threatening Complications

- Guidelines on management/referral of most common complications
- How to respond to danger signs—rapid initial assessment of the mother or newborn, resuscitation or stabilization, management or transfer

Annexes

- Preparation of the care site
- Essential equipment and supplies
- The partograph
- Additional procedures—pelvic exam, defibulation, breech birth, vacuum extraction
- Additional health messages and counseling
- Quick check – emergency section
- Guidelines for referral and transfer

The **Basic Maternal and Newborn Care Learning Resource Package** contains courseware designed for in-service education of skilled providers. It is based on JHPIEGO principles of adult and competency-based learning with a humanistic approach. For ANC there is a 1-week technical update and clinical skills standardization training and for CBC, PPC and NBC there is a 2-week technical update and clinical skills standardization training.

CHAMPIONS FOR CHANGE: REGIONAL MATERNAL AND NEWBORN HEALTH EXPERTS

Harshad Sanghvi, Medical Director, MNH Program, JHPIEGO

Barbara Kinzie, Senior Midwifery Advisor, MNH Program, JHPIEGO

“It is amazing what extraordinary power lies in the hands of those seemingly ordinary”. – Ronald Reagan

Objectives

- Describe the process of development of regional MNH experts
- Summarize progress towards meeting post-training commitments
- Describe how regional experts are scaling up adoption of evidence-based practices

The goal of the development of the MNH regional experts was to scale up the adoption of evidence-based and best practices in MNH in low-resource countries. Many of these best practices have been out there for some time (active management of the third stage of labor, use of partograph, etc.) but have not been widely adopted. The plan was to disseminate these practices throughout various regions of the world. This had to be done from within--in each country, innovators needed to take on these ideas.

The regional experts are early adopters—people able to take on practices that are going to be successful, able to take risks. We were looking for people who will make difference in the world.

The selection criteria for MNH regional experts included:

- Mid-career midwives and physicians
- Active in clinical maternal and neonatal care
- Involved in training and/or education
- Motivated and able to do self-paced, independent learning – need to be continually learning, out there looking for new evidence and how to apply it to save lives in their countries
- Recognized as being, or has potential to be, a leader
- Committed as health individuals and as part of the institution

There are specific objectives for the regional experts. Upon completion of training, MNH regional experts will:

- Advocate for changes in maternal and newborn healthcare practices
- Explain the evidence basis for such changes
- Practice evidence based clinical skills in a standardized manner
- Facilitate local adaptation, and adoption of these practices
- Teach at pre-service and in-service levels
- Provide leadership in their institutions, countries and regions

The development and training of the regional MNH experts included:

- A knowledge and skills update – one week for an evidence based knowledge update and two weeks for clinical skills standardization

- On-site supportive follow-up – someone from the training team went to the site to see how the expert was doing, assisted with problem-solving, provided encouragement, etc.
- Clinical training skills
- Co-training experience
- Advanced training, leadership and advocacy skills

The MNH program learned several important lessons as it developed and supported the regional experts. For example, in training, the program learned:

- There is a wide scope of maternal and newborn care and a diversity of situations. This required flexibility in the course design
- There was a wide range of learning methods and opportunities. This led to a need to expand clinical training sites.
- The program found that transferring the teaching of clinical decision-making is most difficult
- For the participants, Interaction with recognized change agents, advocates and leaders was most rewarding

The program also learned that follow-up and mentoring is essential. This is best conducted by the trainers. There needs to be assessments of competency and retention of skills. This served to improve the transfer of practices to the workplace. The program also found that anatomic models and simulations are necessary for some skills. Mentors were also valuable in recognizing and encouraging change and helping address challenges in implementing action plans.

Lessons were learned about commitment. Supervisors and participants must be committed to the full process that includes change implementation as well as training. The program learned that at least two participants from each site are needed, preferably a physician-midwife team. It also found that a follow up visit facilitated the reinvigoration of commitment.

Most, if not all participants, retained skills in all areas three to six months post-training (see box). Most also kept to the commitments they had made at the end of the training.

Percent of Participants Found Competent in Key Skills 3 to 6 Months After Training

| Skill | Africa | Asia | LAC |
|---------------------------------------|--------|------|-----|
| Antenatal care | 92 | 100 | 100 |
| Use of partograph | 83 | 92 | NA |
| Clean and safe labor and birth | 92 | 100 | 83 |
| Postpartum care of mother and newborn | 90 | 100 | 83 |
| Manual removal of placenta | 92 | 100 | 80 |
| Bimanual compression of uterus | 100 | 100 | 100 |
| Repair of cervical tears | 100 | 100 | 100 |
| Newborn examination | 92 | NA | NA |
| Newborn resuscitation | 100 | 100 | 100 |

Results

In all, there are 43 regional experts from 18 countries. They provide technical assistance and leadership in 48 countries. These experts are developing a second generation of regional experts (42) from 12 countries. This effort is not funded by MNH, but by other partners like WHO, Columbia University, etc. The regional experts are developing a large number of in-country trainers and service providers. Most importantly, they are scaling up the adoption of evidence-based practices.

Overall, amazing things have been accomplished by this group of experts. The process has been very effective in causing changes all around the world.

Regional Expert Success Stories

Advocating for Women Friendly Services

Regional Expert: Delia Veraguas, Chile

Problem addressed: Unnecessary medical interventions especially high rates of c-section (40% in public, 80% in private hospitals)

Intervention: Founder : National network for humanization of childbirth
Public debate and discussion

Achievements: National conference on evidence basis and practice of de-medicalized childbirth

- 5/13 regions have ongoing networks
- MOH has authorized first midwifery run birthing unit in Chile despite strong opposition from physicians

Effecting Policy and Practice Change

Regional Experts: Baize, Dao and Aoua Zerbo, from Burkina Faso

Intervention:

- Invited to guide the development of emergency obstetrical and neonatal care curricula for Francophone Africa
- Provided technical updates and demonstrations for midwifery and medical faculty from 11 countries

Achievement:

- Adoption of competency based approach
- Incorporation of evidence based practices: FANC, partograph, AMTSL
- Curriculum adopted by 11 countries

Working Across Borders

Regional Experts: Rajshree Jha and Meeta Singh from Nepal. They spent 6 months in E.Timor

Problem: A post-conflict new nation with a dismantled health care structure

Intervention:

- Transfer of EmOC skills to midwives through on-the-job training
- Developing and implementing care protocols
- Development of mother and baby friendly policy and training of 49 midwives

Result: At the main hospital in Dili--

- Partograph used in 90% of labors
- 80% of midwives competent in selected EmOC skills
- 50% reduction in MMR

For further information:

Harshad Sanghvi

hsanghvi@jhpiego.net

Barbara Kinzie

bkinzie@jhpiego.net

CHAMPIONS FOR CHANGE—SESSION ONE (SHORT PRESENTATIONS BY PARTICIPANTS)

IMPROVING THE QUALITY OF ANTENATAL CARE AT A DISTRICT HOSPITAL IN GHANA: OUTCOMES, CHALLENGES AND LESSONS LEARNED

Sylvia Deganus, Ghana

Objectives

- Describe key strategies employed in achieving change in antenatal care service delivery and quality.
- Describe the challenges faced and how these were overcome.
- Describe the results of improved antenatal care quality on other maternal care and outcomes.

Dr. Deganus described a very busy maternity unit with 500 deliveries per year and between 150 and 200 ANC clients each day. Before improvements were made, there was poor quality care, a lack of continuity of care, a factory assembly line approach, and a risk-based approach that classified patients depending on characteristics. Each client required 12 visits and client waiting times were long (6 hours on average). There was no partner involvement, no privacy/confidentiality and poor provider/client interaction. The health care provider saw more than 150 clients per day; they had poor job satisfaction and there was a misuse of skills.

Changing this required a new way of thinking. Change began with an analysis of the problem and the preparation of a change plan. There was advocacy with all the stakeholders--midwives, doctors, and hospital management. They began looking for resources themselves and were able to find \$1,000; the hospital topped it up to \$4,000. The unit was able to get a whole new set up with cubicles by refurbishing an abandoned physiotherapy unit. Providers' skills were updated with training activities, including self-paced learning for ANC nurses. There was monitoring and supportive supervision. A job aid was created. Evaluation was conducted with client and provider surveys and a data review.

Under the new system, ANC is individualized and comprehensive. The same provider provides all care to a client in a cubicle for privacy and confidentiality. The same provider provides continuity of care and only four visits are required. There is an emphasis on birth preparedness and complication readiness. Now, ANC, postnatal care and FP are provided in the same facility.

Impact

- ANC attendance has increased,
- Clients are presenting earlier in pregnancy,
- Waiting time has reduced by 1.5 hours,
- Improved client/provider interaction
- Increased use of hospital as delivery facility
- Slight decrease in maternal mortality rate
- Nearly every women who comes from ANC comes back for postnatal care

Other benefits include improved staff morale and a more client friendly environment. Providers' skill levels have improved and there is a better use of staff skills. The hospital has gained recognition as a center of excellence and there is commitment by providers to continue quality improvement.

IMPLEMENTING FOCUSED ANTENATAL CARE IN COMMUNITY MATERNITY HOMES

Keziah Kapesa, Tanzania

Objectives

- Recognize the potential role of a professional midwife in improving maternal and neonatal health in the community.
- Realize how training can bring change for better services and performance when implementation is in the correct direction.

Ms. Kapesa works with a private nurses and midwives association in Tanzania (PRINMAT). After her MNH training she utilized 3 annual general meetings to conduct knowledge update workshops to PRINMAT midwives. These meetings are supported by USAID/Tanzania.

The training was on focused ANC and its components--malaria prevention during pregnancy, birth preparedness (a new concept for most of these midwives), and infection prevention (IP).

Before this training, IPT was not practiced, birth preparedness not practiced, IP was not well known, especially use of chlorine for decontamination, there were many required visits for ANC, and all primigravida clients were referred to the district hospital, regardless of the problem.

As a result of the training:

- All 50 PRINMAT homes are now practicing FANC and its components
- A 30% increase in deliveries at PRINMAT maternity homes between 2002 and 2003 due to birth preparedness interventions facilitated by the trained midwives
- Primigravidas are now being delivered at these maternity homes after a satisfactory physical examination and screening, and
- Referrals made the PRINMAT maternities are now more specific

There are still challenges including:

- Lack of public sector support for update training of private midwives
- Lack of supplies necessary for screening in ANC
- Lack of funds to facilitate supportive supervision
- Inadequate knowledge among community members of complications in pregnancy and childbirth
- Lack of funds for private midwives to buy medicine from a pharmacy--it is difficult for them to buy as income is low

The key lessons learned is that the training of providers in service is an important factor for achieving quality in service provision because it motivates them, adds to their knowledge, and gives them confidence. In the end this improves trust between patient and provider.

As a result of this effort:

- Trained PRIMNAT midwives, though few in number, have managed to provide improved services to many people in the maternity homes' catchment areas

- Training of service providers is an important factor in the improvement of services
- Private midwives in Tanzania are the only people who have the professional knowledge for maternal and neonatal care in the grassroot community
- Private midwives increase access to maternal and newborn care services

STRENGTHENING INFECTION PREVENTION PRACTICES

Mary Jonazi, Malawi

Objectives

- State clearly specific actions used to influence change in IP
- Identify the roles of an MNH trainer in strengthening IP practices at a health facility
- Discuss how to overcome challenges to IP in a busy hospital

Ms. Jonazi is a nurse midwife. She works for the MOH at the Queen Elizabeth Central Hospital (QECH) in Malawi.

