Report to SASNET

Planning Grant Asian Network on Child Health and Survival

Background to the project

Millennium Development Goal #4 is a two-third reduction in the under-five mortality rate, from 93 of every 1,000 dying in 1990 before the age of five years to 31 of every 1,000 in 2015. This goal is aimed not only at saving lives and reducing human suffering. It is also, together with measures such as women's education and reproductive health services, an essential part of strategies to bring exponential population growth under control. In countries where under-five mortality rate is extremely high, fertility rates are also high, with couples having a large number of children in order to guarantee that some will survive to adulthood. Millennium Development Goal #4 is closely allied to Goal #5, which is to improve maternal health. The specific targets are to reduce maternal mortality by two-thirds and to achieve universal access to reproductive health.

The region with the highest maternal-and-child mortality rates is Africa, but rates are also very high in Asia. Latest figures from UNICEF for 2007 show 51% of the under-five deaths in Africa and 41% in Asia. The remaining 8% of the deaths are distributed throughout the other regions of the world.

International monitoring efforts are focusing on 60 countries which together were accountable for 94% of the under-five deaths in the world in 2004. Five SASNET countries—Afghanistan, Bangladesh, India, Nepal, and Pakistan—are among these. Both Bangladesh and Nepal have made significant progress since 1990, but progress in the other three countries is very slow.

One tragic aspect of this situation is that so much is already know about how mortality can be reduced, among neonates, young children, pregnant women, and women in labour. Furthermore, a multitude of life-saving measures especially relevant for lower-income countries and other resource-limited situations have been identified through research. Descriptions of these measures plus other information relevant to health-care policies and clinical practice are made available to midwives, obstetricians, pediatricians, and other health professionals by the World Health Organization, UNICEF, the INFO Project at Johns Hopkins University, and dozens of other agencies and institutions.

Almost all of this information can be downloaded free-of-charge off of WWW, and print copies and CDs can be order free-of-charge. Nevertheless, these valuable and life-saving information resources are unknown and unused by most health professionals in the countries where they are most needed.

At Uppsala University, steps to rectify this situation have been going on since the late 1990s, when International Maternal and Child Health (IMCH), Department of Women's and Children's Health, begin offering courses and other training for master's and doctoral students about how to access high-quality online information in medicine and health, both for their own research and for future professional applications. Since then, many dozens of Asian health professionals from India, Pakistan, Nepal, Bangladesh, and Sri Lanka have gone through this education at IMCH.

At the same time, information units were integrated into Sida-supported International Training Programs (ITPs) on maternal health care and reproductive and sexual health and rights that were organized by IMCH from 1992 through 2002, primarily for African and Asian health care professionals. Of these participants, 86 came from SASNET countries.

In 2003, information activities at IMCH were consolidated into INFORM (International Network for Online Resources and Materials), with the aim of delivering health information training not only in Sweden but also onsite in lower-income countries. Among the first countries to arrange INFORM workshops was Sri Lanka, where four workshops were run at the University of Sri Jayewardenepura between 2003 and 2006.

In addition, INFORM continued to develop and deliver training for ITPs associated with IMCH. One of these was the ITP on child survival held at Uppsala in the spring of 2007, with participants from eight Asian countries, including Afghanistan, Bangladesh, India, Nepal, and Pakistan. Another was the autumn 2007 ITP on strengthening midwifery competence, which was organized by Karolinksa Institute in collaboration with the Swedish Association of Midwives and IMCH. The midwives participating in the training were from Afghanistan, Bangladesh, India, Nepal, Pakistan, and Sri Lanka, as well as five other Asian countries.



The 2007 ITP on child survival

The 2007 ITP on strengthening midwifery

In these and other INFORM courses and workshops, the participants had one response to the information component. "This training is invaluable. We did not realize these resources that we can use to save lives were available to us in our own countries, free-ofcharge." And they had one common request: "Please come to our countries, to do more training and help us build a system for spreading this knowledge to our colleagues." The groups that were most eager to have more INFORM training were from those south Asian countries where maternal and child death rates remain extremely high, namely Afghanistan, Pakistan, and India.

The grant-support activities

The grant from SASNET was aimed at both providing training and initiating network connections among professionals working with child health and survival issues in the region. The decision was made to hold training workshops in Afghanistan and Pakistan. Since costs for the workshops exceeded the SASNET grant, complementary funding was sought from various sources. With the total funding acquired, three workshops were arranged, one in Afghanistan and two in Pakistan.

