

# Regional Centre for Reproductive Health Research and Training, Harare, Zimbabwe

**Reproductive health research, capacity building and  
health care improvement in eastern and southern Africa**

**Ulf Högberg**

**Department for Research  
Cooperation**



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**Sida Evaluation 02/15**

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# Table of Contents

<b>Executive summary .....</b>	<b>1</b>
<b>Evaluation .....</b>	<b>3</b>
Aims .....	3
Methodology .....	3
<b>Program context .....</b>	<b>4</b>
Point of departure .....	4
<i>The Swedish research training and resource base .....</i>	<i>4</i>
<i>Northern course capacity in a sandwich bilateral training model .....</i>	<i>5</i>
<i>North-south courses .....</i>	<i>6</i>
<i>SAREC's sub-Saharan research training and resource base .....</i>	<i>6</i>
<i>Regional networking .....</i>	<i>7</i>
<b>Findings .....</b>	<b>8</b>
<i>Inception of the CRHRT .....</i>	<i>8</i>
<i>The CRHRT's Constitution .....</i>	<i>9</i>
<i>Budget, decisions, applications, allocation, and use .....</i>	<i>11</i>
<i>From Steering Committee to Advisory Board .....</i>	<i>12</i>
<i>Staff and directorship, and facilities .....</i>	<i>13</i>
<i>National coordinators .....</i>	<i>14</i>
<i>Scientific Advisory Board .....</i>	<i>14</i>
<i>Communication .....</i>	<i>15</i>
<i>Courses .....</i>	<i>15</i>
<i>Site visits .....</i>	<i>18</i>
<i>The database .....</i>	<i>19</i>
<i>Multicenter studies .....</i>	<i>19</i>
<i>The CRHRT and ECSAOGS .....</i>	<i>20</i>
<i>The CRHRT and AMRN .....</i>	<i>20</i>
<i>The CRHRT and its Swedish collaborators .....</i>	<i>20</i>
<i>The CRHRT and partners in the region .....</i>	<i>20</i>
<i>Future plans for the CRHRT .....</i>	<i>21</i>
<b>Assessment .....</b>	<b>23</b>
Relevance, quality, and cost-effectiveness .....	23
<i>The CRHRT's activities so far .....</i>	<i>23</i>
The CRHRT's future plans .....	25
<i>The Reproductive Health Literature Database .....</i>	<i>25</i>
<i>Postgraduate training and the CRHRT .....</i>	<i>26</i>
<i>The relationship between the ECSAOGS, AMRN, and the CRHRT .....</i>	<i>27</i>
<b>Conclusions and Recommendations .....</b>	<b>28</b>
<b>Lessons learned .....</b>	<b>30</b>

<b>Appendices .....</b>	<b>31</b>
Terms of reference for evaluation of the Centre for Reproductive Health Research and Training, Harare, Zimbabwe .....	31
<b>CRHRT leaflet .....</b>	<b>33</b>
<b>References .....</b>	<b>35</b>

## **Tables**

Table 1. Proposed budget for 1998 and 2002–2004 – grants, expenses, and balance (SEK) .....	10
Table 2. Members of the Steering Committee of the CRHRT, 1999 and 2000 .....	12
Table 3. Advisory Board of the CRHRT .....	13
Table 4. National coordinators of the CRHRT .....	14
Table 5. CRHRT training courses accomplished 2000–2001 .....	16
Table 6. Proposed pilot studies, 2000 .....	17

## Abbreviations, acronyms, and hyperlinks

AMRN	Africa Maternity Nurse Research Network
AMDD	Averting Maternal Death and Disability ( <a href="http://cpmcnet.columbia.edu/depth/sph/popfam/amdd">cpmcnet.columbia.edu/depth/sph/popfam/amdd</a> )
CCEB	Centre for Clinical Epidemiology and Biostatistics, Newcastle University, Newcastle, Australia
CEU	Clinical Epidemiology Unit
CRHCS	Commonwealth Regional Health Community Secretariat
Epidemiology (Umeå)	Epidemiology, Department of Public Health and Clinical Medicine, Umeå University ( <a href="http://www.umu.se/phmed/epidemi">www.umu.se/phmed/epidemi</a> )
ECSAOGS	East Central Southern African Association of Obstetrical and Gynaecological Societies
HINARI	Health InterNetwork Access ( <a href="http://healthinternetwork.org">healthinternetwork.org</a> )
IHCAR	International Health Care Research Division of International Health, Department of Public Health, Karolinska Institutet, Stockholm, Sweden ( <a href="http://www.phs.ki.se">www.phs.ki.se</a> )
IMCH	International Maternal and Child Health, Department of Women's and Children's Health, Uppsala University, Uppsala, Sweden ( <a href="http://www.kbh.uu.se/imch">www.kbh.uu.se/imch</a> )
INCLEN	International Clinical Epidemiology Network ( <a href="http://www.inclenafrica.org">www.inclenafrica.org</a> )
INDEPTH	International Network of field sites with continuous Demographic Evaluation of Populations and Their Health in developing countries ( <a href="http://www.indepth-network.net">www.indepth-network.net</a> )
MRC	Medical Research Council, Cape Town, South Africa ( <a href="http://www.mrc.ac.za">www.mrc.ac.za</a> )
PMMN	Prevention of Maternal Mortality Network
RCQHC	Regional Center for Quality of Health Care ( <a href="http://www.rcqhc.org">www.rcqhc.org</a> )
RHRU	Reproductive Health Research Unit, University of the Witwatersrand, Johannesburg, South Africa ( <a href="http://www.rhru.co.za">www.rhru.co.za</a> )
SHARED	Scientist for Research and Health for Development ( <a href="http://www.africashare.org">www.africashare.org</a> )
UISPH	Umeå International School of Public Health, Umeå, Sweden ( <a href="http://www.umu.se/phmed/epidemi">www.umu.se/phmed/epidemi</a> )
UNDP	United Nations Development Programme ( <a href="http://www.undp.org">www.undp.org</a> )
UNFPA	United Nations Population Fund ( <a href="http://www.unfpa.org">www.unfpa.org</a> )
WHO	World Health Organization ( <a href="http://www.who.int">www.who.int</a> )