Background

QECH is a central referral hospital, the biggest hospital in Malawi and one of the busiest maternity units in the country. It has a limited pool of trained staff. IP guidelines are outdated and IP measures are not updated to new standards because of insufficient resources for implementation and there is no well-defined IP committee. There are a limited number of in-service trainings.

Other challenges include frequent staff turnover, difficulty in sustaining the quality of performance, difficulty maintaining an adequate supply of IP materials and resources for a teaching institution, and lack of staff motivation.

The following interventions were implemented:

- Orientation of hospital management team and stakeholders to IP
- New hire orientation and formal in-service education for all health care workers and support staff
- Creation of an IP committee (IPC) to monitor implementation of infection prevention practices. This included 42 people from different areas of the hospital and a member of the community
- Setting IP guidelines and posting health messages hospital-wide
- Hospital management collaborating with the Safe Motherhood Project to support training and procurement of material resources
- Benchmarking to provide health care workers with learning opportunities
- Collaborating with hospital drama group to disseminate information on IP

To sustain changes, the following must occur:

- Ongoing orientation and on-the-job training
- Procurement of materials prioritized by hospital management team
- Intensive support supervision and monitoring
- Staff recognition

Results

- IPC is functional and performing monitoring activities
- 75% of staff have been trained to date

- Material resources for IP are a regular budget item
- Education is coordinated by the inservice department
- The hospital drama group is vital for disseminating messages to the community
- Staff members' performance reflects motivation
- Safe environment conducive to improved quality of care
- More IEC materials are available to staff and community

Conclusions

- Implementation of IP practices requires teamwork, support and a champion
- Internal assessment and feedback produces healthy competition
- Motivated staff increases adherence to standards
- Community is really impacted by the hospital drama group
- A supportive hospital management is crucial to IP

The following steps are planned for the future:

- Create a mechanism to give incentives for star performance
- Reinforce exchange visits and internal benchmarking
- Maintaining a formal in-service education program
- Need to intensify support supervision for all units

THE ROAD TO EVIDENCE-BASED MATERNAL AND NEONATAL CARE

Vicente Bataglia, Paraguay

Objectives

- Learn about the changes achieved in maternal and neonatal care at the National Hospital in Paraguay
- Recognize possible strategies for changing classical obstetric practices
- Share results

Dr. Bataglia is an OB/gyn at the National Hospital in Paraguay. National Hospital is a general hospital with 4 referral departments and 450 beds. There is an average of 3,000 births per year.

Before the intervention, the following procedures were routine during labor and childbirth: enema, episiotomy, IV, restriction of food and liquids, shaving, bed rest, etc.

The process of change began with the elimination of practices proven to be harmful and not appropriate. Then a team of service providers was organized so that everyone could understand the objectives and the changes to be made. These were discussed at clinical meetings and periodic weekly meetings. Everything was related to maternal care.

Specific initiatives included including evidence-based medicine in the MNH postgraduate curricula, implementing the WHO partograph, and advocacy with hospital and MOH leaders. In December 2002, the IMPAC manual was incorporated into national regulations. Once things were underway, several more best practices were implemented. In April 2002, after a training workshop given by Dr. Jeff Smith, new standards for episiotomy were developed.

The main challenges included out of date regulations, resistance to change, raising awareness in the professional media of changes in traditional obstetric practices and the need to revise regulations

Results

As a result of the changes, shaving and enema have been eliminated, there are improved conditions during labor (walking, drinking, etc.), a significant decrease in the number of episiotomies, and a decrease in number of c-sections, among others. The number of patients is increasing as news of the good work spreads.

Conclusions

There are clear benefits for consumers and institutions. A new reality is possible with institutional commitment and implementation of “top-down” actions.

Challenges

Finances are always a problem. We need to find partners to help finance this work. There needs to be more cooperation with national institutions and the grassroots level. Women sometimes are not aware of their rights, so we have to give them the correct information so they know their rights; have to set up pilot projects; have to work more to bring health care to the community.

STRENGTHENING SERVICE DELIVERY AND TRAINING AT AN NGO MATERNITY HOSPITAL

Mohammad Baharuddin, Indonesia

Dr. Baharuddin is an Ob/gyn at Budi Kemuliaan Hospital

Background

Indonesia has a shortage of skilled providers and the highest MMR in Asia. Improvements are needed in the quality of care (deficient IP practices, lack of equipment for IP practice, standards and guidelines not disseminated, medical decisions not evidence-based, high rate of complicated deliveries, etc.)

The mission of the Budi Kemuliaan hospital was to provide quality and professional reproductive health services and education for all levels of the community. The vision was to become one of the hospitals that provide the best RH services and education in Indonesia by 2005.

At Budi Kemuliaan there was a gap between the vision and mission and reality. There was also, however, a commitment to improve services—do the right thing and do it right—via the PQI process.

An assessment done in January 2000 focused on technical and decision-making skills, organizational/management issues, mother-friendly and baby-friendly practices, IP practices, documentation and equipment and supplies.

Site strengthening involved:

- Staff commitment—from the administrators to the cleaners
- Knowledge-based updates on evidenced-based standards
- Intense on the job mentoring in decision-making, mother-friendly care, IP and documentation.
- Equipment and supplies—delivery instruments, IP supplies, protective wear and resuscitation equipment for mother and newborn.

New initiatives were implemented in several different areas including:

- ANC—focused ANC and IP improvements
- Labor and delivery—partograph, clinical decision-making and emergency equipment and drill
- Postnatal Unit—rooming-in, counseling, cord care
- Theatre—IP practices, monitoring of patients

At the midwifery academy there were:

- Knowledge and skills updates for faculties and instructors
- Competency-based approach to teaching
- Lab exercises for simulation
- Basic delivery care: active management of the third stage of labor

- IP practices
- Clinical practice site strengthening in 5 satellite clinics

Results

The implementation process continued for 1.5 years with periodic visits from consultants. The site hosted MNH regional expert development workshop in July 2001 and a second generation training of MNH experts in October 2002. APN courses were also conducted. Since the intervention began:

- The PPH rate has decreased to 1.1% and the need for transfusion has decreased
- There is a more rational use of antibiotics
- A functioning emergency team and trolley was created
- The episiotomy rate for primigravidas decreased to less than 5.5% in 2003
- Cord care is compliant with WHO guidelines
- Providers wash their hands before and after patient care
- The surgical site infection rate decreased to less than 1% in 2003
- There is improved documentation and use of data for monitoring
- The site adopted a mother- and baby-friendly approach

Lessons Learned

- There needs to be commitment at all levels of the institution
- Empower staff by providing updates
- Support for resources and technical assistance for implementing changes is necessary
- Leadership is very important
- Monitoring and evaluation is needed to sustain changes

DISCUSSION AND Q&A

COMMENT--Every one of these changes takes a huge amount of effort.

QUESTION for Ghana-- How long does it take to conduct an ANC visit for one patient?

A: Before implementing the change, there were 6 stations, and each client spent about a minute at each station – had very little time at each station, now the average client spends 10 minutes with one care provider for an ANC visit.

COMMENT -- QECH achieved 100% in IP standards for the maternity unit – congratulations to Mary Jonazi.

QUESTION for Tanzania-- I noted that malaria, IP and birth preparedness were taught during the training sessions for private midwives– were other areas left out?

A: These were the focus areas for the intervention but other areas were not left out. We will continue to do updates at annual general meetings, this year will focus on PMTCT (covered partogram in 2003, covered FANC in 2001-2002).

QUESTION to all: It's wonderful to hear all the personal effort that you've put in to make change – what are the mechanisms to bring in national partners?

In Ghana, the regional expert is part of the SM team, so brings in changes there, works with that committee.

In Tanzania, we work with SM program, RH and child health section of the MOH – the regional expert works in an NGO and has found it difficult to get into the public system, so we're working with a small group that can make a great change in the community, which will eventually be seen by the public sector.

In Paraguay, in Latin America, it depends on how you relate to the patients – with regard to recognition that one obtains from those in responsible positions, as somebody whose work is appreciated. We have established a committee to look at best practices all over so that people can be recognized.

In Malawi, IP is a national program, under the national QA program, with a lot of support and commitment from JHPIEGO/Malawi, this effort has gone across the country.

In Indonesia – we need to scale up what has happened in the BK hospital.

QUESTION for Indonesia – You reduced your episiotomy rate to less than 5% in your hospital. Has the perinatal death rate also reduced?

A; If midwives are taught how to properly do second stage of labor, can reduce the episiotomy rate – need to adopt other positions to minimize need for episiotomy (get away from lithotomy).

QUESTION for Ghana and Tanzania – WHO recommends 4 focused ANC visits, with the idea to reduce excessive visits and make enough time per client for quality care – how are you effectively getting women to attend ANC for 4 visits, and not more than that?

Ghana – The national protocols state 4 visits, we are trying to implement that. Sometimes it is difficult to change behavior but we are trying.

Tanzania – We also have national guidelines on 4 visits, this is even referenced in posters in the clinics. All of these midwives are practicing 4 visits, but women believe in going often for ANC

(this is an outing for them) so sometimes they come more often. We see them, top up their drugs, and deal with problems as necessary.

QUESTION: Concerning ANC – what kind of continuing care have you done? When do you book ANC visits? Do you provide booking ANC by home visit or at the clinic?

Ghana– ANC booking is done at the clinic. Ghana has about a 92% ANC coverage rate, so women are used to coming to the clinic and booking (not a problem). In the past they were coming in the second trimester, but since the change, most are turning up in the first trimester.

Tanzania—ANC attendance is about 97%, booking is at the clinic (not at home). Most women start ANC at 16 weeks, after a lot of education, media, etc.

QUESTION for Tanzania:, What was the main problem when you first introduced IPT in the clinic? In Indonesia, counseling is difficult for midwives, as patients get impatient and don't want to stay at the clinic.

A: Tanzanian women believe in the nurse and midwife, so they follow their instructions. Pregnant women were on chloroquine on a monthly basis, so it was easy to change to a different schedule since the women were already used to the idea of malaria prophylaxis.

QUESTION: for Ghana – How many midwives do you have? How many clients are seen?

A: Now each provider sees about 40-45 patients per day, have 5 midwives per clinic (previously each provider saw every patient in an assembly line approach).

CHAMPIONS FOR CHANGE—SESSION TWO

SETTING STANDARDS FOR MATERNAL CARE IN A RURAL HOSPITAL

Pung Purnama, Indonesia

Objective

To share experience in strengthening the quality of a district hospital as a training site and in developing an evidence-based clinical protocol

Dr. Purnama works in the department of obstetrics and gynecology at the Ujungberung District Hospital in Bandung, West Java. It is on the border between the Bandung municipality and district. It serves over one million people. There are two ob/gyns and 8 midwives. There are 1,000 – 1,200 deliveries a year.

There were five steps in turning the hospital into a training site. We:

1. Obtained stakeholder consensus
2. Conducted a site assessment. Issues identified included inadequate staffing, overcrowding of facility, poor IP practices, inadequate supplies, and little monitoring, incomplete and inconsistent documentation.
3. Strengthened the site. This included clinical skills standardization (CSS), knowledge updates, evidence-based clinical protocol developed, facilities upgraded, reorganized midwives,
4. Trained trainers in IP and MNH.
5. Monitored the interventions. This included monitoring use of the partograph in clinical decision-making, IP practices, and compliance with the standards.