The training materials for the workshops, including the compendium, powerpoint slide sets, and hands-on exercises, were developed primarily by Dr Martha Garrett, director of INFORM. (The compendia can be seen and downloaded at the INFORM website, <u>http://www.inform-network.org</u>.)

As with other INFORM training, the materials were tailor-made for the countries and the audience. The packages for Afghanistan and Pakistan differed considerably, since the access programmes available in the two countries are not the same. For example, health professionals in Afghanistan can access many thousands of health and medical journals free-of-charge through a World Health Organization programme called HINARI. Pakistan is not eligible for HINARI, but health professionals have access to the same journals as their Afghan counterparts, thanks to the HEC's national digital library project.

Dr Garrett served as a trainer at all three workshops. Mr Anders Wändahl, a librarian at Karolinska Institute who has lead INFORM workshops in numerous countries, was also a trainer at the first two workshops. The third workshop was facilitated with the assistance of Ms Farzana Sherin, a Pakistani health professional working on her master's degree in international health at Uppsala University.

Workshop 1: Kabul.

This training was held at Rabia Balkhe Hospital, in Kabul, Afghanistan, 20-24 October 2008. The primary local partner was the Afghan Midwives Association (AMA). The focal point was Mrs Pashtoon Azfar, president of the AMA and formerly a participant in the 2007 ITP on strengthening midwifery competence. Partial funding for this workshop came from the HSSP (Health Services Support Project) of the Ministry of Public Health.



Mrs Pashtoon Azfar, President, AMA and Dr Martha Garrett, Director, INFORM

Sabera Turkmani, HSSP/JHPIEGO Midwifery Officer and Mrs Azfar

Participants and trainers

Almost all of the persons attending the Kabul workshop were midwives, either nurse midwives or community midwives with ties to the AMA. The group also included a public health officer, an IT specialist at the Ministry of Health, and several obstetricians. The Swedish Afghanistan Committee sent two of its staff members, an Afghan obstetrician and a Swedish midwife. Trainers were Martha Garrett and Anders Wändahl.

Venue and teaching conditions

Not surprising, teaching in Kabul was complicated by the security situation. Transportation to and from the hospital training venue took a great deal of time because of roadblocks and re-routings arising from security threats. This was so not only for the trainers, but also for the participants. As a result, the workshop sessions had to be started later and ended earlier than normal.



A deserted Kabul street

The venue was reportedly the best place available in Kabul for holding a health workshop requiring multiple computers. Nevertheless, conditions were far from ideal. The hospital library, which was converted into a classroom for the workshop, was extremely crowded, and it was difficult to move the furniture into circles for group work. The computer room was also small and very cramped. Many of the computers were not completely functional and the Internet connection was weak. The trainers consequently decided to divide the group in half and to hold each presentation and hands-on session twice, alternating between groups.



The hospital library completely filled with midwives



Anders Wändahl in the computer room

Feedback and some specific breakthroughs

The participants completed three feedback forms. On one, they wrote down on the first day what they hoped to gain from the workshop. Then, at the end of the workshop, they stated whether they had learned what they wanted. Almost without exception, the participants wrote that they had learned much more than they had expected.

On another form, the participants indicated how familiar they had been with specific information sites (WHO, GFMER, Highwire, etc.) and information concepts and tools (gateways, Boolean searches, etc) before the training and how familiar they felt themselves to be after the training. By far the most common pre-training score for all items was a '1', indicating no or little experience or knowledge. After training scores on all items were primarily '3's and '4's, signifying that the participants felt comfortable with the resource and even thought they could demonstrate or teach it to others.

The third feedback form was a standard type on which the participants graded the seven units within the workshop, as well as the training materials, teaching quality, and practical arrangements, and had the opportunity to write personal comments. There were many complaints about the training facilities, especially the computers and the slow Internet connections. Participants also complained about a related problem, namely, the lack of adequate time to carry out the hands-on exercises. Otherwise, the responses on this form were overwhelmingly positive, as is reflected in some selected quotes: "Now I finally know how to use the World Health Organization web site!"

"I am very, very happy. This was the best workshop I've attended"

"The INFORM trainers are the best teachers I have seen."

"Please come again, to train yet more health professionals in our country"

Two especially important breakthroughs were made during the workshop. First, it was discovered by the trainers that the HINARI access was not working. HINARI is one of the most valuable medical information resources available in Afghanistan. It is simple to use, but each institution or organization that wants to use it must send in their own registration form. Once they are approved by the HINARI office in Geneva, they receive a username and password, which can be used by everyone associated with the registered institution. Unfortunately, serious misinformation had been given out in Afghanistan about the HINARI password system, reportedly even by the WHO office in Kabul as well as by a HINARI trainer sent from Geneva. As a result, passwords had been misused and consequently cancelled by the HINARI office, and most eligible institutions and organizations dealing with maternal and child care has not been registered because they thought they were not eligible.