Results

Since the new evidence-based protocol and IP guidelines were introduced:

- Episiotomy rates dropped to less than 2%
- Prophylactic antibiotics used for all c-sections
- No surgical infections

Conclusions

- Quality of maternal and neonatal care has increased through use of evidence-based protocol and IP guidelines
- Evidence-based protocol and infection prevention guidelines must be implemented in all district hospitals
- There had to be a role model in the hospital to make changes.

STRENGTHENING PRE-SERVICE MIDWIFERY EDUCATION IN ZAMBIA

Theresa Kafula, Zambia

Objectives

- Describe the rationale for strengthening the Zambia midwifery curriculum
- Describe the specific actions and steps Zambia took to strengthen the curriculum
- Describe the Zambia experience in implementing a new midwifery curriculum

Dr. Kafula is the clinical director at the University Teaching Hospital and is also an ob/gyn there.

The goal of this project was to provide skilled attendants to our mothers and newborn babies to increase survival rates. There are 8 midwifery schools all over the country and each school had been using its own curriculum.

The rationale for strengthening the midwifery curriculum included:

- The country's high maternal and newborn mortality rates, many due to preventable causes
- A training needs assessment in the midwifery schools that identified gaps in tutors' knowledge and skills
- The need to strengthen competency based training (CBT) in the midwifery schools
- The need to introduced evidence-based guidelines.

The process started in 2000 with the creation of the curriculum strengthening team (CST). The team consisted of ob/gyns, midwives, midwifery tutors, and MOH and CBOH representatives. JHPIEGO procured training models and materials to strengthen the training sites. The CST underwent MNH knowledge and skills updates and updates in competency-based training (CBT) methodologies. The curriculum was reviewed to incorporate the best practices and new trends in MNH (FANC, EmOC, IP, PMTCT and prevention of malaria in pregnancy).

Next materials were developed including midwifery core competencies, activity outlines, standard midwifery procedure manual, learning guides and checklists. Then faculty and clinical trainers were trained. The curriculum was piloted in 2001 at the University Teaching Hospital—then it was implemented in three midwifery training sites, using the CBT approach.

A preliminary evaluation of the program in 2003 showed that graduates taught with the revised and strengthened curriculum had knowledge and skills much superior than those taught with the old curriculum. The new standardized curriculum was then implemented in all midwifery schools.

The program faced several challenges, including:

- Convincing tutors to accept the use of checklists and anatomic models (overcame this by giving them time to familiarize themselves)
- Changing the attitudes of clinical trainers towards evidence-based practices (e.g., use of partograph, use of oxytoxics in MTSL)
- Ensuring adequate medical and surgical supplies
- Brain drain

Lessons learned:

- Given adequate training and time, midwifery tutors will accept the new curriculum with competence-based training tools and anatomic models
- The new curriculum facilitated knowledge and skills retention
- Adequate medical supplies are essential for training and continued practice/application of skills
- Supervisory visits are important in all phases of implementation – faculty/trainers received ongoing visits from the training team
- Implementation of the strengthened midwifery curriculum must be sustained through continuous nursing education
- The issue of brain drain needs to be addressed by the government and its development partners

CHALLENGES IN INTRODUCING ACTIVE MANAGEMENT OF THE THIRD STAGE OF LABOR AT A PERIPHERAL HOSPITAL

Kusum Thapa, Nepal

Objectives

- Discuss challenges in introducing active management of the third stage of labor (AMTSL)
- Describe best practices in introducing and scaling up practice of AMTSL

Background

Dr. Thapa is an ob/gyn at the Koshi Zonal Hospital in Nepal. Koshi Zonal Hospital is a government-run general hospital with 200 beds. Of those, 73 beds are for maternity. There are 6 doctors and 22 nurses.

Postpartum hemorrhage (PPH) is the main cause of maternal mortality worldwide, especially in developing countries. In Nepal, it accounts for 47% of maternal deaths. The majority of births in Nepal occur at home without skilled attendants. Only 9% of deliveries are in facilities.

Before the introduction of AMTSL, the practice was expectant management of the third stage including waiting for signs of placental separation—the gush of blood; allowing the placenta to deliver spontaneously, sometimes with controlled cord traction and injecting ergometrine 0.5mg intramuscularly if the patient was not hypertensive.

Challenges and solutions

Challenge: Changing the attitude of senior doctors and staff who were not up-to-date and resistant to change.

Solution: Information was shared during clinical meetings and over tea after rounds. Copies of *Managing Complications in Pregnancy and Childbirth* were made available.

Challenge: Limited number of staff in the maternity unit meant the staff could not leave at the same time.

Solution: Training had to be done in batches.

Challenge: Facilities were inadequate for group-based training.

Solution: The training was done in Dr. Thapa's house.

Challenge: Scarcity of funds for training.

Solution: Initially, Dr. Thapa used her own funds for lunches during training, but then found other resources including sponsorship from local companies.

Challenge: The national RH protocol was not updated or disseminated.

Solution: An updated version of the protocol and job aids were prepared at the hospital and put up in different areas of the maternity unit.

Challenge: Scarcity of HR – only 1 nurse at the time of delivery.

Solution: To save time they were encouraged to load oxytocin ahead of time

Challenge: Availability of drugs--clients have to purchase drugs themselves.

Solution: Local shopkeepers were requested to keep an adequate supply on-hand and hospital asked to maintain emergency supply.

Results

Midwives and doctors were enthusiastic to adopt AMTSL since it is not a complicated procedure. Since doctors attend only complicated deliveries, the dramatic reduction in the incidence of PPH and retained placenta meant that they were called to manage these cases less often.

There was a dramatic reduction in incidence of PPH and retained placenta, after introduction of AMTSL. PPH decreased from 1.4% to 0.27% and retained placenta decreased from 0.34% to 0.05%.

Conclusion

AMTSL is a relatively simple and inexpensive intervention that can be applied to a variety of environments. Auxiliary nurses who assist most of the deliveries learn the skill easily and practice it safely. It is not useful to restrict AMTSL to doctors because they attend only complicated deliveries. Lastly, mentoring is essential to ensure that AMTSL is implemented in practice.

With determination, our goal can be attained – each one of us as an individual can make a difference.

THE PROCESS OF IMPROVING PERFORMANCE AND QUALITY AT THE NATIONAL HOSPITAL OF SOLOLÁ

Estuardo Recinos Flores, Guatemala

Objectives

- Describe the clinical situation of maternity health services at the National Hospital of Sololá.
- Describe the implementation of new practices, based on evidence, for women during labor and childbirth.

Dr. Flores is the Director at the National Hospital of Sololá in Guatemala. The National Hospital serves a multilingual, multicultural population with a very deeply rooted culture. There are approximately 17 deaths each year.

As a first step, gaps were identified. These included:

- Lack of current knowledge and practices
- Lack of supplies
- Low acceptance by staff of cultural practices.

To overcome these gaps, training programs for doctors, nurses and nursing assistants were planned. The methodology was based on competencies.

After the training the trained people didn't practice their new skills. They needed support, follow-up and monitoring to make sure they did. To overcome the challenge of high personnel turnover, the program allowed personnel to stay in particular areas. To optimize the support given to TBAs, a TBA is at the hospital 24 hours a day to provide emotional, physical and language support to patients and the TBAs who accompany them.

Results

An evaluation conducted in 2002 found that one-third of the criteria on the management of complications and 92% of the criteria on delivery and postpartum care were met. 80% of all doctors, 100% of all nurses and 59 % of all nursing assistants were trained in maternal and neonatal best practices.

All mothers receive companionship and emotional support, there is 99% AMTSL, immediate breastfeeding and reduced episiotomy. The response to the new practices has been very good, now we are trying to sustain them.

Conclusions

- The training sessions were good, but follow-up is even more important in order to ensure sustainability
- TBAs are a very useful link between the community and the hospital
- Need to promote improvements in care in order to raise the community's confidence and increase timely access to care, particularly in the event of complications

UPDATING THE ESSENTIAL MATERNAL AND NEONATAL CARE CURRICULUM AT NURSING SCHOOLS IN GUATEMALA

Ilse Santizo Salazar, Guatemala

Objectives

- Understand the importance of including evidence based practices in the curriculum
- Understand the process
- Share the results of this initiative

Dr. Salazar is an ob/gyn.

Guatemala is a country of 11 million people. The maternal mortality rate is 153 per 100,000 births. The major causes are PPH, eclampsia and sepsis. About half of women give birth in institutions; 80% of those births are handled by nurses or nursing assistants.

Implementation steps

- Creation of team of nursing schools and Ministry of Public Health and Social Welfare
- Defining of EMNC priorities
- Consideration of other experiences
- Implementation of WHO recommendations – skilled provider, evidence-based practices
- Training: in 2001 there was a workshop on updating knowledge base and standardizing competencies in EMNC; in 2002 there was a training on clinical training competencies; and in 2003 there was an instructional design workshop to prepare the *Educational Packet on Maternal and Neonatal Care*.

Challenges

- Standardizing the training of nursing assistants
- Standardizing the clinical practice sites and teachers
- Obtaining legal recognition of the role of nursing assistants
- Obtaining sufficient numbers of models for clinical practice to ensure competency-based training.

Results

5 clinical practice centers are up-to-date and standardized in EMNC

3 nursing schools standardized (100%)

5 assistant nursing schools standardized (72%)

1,080 graduates with EMNC competencies since 2001

Conclusions

- Promoting and standardizing practices based on evidence, as well as a practical methodology that ensures competence, are critical to the implementation of EMNC, according to WHO recommendations

- The elements of EMNC should be included in educational programs for providers of maternal and neonatal care
- Nursing schools now have an EMNC educational packet that meets the country's current needs.

Next steps include doing an evaluation to see how to improve care even more.

WORKING ACROSS BORDERS: ESTABLISHING QUALITY SERVICES IN EAST TIMOR

Rajshree Jha, Nepal

Background

East Timor became a nation on 20 May 2000. In the violence of September 1999, 77% of health facilities were destroyed. Only 20 doctors were left in the country. Health services made free after independence. The International Red Cross ran the hospital—Dili National Hospital. There were seven East Timor doctors.

Challenges

- Staff constantly adapting to specialists from different parts of the world
- Staff was reduced by 50%
- Staff had been trained by UNFPA in basic delivery – but knowledge and skills were never put into practice, as specialists did not encourage it.

Implementation

- On the job training implemented
- Encouraged staff to use partograph, taught them how to use it for decision-making
- Set up weekly staff meetings to discuss cases
- Held monthly review meeting with pediatricians
- Previously, breastfeeding was not encouraged on the maternity ward, therefore there was a high rate of artificial feeding. To improve breastfeeding rates, midwives in maternity and pediatrics were trained in breastfeeding counseling
- Documentation improved.

Results

- Staff felt more empowered as they were making joint decisions with specialists on the care of mothers and newborns
- There was an increase in the number of women coming to the facility and a decrease in a number of complications and unsafe procedures
- Increased awareness of staff on important SM issues
- Staff learned to share experiences with their colleagues
- Staff learned that together they can achieve more
- Improved documentation
- Staff was better prepared to handle emergency situations
- Staff gained more confidence in their skills
- There was less load on the specialists
- Healthy mothers have healthy babies, and healthy babies are the future of the nation.