When this situation was discovered, the HINARI trainers immediately contacted the HINARI office, which responded within minutes. Short-time passwords were provided for the training workshop, and the organizations were given correct information about registration and passwords.

The other breakthrough concerned access to medical videos appropriate for LIC situations. Some workshop participants knew that the National Library of Medicine (NLM) in the US makes videos available online, and that some of these relate to maternal health. However, some of the videos the midwives needed—for example, one showing how cesarean sections can be performed more safely in LICs—are not available at NLM. The midwives had contacted the WHO office in Kabul about this problem and had been told that WHO did not have such videos available either. In fact, the WHO Reproductive Health Library, which is available both online and on CD, includes exactly such videos.

Workshop 2: Karachi

The first workshop in Pakistan was arranged by the Higher Education Commission and hosted by Dow Medical University in Karachi during 27-31 October 2008. Focal point was Mr Hassan Zaidi, Project Coordinator of the National Digital Library Program at the HEC. Partial funding for this workshop came from the HEC and from the UK organization INASP (International Network for Availability of Scientific Publications).



Group photo for the Karachi workshop. Participants, local organizers, and external trainers and facilitators. The INFORM trainers Anders Wändahl and Martha Garrett are fourth from left and fourth from right in the second row. Mr Hassan Zaidi from HEC is third from right in the second row.

Participants and trainers

The participants group consisted of 26 staff and students at Dow University, Aga Khan University, and other institutions in Karachi dealing with medicine and public health. They included professors, other teachers, medical libarians, post-graduate students, and one advanced undergraduate student with research experience. The trainers were Martha Garrett and Anders Wändahl.

The agreement with the HEC was that the participants should all be working in child health, maternal health, public health, or some closely related area. The group was more heterogeneous in professional background than expected and wished, but many of them were from the core target fields.

Venue and teaching conditions

The physical arrangements and practical support were excellent. The introductory slide presentations and live online demonstrations of resources were done in a teaching room at the University's Learning Resource Centre. It was equipped with a first-class computer and projector equipment and a high-speed connection to Internet. The seating was flexible so that participants could arrange themselves into circles for group work.

Immediately outside the teaching room was a large open hallway outside where the tea breaks and lunches were served, and immediately across the hall were the offices for the Learning Resource Centre, whose staff made sure that everything functioned smoothly.

The hands-on exercises at computers were held in the University Library's Computer Lab, which was nothing short of spectacular. The lab includes several training rooms. The one assigned for the workshop was spacious, immaculate, well lit and ventilated, well designed, equipped with 40 perfectly functioning computers, fully functional, and providing every feature a trainer could dream of. (A photo of the room is on the INFORM website in the random slide show under the INFORM banner.) The IT staff were knowledgeable and extremely supportive.

Feedback and some specific breakthroughs

The participants completed feedback forms both for INFORM and for the Learning Resource Centre, and participants were also given a chance to give verbal feedback.

There were two major complaints. One was that material sent out by the HEC to recruit participants had not been clear. Several younger teachers told us that they had been forced by their department heads to attend. They had not wanted to come because they expected the workshop to be technical or introductory. They said they felt very lucky—if their senior colleagues had understood what the training would cover, they would have signed up themselves and the young ones would have missed the opportunity.

The other major problem was that the two teaching spaces (at the Learning Resource Centre and at the Library Computer Lab) were too far apart. The participants needed about 10 minutes to leave one place, walk to the other, and get settled down. When it became obvious that this was going to result in a significant loss of training time, the trainers divided the group in two and rearranged the schedule into larger blocks. Although this worked well, a few participants were sure they were missing something.

Otherwise, the scores on the feedback forms were high on all points, including other aspects of the local arrangements, the value of the workshop content, and the quality of the teaching.

As usually happens in an INFORM workshop, people were truly amazed to realize how much online information they had been missing, and many of them expressed great satisfaction about what they had learned. A senior professor of obstetrics stood up during the feedback session and said that she had come 'just for fun' the first day, because she was sure she already knew about all the relevant online information resources in her field. It took just one presentation to change her mind and convince her to stay the week.

An unexpected number of comments were also made about the manner in which the trainers interacted with the participants, which was described as courteous, kind, friendly, polite, and culturally sensitive. Here is a selection of some comments from the forms:

"Please thank the funders. This training has been a blessing for us".