DISCUSSION AND Q&A

QUESTION for Zambia: Congrats to Zambian MOH for incorporating MNH into midwifery curriculum – has anything been done for medical students?

A: Zambia only has one medical school, the seat of which is University Teaching Hospital – as changes took place in ANC and the maternity unit, it affected the medical school. The medical students had to learn what the midwives were learning when they came to the maternity ward. There have been discussions with the Dean of the School of Medicine about the need for review of the curriculum – the medical school has asked for funding so that the curriculum can be reviewed and best practices can be incorporated.

QUESTION for Guatemala (Dr. Flores): You say you’ve trained people but they don’t practice what they’ve learned, but you do supervision and follow-up – how do you support providers to practice what you want them to do after training?

A: These trained people do not put into practice what they have learned – we have to break cultural barriers after the training and we must work as a team. We still have lots of obstacles to overcome.

QUESTION for Zambia: What program do you have on midwifery education – training from nursing, diploma, and academic? Is your curriculum local or national? In the changes, are you putting in new material or just promoting evidence-based practices?

A: The curriculum is national – we have now spread the updated curriculum to the rest of the midwifery training schools. Midwives first train as general nurses and then go on to train as a midwife (1 more year of training). We developed core competencies for this new curriculum and developed learning guides as new materials.

QUESTION for Zambia: What are the interventions for strengthening clinical training sites for the eight midwifery schools?

A: During the needs assessment, we found that the infrastructure was OK, but we needed models. We created a revolving fund of materials and we will be levying students through their tuition to pay something towards production of learning materials. We also trained those who will be training students.

QUESTION for Nepal (Dr. Jha): How was advocacy done?

A: The President was very supportive, he came to functions with his wife to reinforce ideas and his wife chose to have her delivery in the main hospital with a midwife. This sent a message that women could count on the health care system.

QUESTION for Indonesia: What advocacy have you done with the teaching hospital near your hospital?

A: We use a resident as an agent of change. He shares information with the other residents

QUESTION for Nepal (Dr. Thapa): Are there any community outreach programs to get women to the facilities? Any training for birth attendants in AMTSL?

A: My hospital is not a training center for the whole region. We have now started up a training center. Nepal has auxiliary midwives – they get a knowledge and skills update for one month and then they go back to their sites and implement changes.

QUESTION for Nepal (Dr. Jha): Breastfeeding was not initially practiced, and you trained the staff. Was the issue of HIV/PMTCT addressed?

A: The prevalence of HIV in East Timor is quite low, though a volatile situation given the large influx of foreigners. We discussed the issue with the staff to prepare them to handle it. Artificial feeding was a concern of the public so we counseled midwives to give the option to the clients.

QUESTION for Zambia: How long was your TOT? Is this enough time?

A: One week of knowledge update and two weeks of clinical skills update; judging from their performance, it is enough training time.

QUESTION for Nepal (Dr. Jha): Were there any opportunities to share you're East Timor experience with others in Nepal upon your return?

A: We disseminated the findings within the hospital, still need to disseminate them to the National Congress.

QUESTION for Indonesia and Nepal: (Drs. Pung and Thapa): Dr. Thapa's hospital was not part of the SM program initially but it is now recognized as a regional training centre for all of these midwives – what happened to make this so? Also, Dr. Pung's hospital is a tiny hospital, and he gets residents from a large teaching institution. He teaches the residents the right thing to do, and then they go back and have difficulty implementing – can he say more about how he has provided a bridge between the two institutions?

A: (Dr. Thapa): We standardized the hospital after the MNH training and when people came over from the Family Health Division to review the work they were quite impressed. We did the first training and got good feedback, so we started with MNH regional training in Indonesia.

Dr. Pung: After I was trained in MNH, I tried to convince professors at the teaching hospital about evidence-based practices. I started the program in this hospital. I did not start in the other hospital because there were so many “Goliaths” there--they agreed on a 3-day update, but there was not good attendance. So we gave the MNH information to a resident who came to the hospital and asked for residents to be posted for a month so they could get a good sense of the changes and then they can tell the teaching hospital. This has now been implemented. We have learned that you have to be a role model, you have to be innovative, you have to be persistent, and you have to be an incurable optimist in order to succeed.

PREVENTION OF CERVICAL CANCER: WHY A NEW APPROACH – SVA – IS NEEDED

Sylvia Deganus, Ghana

Sydney Adedevoh, Ghana

Cervical cancer is an STI, caused by the human papilloma virus. A primary prevention approach takes a long time to successfully implement. Available and accepted screening methods are not practical or accessible to the majority of women living in many countries. Limitations of cervical cytology include the fact that it is a complex test; it requires a trained cytotechnician to read it and a pathologist to review it, etc.

There are also programmatic constraints in low resource settings such as a lack of clinical expertise, very limited capacity for confirmatory or diagnostic testing, and poor infrastructure.

In the single visit approach (SVA), the initial management decision can be made at a single visit. Visual inspection of the cervix with acetic acid wash (VIA) is a potential testing alternative to the Pap smear. It is effective, safe, practical, affordable and available. VIA has a sensitivity of 66-98% (higher sensitivity than a Pap smear) and specificity of 64-98%. This means that we will have more false positive results and therefore some degree of over treatment with VIA, but a little over treatment may not be as bad as no treatment at all in terms of preventing cervical cancer.

VIA is an examination of the cervix to detect abnormalities after applying a dilute solution (3-5%) of acetic acid (vinegar). Acetic acid enhances and marks a precancerous lesion or cancer by turning it a whitish hue (the acetowhite change).

VIA classification includes:

- Positive – raised and thickened white plaques
- Negative – smooth, pink, uniform
- Cancer

The benefits of VIA include:

- It is noninvasive, easy to perform and teach, inexpensive, does not require expensive equipment
- It can be performed by all levels of healthcare workers in almost any setting
- Results are apparent immediately – treatment and/or referral can be provided at the time of examination.

Screening/testing on its own has no intrinsic value--it must be linked to treatment. Cryotherapy is the preferred treatment method--it freezes and destroys abnormal cells. It is offered to eligible women immediately after VIA test, using carbon dioxide or nitrous oxide gas. No electricity is needed.

Ghana faces a high incidence of cervical cancer. We are currently engaged in a project to demonstrate the safety, acceptability, feasibility and effectiveness of an approach to prevent cervical cancer through VIA and cryotherapy.

Three doctors and four nurses were trained in VIA and cryotherapy. They provided services at Ridge Hospital in Accra. A referral system was set up for large lesions, suspected cancer and other gynecological problems and they created a process for quality improvement.

Women aged 25-45 years, who were ever sexually active, and who provided informed consent were included in the study. Women with hysterectomy, ever diagnosed with cervical cancer or pregnant (or suspected to be pregnant) were excluded.

3,665 women were screened by May of last year – 13.2% tested positive, 3 women were suspected of having cancer. 67.6% of those who tested positive (483 total) had immediate treatment, 29% postponed treatment. Reasons for postponement of cryotherapy included cervicitis at the time of the test, the need to discuss the issue with a partner, other reasons (time constraints, suspected pregnancy, etc.).

Compliance with home care instructions was high. Each woman who got cryotherapy was given a home care card with specific information – 92.8% abstained for 4 weeks, 62% used condoms, 81% did not insert anything into their vagina.

Practically all (99%) of the women said they would recommend this procedure (VIA) to others; 99% of women felt that they were informed enough. Of those treated, 99% of women who had cryotherapy said they would recommend this to others, 98% felt that they were informed enough and 98% were very satisfied or satisfied with their decision to have the treatment done.

Preliminary conclusions

VIA combined with immediate treatment or referral appears to be:

- Safe for testing and treating women at a local community hospital when performed by trained nurses
- Acceptable to both clients and providers and
- Feasible for use in low-resource settings.

VIA and cryotherapy have since been incorporated into the national RH service delivery guidelines and standards. VIA is now standard for cervical cancer screening in Ghana. Long-term, the aim of the MOH is to include VIA as a screening tool in the comprehensive health care service package for all women attending the clinic. The MOH also plans to incorporate VIA and cryotherapy into the pre-service curricula.

PREVENTION OF CERVICAL CANCER – CHALLENGES AND OPPORTUNITIES

Harshad Sanghvi

Just eight or nine years ago, there weren't many options for cervical cancer screening, apart from the Pap smear. But if we look carefully at the cervix, we will detect disease.

The SAFE demonstration project in Thailand had similar initial steps as the project in Ghana, but it also had mobile teams in up to 30 rural village health centers. It held a workshop for stakeholders because they needed to buy in to the intervention. Next the project trained supervisors with a simplified cryotherapy machine and got carbon dioxide from Coca Cola.

After a year, physicians started supporting the program in Thailand. Nurses were getting patients not normally seen, and referring them to physicians for other conditions.

Quality assurance testing found that:

- In VIA assessment there was 93% agreement between provider and supervisor
- In case management there was 92% agreement between provider and supervisor.

VIA and immediate treatment costs \$11/woman and contributes to almost 35% reduction in the cervical cancer mortality rate.

Conclusions

SVA for prevention of cervical cancer is:

- Safe
- Acceptable to providers and clients
- Feasible
- Efficient and cost effective.

Cervical cancer was a disease that no one used to talk about, because there were no simple solutions. Today we have simple solutions for screening and treatment, we have a community that cares about its health, and we have nurses to provide the service. We are able to take this innovation forward.

FUTURE DIRECTIONS FOR MATERNAL AND NEWBORN CARE

Harshad Sanghvi, Medical Director, MNH Program, JHPIEGO

The safe motherhood community has accomplished much over the past ten years. Some strategies have worked well. There are some proven interventions that could have impact on a large scale; there are effective and low cost solutions that do exist. We haven't highlighted that we can do something about maternal mortality. We need to emphasize the good solutions that we already have

Women are not dying because of diseases we cannot treat – they are dying because societies have yet to make the decision that their lives are worth saving. The knowledge is there – women are dying because we have not succeeded in taking to scale these safe, effective measures. We have not succeeded in ensuring that a woman and her baby have the right to skilled care. The most important intervention for the future is the scaling up of those interventions that have worked in our institutions.

Skilled care is crucial. TBAs may make some contributions, but these are not sufficient. We need to create a trusting partnership between traditional and professional providers. We need to maintain a woman-centered focus--guidelines should be written for what the woman needs, not written from the provider's perspective (i.e., what the provider needs to do). Nurses and midwives can assume an expanded role.

Another major challenge is changing established practices. Change takes courage. Women and communities will demand their rights, if we do not make the changes ourselves.

We have revised antenatal care and we have created competent communities (recognize danger signs, etc.). We have made efforts to make home deliveries safer and to set up referral mechanisms. All this should continue. We need to move towards a more integrated group of services – we cannot take from other programs for our own program.

We need to do the following as we go forward:

- Need to scale-up and increase coverage – this requires partnerships and it requires us to let go of control, so programs can expand
- Need to create skilled providers more efficiently, strengthen pre-service training – our specialists are not the answer
- Need to use antenatal care as the platform for scale-up and the promotion of target interventions, such as birth preparedness/complication readiness, PMTCT, prevention of malaria, etc.
- Need to support expansion of PQI at every level of the health care system, including the community
- Need to continue to create champions/change agents at the facility and community levels
- Need to come up with interventions to increase survival at home birth – investigate safety of misoprostol for management of miscarriage, investigate whether aspirin prevents pre-eclampsia, strengthen computer/self-paced learning.

The challenge is with us – we are the ones who have to take this forward.

CHAMPIONS FOR CHANGE--SESSION 3

CREATION OF THE LATIN AMERICAN AND CARIBBEAN NETWORK FOR THE HUMANIZATION OF CHILDBIRTH--RELACAHUPAN

Delia Vergaus Segura, Chile

Objectives

- Describe the process of creating RELACAHUPAN
- Share information about the program, results and challenges
- Describe our role as leaders of change

The current model for birth in LAC is based on biomedical principles—separation of mind and body, overvalued technology, invasive practices not always justified, etc. The woman often loses her central role and is treated as a patient. Pregnancy and childbirth are treated as a disease. This model results in a high rate of c-sections.

RELACAHUPAN, a network to reduce the medicalization of delivery was launched on 5 November 2000. It:

- Promotes the humanization of care
- Promotes the central role of the woman and her family
- Recognizes the role of professional midwifery
- Encourages public debate on the topic
- Distributes information about new models of care
- Makes effective recommendations to WHO/PAHO

The network acts as a regional and national liaison throughout LAC. It has built an effective communications system (with a website). Currently it is:

- Seeking funding for operations
- Investigating the reality of care provided during childbirth in LAC
- Sending representatives to national and international meetings
- Publishing an electronic newsletter
- Creating and distributing educational materials
- Seeking alternative care models (such as birthing centers) and publishing their results

The new network faces several challenges including:

- Overcoming resistance to change on the part of doctors and midwives
- Overcoming the fear of these professionals that they will lose power and control if the woman and her family take a central role in the event
- Obtaining financing for the various initiatives
- Influencing governmental policy in each country
- Raising awareness that women have the right to safe delivery/good childbirth

Results:

- 22 countries are participating in the network
- There are national networks in Brazil, Bolivia, Argentina, Peru and Chile
- Also carry out research work
- Database with relevant organizations
- www.relacahupan.org
- Bimonthly electronic newsletter
- Common logo
- Childbirth now a topic of public discussion
- In Brazil, the network helped achieve a reduction in the rate of c-sections at public hospitals (20 to 15%). Started a volunteer doula program and established birthing centers throughout the country.
- In Uruguay, helped pass a law on accompaniment during childbirth
- In Argentina, part of the award-winning video “Caliáte y Pujá”
- In Bolivia, a ministerial resolution incorporated 18 appropriate practices and technologies for childbirth
- In Chile: established RELACAHUPAN—Chile in six of 13 administrative districts in the country

Conclusions

RELACAHUPAN has helped motivate and promote the work of organizations and professionals in support of a more humane, respectful and safe model of care in LAC. There is greater awareness and acceptance of respectful, non-invasive practices by professional doctors and midwives. The will to change is expressed in concrete experiences on the local and national levels. Lastly, there is growing public opinion that the technocratic paradigm must be changed.

Next steps for the network in Chile include:

- Trying to increase number of deliveries at facilities
- Establishment of a birthing center in Santiago
- Strategic alliance with the Women’s Health Network
- Finalizing the process of becoming a legal entity
- Holding a national conference for network coordinators
- Holding national and regional meeting with women
- Launching a national campaign for respectful childbirth
- Creating more friendly birthing environments
- Breaking with the paradigm of giving birth in the traditional way
- Empowering women to know their rights

For more information:

In Central America: Mesoamerica@relacahupan.org

In the Caribbean: caribe@relacahupan.org

In South America: delsur@relacahupan.org

In Chile: ds.veraguas@sal.cormuvina.cl

www.relacahupan.org

IMPROVING THE QUALITY OF NORMAL DELIVERY CARE THROUGH STANDARDIZATION OF MIDWIVES

Heru Erdiawati, Indonesia

Objectives

- Describe how quality care was strengthened at Cipto Hospital
- List steps in establishing standards that support high quality care
- Describe results of interventions at Cipto Hospital

Cipto Hospital serves as the technical operation unit of the health department and is a teaching hospital of the University of Indonesia. The hospital is responsible for leading public health activities through health promotion, prevention, curative and rehabilitation services.

The vision of Cipto Hospital is to become a quality teaching hospital in ASEAN by 2005 and reach Asia-Pacific quality standards by 2010. In line with these goals, the mission of the hospital is:

To provide comprehensive, high quality and affordable health services

To serve as a venue for education and training of health care professionals

To serve as a venue for research and development

To serve as a national referral center for educational, research and development activities.

Background

Cipto Hospital was providing low quality basic MNH services: there was a lack of mother-and baby-friendly care, the partograph was not used for monitoring labor progress and IP practices were not up to standards.

Interventions

Midwives were trained in normal delivery care in a 10-day training that included four days in a classroom for presentations and practice on models, followed by six days of clinical practice in the labor ward. Topics included:

- Clinical decision making with use of the partograph
- Mother-friendly and baby-friendly care
- Infection prevention
- Documentation
- Recognition of complications for referral

The training was competency-based. Every midwife had to demonstrate competency on a model before going to the clinic. Clinical instructors supervise the clinical practice of every midwife and midwives must assist deliveries until they are competent.

Challenges and actions

- Who supports and pays for training? The training was supported and financed by the head of the department, the director of the training center and a sponsor.
- How to schedule training for all the midwives? The midwives were divided into groups and a timeline was developed for the training

- Are midwives willing to upgrade their knowledge and skills? The midwives were motivated to learn by seeing the usefulness of new practices
- How to assess quality of care? Quality of care was assessed through direct observation by skilled providers

Results

- Sixty midwives were trained and are competent
- Partograph now used on a consistent basis
- IP practices strengthened
- Midwife attitudes and practices support mother-friendly care
- Newborn care strengthened
- AMTSL now routine
- Improved postpartum monitoring

Conclusions

- It is possible to change the skills and attitudes of midwives
- The standardization of skills for all midwives in the labor ward facilitates clinical care
- Collaboration between doctors and midwives is essential to achieve improvement in overall quality of care

For further information

Heruwati: Erdia_w@yahoo.com

INTEGRATION OF BEST PRACTICES IN MATERNAL AND NEONATAL HEALTH IN PRE-SERVICE EDUCATION: EXPERIENCES FROM THE MIDWIFERY SCHOOL OF BURKINA FASO

Aoua Zerbo, Burkina Faso

The pre-service education curriculum for professional midwives in Burkina Faso fosters the attainment of education objectives so that midwives graduating from this program can give high-quality care based on national RH policies, norms and protocols.

History

The midwifery school was established in 1977. In 1988 the first male midwives graduated (female midwives don't want to go to rural areas). The midwife training is a three-year program with one year of common training with nurses. The program is based on National Health Policy and Primary Health Care guidelines. The curriculum was revised in 2000 in partnership with Family Care International. It now includes elements of basic RH and is a modular teaching system.

The first year of training is in general nursing care. The second year includes management of ANC, normal labor and birth, use of the partogram, postpartum care and pediatrics. The third year covers management of abnormal labor and birth, management of obstetric complications, community midwifery and FP.

Integration of best practices

- Briefing to superiors and the MOH about the MNH training process
- Update of tutors (1 day)
- Identification of school's strengths and weaknesses
- Development of an action plan

Strengths of the process

- Permission obtained from those in charge
- Three midwifery tutors were trained in MNH knowledge and skills
- An MNH-trained clinical tutor works in the referral hospital
- Use of learning guides and checklists for basic nursing care procedures
- Borrowed anatomic models from MNH for use at the school

Constraints

- Insufficient training materials and staff support
- High student-teacher ratio: 1 teacher for 29 students
- Too few well-trained full and part time tutors
- Heavy schedule of activities
- Not all training materials were easily available to the students

Results

- The number of hours available for nursing, obstetric practice, FP and IP were revised to include MNH best practices
- A new national partogram was adopted and training in its use began

- Learning guidelines and checklists were adapted
- Self-study activities for students were formulated
- Group work was instituted
- 150 second year students have benefited from this new program

Next steps

- Extend training to other tutors and trainers
- Exchange of experience and information with other pre-service programs in the sub-region
- Advocacy for the mobilization of resources
- Revision of the entire curriculum to include best practices

Lessons learned

- Advocacy towards the leadership of the national midwifery school is essential
- Including all tutors in the adaptation process insures greater acceptability of new approaches
- Clinical practice in the field insures use of new approaches in realistic settings
- Follow-up and training of students in the field motivates them to continue to use the new approaches
- A skilled attendant at birth is essential to overcome the social injustice of maternal death

ALTERNATE POSITIONS IN DELIVERY: A NEPALESE EXPERIENCE

Meeta Singh, Nepal

Objectives

- To describe the situation in Tribhuvan University Teaching Hospital (TUTH) prior to the intervention
- To describe the intervention to introduce alternate birthing positions
- To describe the results of the intervention

Background

Tribhuvan University Teaching Hospital (TUTH) was established as a tertiary center in 1985. The OB/Gyn department has 50 beds. There are approximately 3,287 deliveries each year, and the c-section rate is 19%. Deliveries were in the traditional position.

Challenges

- The doctors were very resistant to change
- Service providers had misconceptions and unfounded fears—they were afraid babies would come out asphyxiated; there would be increase in cervical tears, etc.
- Lack of birthing chairs/beds
- Faculty concerned with the change
- Technical difficulties—for example, monitoring with a fetoscope was difficult, so started monitoring with Doppler, also we have come up with mackintosh sheets as beds were being soiled

Objectives of intervention

- To allow pregnant women to adopt comfortable positions of choice during delivery
- To acquaint service providers with alternate positions in delivery
- To develop skilled service providers who can facilitate the use of alternate delivery positions
- To encourage ambulation and restrict unnecessary and medicalized intervention during birth
- To introduce a policy of restricted episiotomy

Intervention steps

- There was a dissemination workshop after the meeting at MNH Jakarta in 2000
- Evidence-based medicine was introduced and there were demonstrations and coaching in alternate positions—simulated and in the labor room
- Job aids were created
- Also taught mothers to do uterine massage after the delivery

Results

The study period was from July to November 2002. There were 1,300 total deliveries; 57 were in an alternate position (51 knee chest, 6 squatting). Complications (PPH, tears, retained placenta) were not statistically significant in alternate positions (as opposed to lithotomy). This is an ongoing study. Client satisfaction, second stage duration, third stage duration and six week and six month follow up will be measured.

Conclusions

- Normal delivery is not a medical/surgical event but a physiological event which is natural to life
- Laboring mothers should be given the choice that is most comfortable for them in delivery.