"I have found out about resources that I didn't know I had access to, that I didn't even know about. I am grateful to you for your teaching."

"A major strength of the INFORM trainers is that they adapt to the indigenous culture and give importance to the values of the host country."

One major breakthrough during the workshop was the realization by the participants that they all have free access to full-text articles from all the journals subscribed to by the HEC. The issue of access to the HEC journals was clearly a highly sensitive matter. When the topic first came up, the librarians and participants all began talking, simultaneously and loudly. After much discussion it became clear that everyone had an opinion, and all those opinions were incorrect.

The HEC subscribes to thousands of journals in medicine, and all of these are available to academic institutions throughout the country. Licensing agreements that would allow all teachers and students to access every article from their own computers would be prohibitively expensive, so only certain journal sets are available online at specific institutions. However, HEC may download any article for document delivery. Thus anyone can order any article from the HEC by email and receive a digital pdf or print copy free-of-charge, normally within two days. Not even the medical librarians attending the workshop were aware of this arrangement, and many participants had trouble believing it was true. It was very fortunate that Hassan Zaidi was present at the workshop to speak for the HEC.

Another major breakthrough was the new commitment to teaching about information resources. Although Dow has had some instruction available through the library about topics such as Medline, it has not offered the kind of training that INFORM provides. By the end of the workshop, several participants plus the staff from the Learning Resource Centre and the University Library had decided that they wanted to do this type of training and had approached the Vice Chancellor with a proposal.

As a result, at the workshop closing ceremony, the Vice Chancellor announced that the University would now arrange various types of training about online information resources in medicine and health. Furthermore, the first course of this type—based on the INFORM workshop materials and taught by some of the participants—was already organized for the following week, with all the course places filled.

Workshop 3. Islamabad

The second Pakistan workshop was hosted by the Health Services Academy of the Ministry of Health in Islamabad and took place 3-7 November 2008. The focal point was Professor Shakila Zaman, Director of the HSA. One of HSA's staff members, Dr Saima Hamid, had participated in the 2007 ISP on child survival and had requested INFORM

training for her institution, and Professor Zaman had then made contact with the INFORM trainers during a visit to Sweden. Partial funding for this workshop came from INASP and from USAID through a grant to the HSA.

The participants and trainers

The participants were teachers, researchers, and post-graduate students at the HAS and at other institutions in Islamabad dealing with public health issues. Two teaching staff from the Department of Community Health at Aga Khan University in Karachi flew to Islamabad to attend this workshop because they had been unable to get into the one held at Dow. The workshop was intended for 24 persons, and there was a 'core group' of that size who attended all the sessions. In addition, about 16 others participated in some sessions. The trainer was Martha Garrett, who was assisted by Farzana Sherin.



Group photo for the Islamabad workshop. Professor Shakila Zaman, Director of the HSA, and Dr Martha Garrett from INFORM are in the front row centre fuchsia and turquoise. Farzana Sherin is immediately behind Martha Garrett.

Venue and teaching conditions

The HSA is a training institution and has good facilities for a workshop of this sort. The room used for powerpoint presentations, group work, and live demonstrations was large and had good computer and projection equipment. The computer lab was immediately adjacent, which made it easy for the group to move back and forth between the two spaces. Yet another room on the opposite side of the teaching room was used for tea breaks and lunches.

Unfortunately, the IT staff, although quite knowledgeable and very helpful, were not upto-date on security. The computers in the teaching room and the computer lab were infected with mini-trojans, which were transferred to the INFORM training laptop when flash disks were used to transfer materials and were not detected by the standard antivirus software on that laptop. This resulted in major system problems, which were eventually solved when the team returned to Sweden.

Feedback and specific breakthroughs

The standard INFORM feedback procedures were followed. Many of the part-time participants did not complete the whole set of forms since they could not evaluate those sessions they had not attended. The scores for local arrangements, workshop content, and teaching quality were high and indicated extreme satisfaction with the workshop.

Most of the verbal feedback and many written comments were about the great need for more training of this sort throughout the health sector in Pakistan and elsewhere in Asia. Participants who were working either with policy or clinical decisions were especially grateful for the coverage of evidence-based medicine resources during the workshop, and those actively involved with research appreciated the introduction to research guides, questionnaire databases, and other research-relevant tools. But probably the most exciting resources for the whole group were those delivering free full-text e-books and journal articles.

As in Karachi, many participants were eager to begin teaching about information themselves, and discussions took place about how information training could be incorporated into the curriculum at the HSA and other institutions.

Among the comments on the feedback forms were the following:

"Previously I thought that only abstracts were available to us via Medline/PubMed. Now I know how to access millions of full-text articles that way."