EXPANDING EMERGENCY OBSTETRIC CARE IN NEPAL

Meera Thapa Upadhyay, Nepal

Objectives

- Summarize how Nepal is expanding EmOC through SM activities
- Describe the changes that occurred at the Maternity Hospital in Thapathali, Nepal in order to develop an internationally recognized CBT site for the region

Background

- There are about 850,000 pregnancies nationally and an estimated 130,000 obstetric complications
- Nepal has an MMR of 539/100,000
- Every two hours a woman dies as a result of causes directly related to or aggravated by pregnancy and childbirth
- Most of the deaths are preventable
- 90% of deliveries are at home (just 10% in institutions)
- Government has established a 15 year plan which aims to provide basic EmOC and comprehensive EmOC throughout the country

Description of interventions

- Site assessment of training site in September 2002
- Team training in EmOC (regional course, TA from JHPIEGO)
- Standardization of hospital (ongoing)
- Availability of training materials

Challenges

- Inadequate or slow changes at the hospital
- Limited number of trainers
- Government's plan of having skilled attendant at each birth within 15 years

Overcoming challenges

- Introduced regular continuing medical education in the hospital regarding evidence-based practices
- Held a midwifery skills refresher course for 15 nurses
- Created a separate training room for EmOC
- More trainers were trained
- The Government now plans to develop more EmOC training sites

Results

- AMTSL for all deliveries
- Labor monitored by partograph
- IP practices strengthened
- Emergency drugs are available in the wards
- Some structural changes were made to the labor wards

- PAC service is available 24 hours a day
- The number of ANC visits were reduced
- This training center covers 22 districts; there is a plan to develop training sites for the eastern and western regions

Conclusions

- The hospital is practicing many of the evidence-based practices
- Staff are very receptive to the changes and the training program
- Many ob/gyns are interested in becoming trainers
- The Family Health Division and HTC along with the donors are keen to develop this hospital into regional a CBT EmOC site

Remaining issues, next steps

- Need to provide continuous knowledge update sessions for young doctors and nurses (would like to incorporate into pre-service training)
- Nurses need more refresher courses
- Need to include EmOC training curriculum into pre-service area
- Well-planned follow up is necessary

For further information contact:

Dr. Meera Thapa Upadhyay

upadhyay@mail.com.np

ESTABLISHING POST-ABORTION CARE SERVICES IN A FAITH-BASED PRIVATE SECTOR SETTING, MUHAMMADIYAH HOSPITAL NETWORK, INDONESIA

Pancho Kaslam, Indonesia

Objectives

- Describe the steps to establish post-abortion care (PAC) services in the Essential Maternal Services using general practitioners and midwives as a provider team
- Share the challenges, successes and lessons learned working with a faith-based organization to establish PAC services
- Discuss the future directions of the Muhammadiyah PAC training site as it graduates from the MNH program.

Dr. Kaslam is with the National Clinical Training Network—Reproductive Health (NCTN—RH) in Indonesia.

Background

Every hour 2 women die in Indonesia of an abortion-related condition. It is the fourth leading cause of maternal death. There are over two million abortions each year, 53% are in rural areas, 25% to 60% are induced and 75% are to married women. The MMR in Indonesia is 343 per 100,000.

The purpose of the intervention was to develop model PAC services and training sites at 4 hospitals. This was done through advocacy with stakeholders and establishing their commitment.

Challenges

- Management of abortion focused on curative services offered only by specialists
- Most challenges are technical.

These challenges were overcome by:

- Having a PAC training strategy
- Developing standard PAC program benchmarks
- Promoting the role of the midwife as a critical member of the team
- Giving the provider a share of the income for providing of PAC
- Developing PAC standard operating procedures

Conclusions

- Integrating advocacy and community interventions into the program was essential
- Little steps were challenging but feasible and made a difference in reducing maternal death
- Integrated EmOC in low resource settings can be cost-effective and efficient
- Initial and ongoing follow-up and supervision helps establish high-quality services
- Transfer learning by implementing a sustainable strategy of training
- Maximize human resources by promoting GPs and midwives
- Providers need updates in FP
- Institutionalizing the FP component of PAC services will require providers trained to provide counseling, conveniently located FP commodities and referral

Next steps

- Replicating PAC training as part of integrated EmOC in public hospitals
- IP compliance still a major issue
- Integrating PAC into pre-service education (MVA vs. D&C)
- Expansion and scaling up of PAC services at remaining hospitals in the private network
- There is still an issue of MVA instrument re-supply
- Internal commitment and leadership for PAC has to be nurtured and supported

CHAMPIONS FOR CHANGE--SESSION 4

CARE STANDARDS: INCOMPLETE ABORTION WITHOUT COMPLICATIONS

Gerardo Vitureira, Uruguay

Objectives

- Development of care standards
- Collaboration with a multidisciplinary MNH team
- Advocacy in various settings to promote implementation of the standards

Background

Clandestine abortion is the primary cause of maternal death in Uruguay. There are no standards concerning how to treat incomplete abortion without complications (IAWC). There is inexperience with and stigma surrounding the MVA technique.

Initiatives

- Created and trained a multidisciplinary team
- Involved local authorities as needed
- Reviewed current evidence
- Surveyed 58 people involved with the issue

Challenges

- Standardizing IAWC care
- Developing institutional standards
- Mediating the healthcare, scientific, ethical, legal, moral and logistical aspects
- Implementing the standards
- Educating people in correct technique
- Supplies

These challenges were overcome through:

- Technical training and continuing education
- Monitoring of the implementation
- Expanding implementation throughout the country
- Providing needed supplies

Results

- After two years, the IAWC care standards were prepared. The standards were based on evidence and were developed with the participation of a multi-disciplinary team
- There was involvement and participants by key players
- Indirect recognition of the abortion “problem”
- Recognition of the importance of training prior to standardization

Conclusions

- Key elements for the successful implementation of IAWC care standards included:
- Development of IAWC institutional standards based on current scientific evidence
- The participation of a multidisciplinary team in developing, implementing and monitoring the standards.

Next steps

- Print and distribute the standards
- Provide training in MVA technique
- Properly supplying the facilities
- Expanding implementation of the standards throughout the country
- There is need to share this experience with all other champions

We would like especially to acknowledge Gloria Metcalfe as a champion in her own right. We also have to thank the women who gave us the chance to work on their bodies to improve our techniques and their lives.

For further information
Dr. Gerardo Vitureira Liard
gvl@chasque.apc.org

THE IMPLEMENTATION OF RESTRICTIVE EPISIOTOMY AT THE HOSPITAL OF AMATITLÁN, GUATEMALA

Jose Fredy Chuy Mancilla, Guatemala

Objectives

- Describe why we changed the practice of episiotomy at our hospital
- List the initiatives that were undertaken to achieve change
- Explain the results
- Share the lessons learned

Background

- Hospital is 30kms from the capital
- Rate of hospital deliveries is only 50% and care is not optimal

Initiatives

- Obtained authorization from the hospital board of directors
- Advocated medical and paramedical personnel who are resistant to change
- Provided CBT to maternity ward doctors and nurses to ensure they are able to provide humane care during childbirth and restrict the use of the episiotomy
- Updated the hospital's obstetric care protocol
- Measured and monitored results
- Developed an incentive system for personnel

Challenges

- It was difficult to obtain authorization
- There was resistance
- Needed to provide training
- Lack of updated care protocol
- Difficulty obtaining incentives

To overcome these challenges, the project had to:

- Prove to the medical staff who resisted that it was necessary
 - Prepared a video to convince them – they needed to be convinced that what we were doing was good
 - Also had informal talks and educated by example
- Design a training package that was responsive to the time constraints of working personnel
- Convince management to create an incentive program
- Revise and update the care protocol

Results

The percentage of births with episiotomy in first time mothers decreased from 100% in 2000 to less than 10% in 2002. The percentage of births in a hospital increased from 50% to 85% in the same time period.

Conclusions

- The model for improving performance and care quality has been an effective tool for implementing new practices
- A healthcare personnel incentive system is much more effective in increasing quality care than performance monitoring systems
- Changes in practices at any healthcare institution should be accompanied by a multidisciplinary effort that includes everyone from medical personnel to admissions workers.
- Any attempt to achieve change without the support of the authorities, both in the process of modifying practices and in monitoring, will not succeed.
- Personnel incentives are of critical importance in achieving--and, above all, in maintaining--the standard of care.

Next steps

- Expand the maternity ward
- Separate the maternity ward from the operating room
- Hire midwives for psychological and emotional support

MEETING THE CHALLENGE: POLICY CHANGE FOR BASIC EmOC TRAINING

Duptho Wangmo, Bhutan

Bhutan is a small country with a population of 657,548. There are about 22,400 births per year and the MMR is 2.55 per 1,000 live births. Fifty-six maternal deaths have been reported since mid-2001. There is believed to be severe underreporting.

The Government established 18 basic EmOC and 16 comprehensive EmOC units – most are equipped but are awaiting personnel. There are no skilled EmOC providers—there are only three gynecologists, plus two expatriates. So, even though facilities are available, as providers go on leave or are transferred a center may move from comprehensive to basic EmOC or even stop working completely. There are no medical schools in Bhutan – students are sent for training to India, Bangladesh or Burma.

Therefore the challenge is to have adequate trained staff available. The MOH initiated comprehensive EmOC competency based training, but there is a shortage of medical officers in the districts to attend the five week training.

PPH is the leading cause of maternal mortality and about 45% of this mortality is due to retained placenta. Midwives were to be trained in manual removal of the placenta. In five cases where delivery was conducted by personnel at home, the personnel were not skilled so the women died.

We advocated for change in policy, so that all graduating doctors and nursing staff will have EmOC training. The Public Health Department endorsed this. Providers were released from work for this training but on a few occasions they were called out to attend to urgent or complicated cases. Also, during the training there were not enough cases for certain conditions – there was no case of incomplete abortion during the training, for example.

The participants all felt the training was relevant. The curriculum has been revised to incorporate competency-based training. Ten doctors, three BScN graduates and two midwifery tutors will be going to the peripheral units, and it is hoped that these will save the lives of mothers who live in the rural areas.

TRAINING WITHIN AND WITHOUT

Gonzalo Sotero, Uruguay

Objectives

- Describe the importance of training in the education of specialists (gynecologists, midwives)
- Describe the importance of disseminating results
- Describe the importance of advocacy at the technical-administrative level

Background

- About 90% of deliveries in Uruguay are in health facilities
- Doctors and midwives receive traditional training – not interactive, no feedback given, almost no monitoring of clinical practices
- Since no feedback given, providers do not know their mistakes
- Lessons learned are permanent

Initiatives

- At the national level, 58 residents and 42 midwives were trained
- Monitoring initiated
- Results distributed in and outside the institution
- Periodic meeting with leadership
- Periodic meeting with administrators

Challenges

- Need to change mentality at all levels
- Opinion leaders need to meet people who make a difference
- Make sure rest of our colleagues understand what we are doing and the sum of changes that are occurring

Results

At the local level:

- Implementation of best practices
- Raising the awareness of the health care team and the population
- Multiplier effect of training
- Support of political, academic and administrative authorities

At the regional level:

- 49 professionals trained
- 12 trainers trained in Santo Domingo
- 24 hospitals participating in GUIDELINES project

Conclusions

- Training trainers is simple and has a multiplier effect
- It is essential to know who to select for training
- Training should be adapted to meet the objective
- Use multifaceted strategies
- Always feed back the results
- The support of administrators is crucial
- Monitoring at a distance is difficult

Next steps

- At the national level, continue to disseminate best practices
- At the regional level, evaluate the training team from the Dominican Republic, continue to provide information and training and implement the intervention of the GUIDELINES project, 2004-2005

The Latin America team would like to especially thank very sincerely Jeff Smith and Gloria Metcalfe, and not forgetting Nancy Russell – “If you dream it, you can do it!”

For Further Information
Gonzalo Alberto Sotero Salgueiro
gonzasote@hotmail.com

IMPROVING QUALITY OF CARE AND PROFESSIONALISM OF INDONESIAN PRIVATE PRACTICE MIDWIVES THROUGH THE BIDAN DELIMA RECOGNITION PROGRAM

Asmuyeni Muchtar, Indonesia

Objectives

- List the goals and objectives of the *Bidan Delima* program
- Define the qualities of a *Bidan Delima* private practice midwife
- Describe how the *Bidan Delima* program works
- Define how a private practice midwife becomes accredited as a *Bidan Delima*

Background

- *Bidan* = midwife
- *Delima* = award or recognition for those who reach a standard of quality
- IBI= the Indonesian midwifery association – has branches at the central, provincial and district levels
- IBI does internal monitoring and external monitoring is done by government (MOH) and the community
- Midwives provide FP, ANC (90%) and deliveries (55%)

Objectives of the Bidan Delima program

- Increase quality of services for the community
- Disseminate best practices to IBI members
- Increase midwifery professionalism
- Develop and promote midwife leaders in the community
- Increase the scope of family planning and reproductive health services by midwives

Steps

- Develop a committee at the central and periphery levels
- Training
- Develop organization guidelines—recruitment system and guidance and mentoring system
- Develop tools
- Create recognition and certification systems
- Create quality assurance and follow-up system
- Internal and external marketing

Midwives register at the local IBI branch and are given guidelines on FP and maternal and neonatal care – tools and a self-assessment booklet, which includes the supplies they should have. The midwife conducted the self-assessment and calls the supervisor to assess her/him. The midwife then gets mentorship from the supervisor. There is also peer review, study groups, radio vignettes for training, seminars and workshops and training to assist the midwife meet standards.

Challenges

There are a large number of chapters and members of IBI—68,772 members out of 80,000 midwives nationwide. 29,000 are private practice midwives. Thus there are large numbers of midwives who need to update their skills and knowledge to reflect international evidence-based standards.

Results to date

- 320 private midwives in six provinces have been trained as project facilitators
- Private practice midwives are offering higher quality services

Next Steps

- QA follow-up
- Strengthen IBI management
- Marketing—mass media campaign to promote Bidan Delima, patient education materials, marketing of Bidan Delima to other IBI members and external organizations
- Scaling up to other districts and provinces
- Currently the program is funded by USAID for first batch – IBI will continue the program using the money they obtain from registration

Conclusions

Improving the quality of care and professionalism of private practice midwives through Bidan Delima requires time, hard work and systematic activities. Updating and disseminating best practices requires broad involvement: midwives, government, communities and donors.

For Further Information
STARH—JHPIEGO/Indonesia
amuchtar@jhpiego.net

PERFORMANCE IMPROVEMENT IN ANC/MALARIA IN PREGNANCY

Alice Mutungi, Uganda

Objectives

- Describe the application of Performance Improvement in Antenatal Care (PIA) for quality ANC services (and other aspects of health care)
- Describe the importance and benefits of using low cost approaches for quality services (e.g. ANC)
- Enumerate the benefits of empowering health care providers through capacity building and participation

Dr. Mutungi is with the Regional Center for Quality Health Care (RHQHC) in Kampala, Uganda.

Background

Activities at the Regional Center for Quality Health Care (RCQHC) have been supported by the Ugandan MOH, REDSO/ESA, USAID and JHPIEGO. A need was identified for a PI guide in ANC highlighting malaria in pregnancy. RCQHC was asked to develop the guide.

Description of Interventions

A draft PI guide was created with input from experts and key regional representatives. It was pretested in three facilities in Kumi District, Uganda. For the pretest, each facility:

- Set what they wanted to see done in ANC (desired performance)
- Collected data on what they were doing (actual performance)
- Determined the gaps and did root cause analysis
- Shared the findings with whole team and stakeholders
- Designed interventions to close the gaps
- Made draft work plans

Key gaps addressed include:

- Inadequate knowledge of goal-oriented ANC
- IPT in ANC not routine—not done at all in outreach programs
- Broken door locks on examination rooms
- Lack of appropriate placenta disposal sites

In implementing the interventions, the teams:

- Built on on-going activities in ANC
- Worked within existing resources
- Received support from the district
- Strengthened monitoring

Challenges

- The teaching materials and guide were complex
- Changing the mindset of the stakeholders
- Creating a team spirit among the three facilities

Overcoming challenges

- Involved facilitators in simplifying teaching materials
- Created sense of ownership of the process among stakeholders—partners in quality improvement and not fault-finding
- Continuously encouraged participants' meetings and regular interchange of information, accomplishments and confidence-building

Results

At the facility level:

- Goal-oriented (focused) ANC put in practice
- IPT given as DOT and no SP stock-outs
- IPT integrated into ANC in outreach programs
- Doors repaired and functional
- Placenta pit constructed at one hospital
- Incinerator constructed at one hospital (almost complete)

Lessons learned

By RCQHC:

- Participation of key stakeholders a must
- PIA is applicable at different health facility levels but need to start small (where it is likely to work)
- Need for a champion
- Periodic follow-up support, supervision and mentorship needed

By Kumi Team:

- PIA and the process requires teamwork
- Need prioritization during reallocation of resources
- Needs commitment
- Requires mothers to attend ANC early--health education needs to be intensified

Next steps

To facilitate scale up of use of PIA in ANC/MIP, RCQHC held a regional meeting for eight countries. Participants were oriented to PIA in ANC/MIP, the Kumi team shared its experience and country teams developed action plans.

Progress has been made. Zambia initiated implementation in December 2003. Uganda and Tanzania are in the process. A presentation at the IBP launch in Africa meeting in June 2004 generated a lot of interest.

The PI in ANC/MIP guide needs to be completed and disseminated.

In the words of one participant on the Kumi team:

“Each time I see a problem now, I take it as my responsibility and start thinking of the causes, and ways to sort it out, and not wait or transfer it to my supervisors.”

Another participant said:

“Before starting use of the PIA, I used to think that particular problems should be left for the sister in charge to solve, but now my immediate concern is to get involved in analyzing the main causes and finding solutions, and sure I am able to solve some of the problems even in my area of work before the sister is aware of these. I just share afterwards what took place—and it feels really good.”

For Further Information

Dr. Alice Mutungi

amutungi@rcqhc.org

DISCUSSION

QUESTION for Indonesia: What is the Bidan Delima program?

A: This is a program led by the IBI, in which an award is given to private midwives to help increase quality of care and professionalism.

QUESTION for Kenya: What is Kumi? In Ghana it is a person's name.

A: This is the name of the district in Uganda where the activity was carried out.

QUESTION for Indonesia: How long is your midwifery training in Indonesia?

A: IBI started training in 1954. The midwifery training is 3 years long, starting after Grade 12 school.

QUESTION for Guatemala: What sort of incentives were given?

A: We had to be creative – incentives are not necessarily financial. They included:

- A letter from the director, appreciating the good work
- An extra day off
- A certificate, etc.

QUESTION for Kenya: You said that for the PI framework to be used, the service delivery guidelines should be in agreement. Usually these service delivery guidelines are outdated, so should the guidelines first be updated or can the two processes be done simultaneously?

A: In all five countries policy guidelines have very recently been updated. Usually the country has to incorporate this themselves, as the RCQHC cannot do this for the countries.

QUESTION for Indonesia: Regarding the increase in number of midwives from 16,000 to 80,000, how does this relate to a reduction in maternal mortality?

A: Yes, there has been a reduction (in maternal mortality) from over 400 per 100,000 live births to 307. But there are 80,000 midwives for a population of over 200 million and they are not equally distributed all over the country, so this cannot be the only thing that contributes to maternal mortality.

LINKING PROGRAMS TO EXPERTS

Leslie Mancuso, CEO, JHPIEGO

This session began with recognition of Harshad Sanghvi. He is an innovator and an idea person—he came up with the regional experts idea.

This part of the program is to highlight donors, NGOs, CAs – to hear about their agencies, how they have worked with regional experts, and their future plans.

UNICEF

Dr. Chewe Luo, Senior Health Advisor, MCH

MNH: Scope of UNICEF's Work and Opportunities for Collaboration

Dr. Luo began by thanking JHPIEGO for including UNICEF as a participant in this very important meeting. UNICEF attaches a lot of importance to the work that JHPIEGO has been championing.

UNICEF's mandate is to advocate for the protection and fulfillment of the rights of children. UNICEF is guided by a vision that leaders and the international community commit to use their power, influence and resources to assure every child the right to survival, growth and development to his or her full potential. Health is a key priority in UNICEF's scope of work.

The programming strength of UNICEF's work at the country level are programs driven by the country needs. UNICEF is working with partners to achieve the Millennium Development Goal to reduce maternal mortality by three quarters between 1990 and 2015. The organization is working with the Mailman School of Public Health at Columbia University to avert maternal mortality and disability.

Recognizing the interlink between maternal health and child survival, UNICEF is redefining its work towards promoting innovative evidence-based approaches to comprehensive ANC service provision, including birth preparedness, complication readiness, HIV prevention and care, malaria prevention and management, nutritional support and tetanus toxoid. Through the girls' education initiatives, UNICEF is paving the way for a new generation of women who are better nourished, healthier, have better family income, later age of marriage, and reduced fertility rates. UNICEF also continues to support programs that promote breastfeeding.

At the country level, UNICEF works with communities to improve health care seeking behaviors as well as family care practices. It works with partners to uplift the status of women in society and reduce harmful traditions (e.g., female mutilation).

In terms of opportunities for collaboration, UNICEF continues to be part of the global forum for the setting of standards and norms as well as advocacy at the global level; dissemination of standards and norms through UNICEF regional offices and country offices; strengthening of regional networks and capacity development; and in-country collaboration and partnership in program planning, implementation and scale up.

“When people with a common vision come together, something extraordinary happens.”

WHO

Dr. Juliana Yartey, Department of RH and Research

The Making Pregnancy Safer (MPS) initiative in WHO is in the process of being developed into a separate department –it is coming out of the Department of RH and Research. The goal is to give the department more visibility within WHO.

WHO's focus is on strengthening country level activities, including HR – under the MPS initiative and to set up regional centers and/or networks to provide assistance to countries in implementing MNH initiatives.

WHO is definitely willing to work with this body of experts to build regional expertise. The Implementing Best Practices (IBP) initiative's goal is to improve RH. The challenge is bridging the gap between the transfer and application of evidence-based knowledge. IBP is a global health movement focused on improving RH programs. It is operated by a consortium of 20 international organizations working with local networks at regional and country levels. IBP acts as a magnet creating networks of organizations and agencies at regional and country levels, working toward more effective results. For more information go to: www.ibpinitiative.org.

OPTIONS/DfID

Alison Dembo Rath, Project Director, Nepal Safer Motherhood Project

DfID is using TA to support Safer Motherhood in Nepal. OPTIONS is a subsidiary of Marie Stopes. The Safe Motherhood Project is in 9 districts out of 75 in Nepal. It includes policy and programme development, support for community advocacy and improved midwifery skills. It is funded by DfID and managed by Options. People trained in MNH regional expert program have been used for various activities including upgrading of physical infrastructure, staff training, etc.

The Nepal Safe Motherhood Project (NMSP) ends September/October 2004, but DfID is giving the project another 20 million pounds in support for the next five years. We are moving away from a project to a programme approach, to try and cover more of the population.

Scale-up is a challenge, to translate NMSP successes to national interventions. Areas of technical assistance include capacity building of the MOH and health systems (creating an enabling environment), HR development, management of physical assets, etc. OPTIONS will continue the relationship—the OPTIONS consortium will be there for next five years with a team of partners. The question is, how fast can scale up take place in a weak system where health sector reform has not yet started?