"Thanks to this workshop, I will look for more evidence-based materials before taking any major decision about treatment for patients."

"I learned how to go about searching wisely, without wasting time on irrelevant information."

"What I would say to funders is, 'Arrange more of these workshops.'"

Follow-up activities

The three workshops held in Afghanistan and Pakistan in 2009 were just the first step. These workshops were essential in convincing groups of health professionals working with child survival and related public-health areas in these countries that an enormous body of free, high-quality material is available online to support their work. At all three sites, participants discussed what could be done to assure that knowledge about online information spreads throughout the health sector—in universities, hospitals, ministries, and nongovernmental organizations—and reaches people working with child health and survival, as well as maternal and reproductive health.

Among the key points made during the discussions were these:

- INFORM should continue to hold its own workshops in countries throughout Asia and to reach Asian health professionals through other training opportunities.
- Information training based on INFORM materials but run by local trainers should be offered regularly at a large number of institutions in each country.
- For such training to be high quality, the local trainers must have easy access to free updated materials from INFORM on the topics of child health, maternal health, and reproductive health.
- Both information end-users and trainers in Asia should share tips, problems, solutions, and ideas with each other through various means.
- One means would be the network that INFORM has proposed, but measures would be needed to make people feel that the network was 'theirs' so that they would participate in it actively.

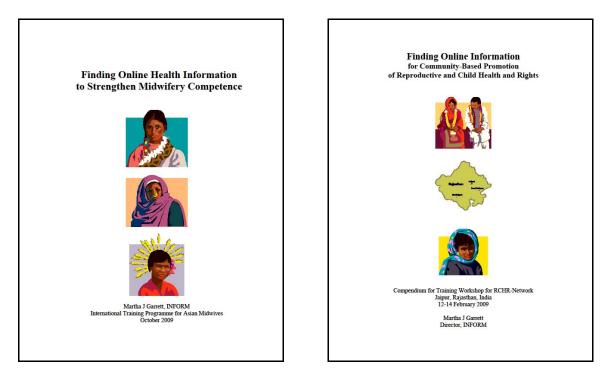
Since the workshops, INFORM has made progress in responding to many of these points.

• Yet another INFORM workshop has been held in southeast Asia, this time on the topic of finding online information for community-based promotion of reproductive and child health and rights (RCHR). The training was organized in collaboration with the RCHR Network in Rajasthan, India, and was held in Jaipur on 2-14 February 2009. Participants were 24 persons from 10 community-based organizations; trainers were Martha Garrett and Kristina Bolme. The worked was financed by Sida via a grant to the RCHR Network and International Maternal and Child Health, Uppsala University.



Participants and trainers at the INFORM workshop on information for community-based promotion of reproductive and child health rights, Jaipur, February 2009

- INFORM training has been provided to another set of Asian midwives as part of the 2009 autumn ITP at Karolinska Institute on strengthening midwifery. The 28 participants came from nine Asian countries, including four SASNET countries— Afghanistan, Bangladesh, India, and Nepal.
- Two more INFORM workshops, again on child health and related public health issues, will be held in Lahore, Pakistan, in March 2010 with support from the Pakistan HEC, the international organization INASP, and possibly USAID. Trainers will be Martha Garrett and Anders Wändahl.
- An INFORM web site has been established at <u>http://www.inform-network.org</u>. In January 2010 it will be 'findable' via Google.
- The site provides downloadable pdfs of several recent INFORM sourcebooks (the new term for the compendia). These include three sourcebooks specifically on child survival, sexual and reproductive health and rights, and midwifery. As new sourcebooks are produced, they will be made available online for downloading.



• Much progress has been made on establishment of an all-Asian network for promoting knowledge and application of information resources for child survival and related areas such as reproductive and maternal health. INFORM, another international organization, and two Asian schools of public health will be submitting a proposal together in early 2010 for funding of a 4-year training programme that will train almost 300 health professionals and medical librarians on this topic. The programme will be modeled on the ITPs, with initial training at a central location in Asia, probably Thailand, followed by application work in the participants' own countries. The INFORM website will be used to support the work of the network and to encourage exchange of information among its members. Training will initially be facilitated by teams of Swedish and Asian trainers, with the Asian trainers eventually taking over.

Thanks to SASNET

We appreciate very much the support that SASNET has given to this endeavor. Without your financial assistance, we would not have been able to arrange the training in Afghanistan and Pakistan, two countries where better access to information about child health and survival is sorely needed.

Martha J Garrett Director and trainer, INFORM 12 November 2009



A memory from Karachi