Save the Children

Joseph de Graft Johnson, Africa Regional Health Advisor

Save the Children was founded in 1932; it is a non-profit child assistance organization. It is a member of the International Save the Children Alliance, which is an association of 30 independent organizations. Save the Children's mission is to create lasting and positive change in the lives of children in need. The organization has four initiatives:

- America's forgotten children
- Every Mother, Every Child (the international component)
- Children in emergencies and crisis
- Changing lives through sponsorship

Every Mother, Every Child includes a health unit. The goal of health unit is to bring about sustainable improvements in the health status of individuals, families and communities, with an emphasis on children. Its programs include Saving Newborn Lives (SNL) and school health and nutrition.

Saving Newborn Lives (SNL) focuses on safe motherhood on one end and child survival on the other end--most SM programs focus on the mother and less on the newborn. SNL works to:

- Strengthen and expand what works (e.g. tetanus toxoid immunization, clean delivery, KMC)
- Discover and diffuse new and better technologies and approaches to preventing newborn illness and death (e.g., infections and birth asphyxia)
- Build understanding and commitment at global and country level to addressing newborn health
- Build partnership and mobilize resources to achieve scale and impact
- Build global and country level capacity to lead and support improved newborn health programming

In RH, Save the Children works towards:

- Improved recognition of pregnancy-related danger signs, care-seeking behavior, and access to services related to essential obstetrical care including community and facility-based life saving skills (Safe motherhood)
- Improved knowledge about, and access to, services related to reproductive tract infections
- Increased quality of, and access to, family planning services to enhance both maternal and child health
- Improved women's nutrition, with special attention to anemia

Its strategies include:

- Enhancing the quality, availability and use of key health services
- Fostering improved health practices at the individual and household level
- Enhancing knowledge about, and therefore demand for, key health services
- Encouraging, defining, and supporting policies and approaches that are cost-effective and sustainable in addressing the major causes of illness and death

Approaches include:

- Community empowerment and mobilization
- Partnerships both to inform policy and to facilitate replication of successful models
- Capacity-building in both managerial and technical knowledge and skills upgrades
- Program Learning - Action Research to develop and test new and/or better technologies to meet the health needs of disadvantaged populations
- Technical assistance

SAVE works in 15 focus countries and 13 non-focus countries around the world. SAVE has a health advisor and program managers in every country.

MNH experts can work with Save the Children in the following:

- Assist in assessing needs, developing strategies and plans for MNH Programs, especially the facility-based component
- Facilitate training and support supervision
- Serve as team leaders/members in evaluating our programs
- Assist in keeping our staff abreast of current MNH through dissemination of information and materials
- Disseminate lessons learned from their experiences (e.g., provision of quality services in facilities with inadequate staffing)
- Identify operations research questions in MNH service delivery
- Serve as advocates to facilitate evidence-based MNH programming.

MNH partners could assist Save the Children and its partners in their regions to have adequate maternal and neonatal care knowledge and skills and to serve as advocates to mobilize additional resources.

POLICY Project

David Logan, Interim LTA, Policy Ghana

The POLICY project is funded by USAID. It has more than 25 years of experience in population and policy development. The project works with host-country governments and civil society groups, professional and non-governmental organizations to achieve a more supportive environment for policies that promote quality FP/RH services including maternal and child health and HIV/AIDS

The project's strategic objective is to help develop policies and plans that promote and sustain access to quality FP/RH/AIDS services. As a result of this work, political and popular support is broadened and strengthened; planning and finance for FP/RH/AIDS improved, relevant information informs policy decisions and in-country regional capacity to provide policy training is enhanced. The focus is to develop local and regional training capacities targeted at policy champions and authorities responsible for the formulation and implementation of health policy and ensure that policy advocacy becomes self-sustaining.

MNH experts can help identify local policy champions to lead the work in maternal health and can assist in the implementation of an MNPI index (use local experts to score national MN programs).

Regional Center for Quality Health Care Alice Mutungi, Uganda

The Regional Center for Quality Health Care (RCQHC) was established in 1999. Today there are about 1,500 members. It is funded by USAID/REDSO. JHPIEGO was part of the formation of the center

The vision of the center is to be an internationally recognized center of excellence advancing the quality of health care in Africa. Its mission is to provide leadership in building regional capacity to improve quality of health care by promoting evidence-based better practices through networking, strategic partnerships, education and training.

Its strategic objectives include:

- Strengthen technical skills in the region
- Strengthen institutional management
- Expand access to critical quality of care information in the region
- Expand access to information technology in the region
- Improve networks and partnerships in the region

Areas of focus include:

- Health intervention priority areas – Reproductive and MNH, child health, infectious diseases, HIV/AIDS, public health emergencies
- Process areas – guidelines and standards, innovative training, logistics support, facilitative supervision, QA, cost and quality

Approaches include:

- Graduate diploma course in quality health care (1 year)
- Short courses in the above-mentioned areas (1 to 2 weeks)
- Expanding access to critical quality of care information (newsletter, job aids, web site, calendar)
- Improving networks and partnerships – provide technical assistance to Ministries of Health and NGOs
- Expanding access to information technology
- Research

How to work with the MNH regional experts?

- Involve them in activities in the region (training courses, workshops, follow up and support post-training). They are an invaluable resource.
- They can help with scaling up
- At the IBP launch in June in Entebbe we will encourage countries to work with these experts.

AWARE-RH/WARP (Action for West Africa Region–RH)
Fatimata Diabate Diallo, Obstetrician

AWARE is a 5-year project that is funded by USAID/WARP. EngenderHealth, Abt, AED and MSH are involved. The project covers 15 countries of ECOWAS plus Chad, Mauritania, and Cameroon. Its goal is to increase the adoption of sustainable FP/RH interventions.

AWARE's strategies include:

- Use regional consultative processes to ensure regional ownership of best practices and approaches
- Facilitate the creation of diverse partnerships to implement activities, etc.
- Identify, disseminate and apply best practices that can be adapted and replicated throughout the region
- Foster the technical leadership, marketing and business development capacity of regional institutions and networks

In collaboration with MNH and other partners, AWARE – RH will disseminate best practices in MNH.

Family Care International
Brahima Bassane, Project Officer

Promoting Safe Motherhood in Africa: the Skilled Care Initiative

Family Care International (FCI) is an NGO that was founded in 1986. Its headquarters is in New York. Its mission is to promote RH in general. FCI is the Secretariat for the Interagency Group for SM. The Skilled Care Initiative is a five-year project implemented with the MOH in 3 countries – Burkina Faso, Kenya and Tanzania. The goal is to decrease death and disability caused by pregnancy-related complications, through skilled birth attendance.

The skilled care model aims to:

- Promote essential obstetric care (EOC) throughout pregnancy, labour and delivery and in the postpartum for all cases, including major obstetric complications
- Shift more essential obstetric care services to lower levels of service provision
- Facilitate front-line providers to practice all basic essential obstetric care procedures
- Build an enabling environment to support skilled care
- Promote community awareness and mobilization to increase the utilization of skilled providers

In Burkina Faso, the main goal is to increase skilled attendance from 20 to 27%. There are several aims including:

- Promote essential obstetric care throughout pregnancy, labor and delivery and in the postpartum for all cases
- Mobilize resources
- Apply strategies – utilization of services through behavior change interventions
- Use an evaluation system which is quasi-experimental.

FCI is already working with people in the field – MNH experts and other trainers. We have used Dr. Dao quite a bit and we have also used MNH materials. We are adapting MNH materials for community-based activities. Dr. Dao is their main collaborator and he will continue to work with them.

LESSONS LEARNED – LAUNCHING THE MATERNAL AND NEWBORN CHAMPIONS NETWORK

Harshad Sanghvi

The Africa representative, Keziah Kapesa, reminded the group that maternal death is very painful, we all know that. On behalf of her African colleagues and all African woman who have been saved due to this program, and have been trained by these experts she extended her sincere thanks to the JHPIEGO administration and the MNH team and everyone who has contributed to make the MNH program a success. “I thank you on behalf of all the women and children whose lives will be saved by this program.”

The Asia representative, Dr. Djoko said that on behalf of the Asia MNH experts, he would like to thank JHPIEGO (staff and faculty), the Ghana MOH, the local committee and all participants. They have enjoyed meeting other MNH experts in Ghana – we have come from a long way, but it doesn’t matter – we have learned, we have heard innovations in saving maternal and neonatal lives – we promise that we will work hard to scale up in our region. He recommended that the next regional MNH meeting be done in Latin America. “Thank you for this opportunity.”

The Latin America representative, Dr. Estuardo, said that those from Latin America would like to thank God for bringing us here, and JHPIEGO for this opportunity to participate in this conference with the regional experts. We think the aims and objectives have been achieved; we were motivated as champions of change, we have seen examples to follow. We are so motivated that at the next meeting we’ll be able to show better results and save more mothers’ and children’s lives. We are proud of being champions of change in Latin America and we wish all of you a safe return to your various countries. “May God bless you and thank you.”

Dr. Sanghvi remarked that this has been an incredible week with so much energy, so much participation – these last 2 days have been so amazing and interesting – I have been overwhelmed by the real change that you’re bringing about. I’m impressed by your persistence, and delighted by Latin America wanting to learn about episiotomy rates from Zambia, and Ghana learning about performance and quality improvement from Latin America. I’m delighted by your desire to make a difference. “We have created a momentum and we cannot let that dissipate.”

Dr. Sanghvi noted that the MNH Program has been exploring a new home for this effort. It is time for such a network to grow. This innovation needs scaling up, it needs a home bigger than MNH. We have looked for a global body that could be the home, with a commitment to the survival of mothers and newborns, that could have global reach (particularly in low resource settings), is able to bring together partners, and is committed to our philosophy is that it is people that make a difference. We have found such an organization – they will maintain this network and expand it, they will link all the experts to different programs around the world, they will support the work of experts in their own countries and across borders and will help experts continue to share their learning. For the moment, this will be a virtual network. The Global Partnership for Safe Motherhood and Newborn Care (formerly the Interagency Group) has accepted the responsibility for running this network. The secretariat is in Geneva, in office supplied by WHO.

Lessons Dr. Sanghvi has learned from this meeting:

- If we make a change, we are alive. If we do not, we are dead.
- If we can dream it, we can do it.
- Lord Buddha was born in an alternate birth position.
- Let us do the right thing and do the thing right.

Lastly, he remarked that we have worked hard this week, we have also had some fun, and we made friends across three continents. I urge you all to continue your remarkable efforts.

Donna Vivio thanked everyone on behalf of the MNH program. She said that the network here in this room is a community – we have been doing networking with each other and with the donors – we are a community now –we’ve shared the pluses and the minuses, and the challenges. Community is much more powerful than just a network. The keys to effective leadership are clarity, focus and alignment – need to know what the problem is so the solution is applicable. We have focused on new opportunities for funding, to get our issues focused on. We have had alignment in getting our countries and organizations behind us to do what we’re doing.

Thank you – to the hotel for accommodating this conference despite all the “drama”, Kristin White and Liz Kizzier, Angela Nash-Mercado, Therese Gouel-Tannous, the Ghana office staff for hosting this, and all our other Ghanaian colleagues. Special thank you to the translators, a huge thank you to the faculty who have put in so much effort on this, thank you to all the participants and partners.