# Executive summary

In a global health strategy, there is a need for knowledge investment in operational research, as well as basic and applied scientific research in the low-income countries. The only way to achieve this is by building long-term research capacity in the developing countries themselves, which also is the one way to avoid brain drain. Reproductive health is one area that needs urgent attention if there is to be sustainable development. Reproductive health research by necessity encompasses a wide range of scientific disciplines, such as obstetrics, pediatrics, the basic sciences, nursing science, sociology, anthropology, epidemiology, public health, and health economics. Improved epidemiological knowledge, through improved surveillance and reporting systems in the community and in clinical settings, is a basic tool for addressing operational research questions on health economics, health systems, and health policy in reproductive health. Consequently, a strategy for building and strengthening research capacity in reproductive health research should consider the complexity of this research field, which should be addressed by universities/faculties rather than by individual university departments. Likewise, networking should be viewed from the perspective of research capacity and as a means of spreading knowledge.

During the past two decades, the Swedish Agency for Research Cooperation (SAREC) has shown a commitment to supporting north-south collaborations in developing reproductive health research competence in sub-Saharan Africa. In Sweden, SAREC has supported a resource base in reproductive health research in low-income countries, is presently both from a Scandinavian and from an international perspective promising. In Sweden, the northern counterparts have developed supervision capacity in research training, adapting a sandwich model of training, as well as developing a set of training courses, master's, and research courses, the requirements of which differ from those of a Swedish Ph.D. but which are necessary for research capacity building from a global perspective and to prevent brain drain. A considerable number of professionals in reproductive health in sub-Saharan Africa have already completed their research training now available, and more are to come. However, building research capacity is a very long-term commitment process, as a Ph.D. is only the first step towards supervision competence. Due to the complexity of the research field, research capacity is dependent on broad university/faculty competence.

One outcome of the bilateral collaboration has been the establishment of a regional networking system. The northern counterparts have held basic methodology training courses and regional research workshops in a number of countries and helped establish the professional bodies of gynecologists, the East Central Southern African Association of Obstetrical and Gynaecological Societies (ECSAOGS), and midwives, the Africa Maternity Nurse Research Network (AMRN). Through this networking and developing of regional research capacity, the support to the CRHRT has evolved. The CRHRT's member departments are Zimbabwe, Zambia, Tanzania, Mozambique, and Uganda.

The CRHRT's overall objectives are to contribute to a reduction in reproductive morbidity and mortality in the eastern and southern African regions. More specific aims are to facilitate the conducting of, from a gender perspective with special emphasis on the needs of women, research, teaching, continuing education, and training in reproductive health and publish and disseminate information on research results both within the region and internationally.

Other objectives are to (1) initiate and promote multidisciplinary research in reproductive health; (2) facilitate human resource development and institutional capacity building through training at all levels; (3) strengthen collaborative research in the region and function as a resource center in reproductive health issues; and (4) advocate improved reproductive health in the region through the dissemination of research findings.

During its first 2 years, the CRHRT had a part-time Acting Director. University-affiliated directorship has not been achieved. A physical center with facilities and employed staff has been established. An Advisory Board has been created consisting of prominent professionals in reproductive health from the member countries. Networking facilities for the Internet have been established, although a website with the envisaged reproductive health database remains to be set up. So far, there have been scarce national activities of the CRHRT through representatives in member countries. With regard to training, the CRHRT has started a course training program of the highest relevance, although more follow-up need to be done and a more focused course strategy has not yet been developed. So far, no funding from sources other than Sida/SAREC has been obtained.

Future support from the SAREC for research capacity building should continue to be channeled by supporting university/faculty capacity. In this respect the bilateral SAREC support should be strengthened to ensure that the Ph.D. students have time for their research studies at their home university, as well as additional post-doc support. Further, SAREC support for individual Ph.D. training, presently only for Swedes, should be open also for applicants from low-income countries. The role for supporting the need expressed by the inception the CRHRT will be more on knowledge diffusion, networking with the member countries, interacting with other centers, non-governmental organizations (NGOs), and organizers of preparatory methodology courses and operational research courses, and providing guidance to university research courses. If the CRHRT is to function as a regional networker it will benefit from a directorship, and national representatives, with university affiliations. Another most important role for the CRHRT is as a promoter of the ECSAOGS and AMRN, and further being a bridge-builder for the complimentary roles of midwives and doctors. In this regard, midwives are still underrepresented on the CRHRT's Board and on the national level.

The argument that SAREC support for the CRHRT is premature within a long-term strategy, before a more consolidated national resource base is established in each country, has some relevance. However, it should be argued that the processes of supporting national research capacity and regional networking must be parallel. The first 2 years since the CRHRT's inception should be viewed as a pilot with the long-term research goal in mind, which is to build independent research capacity. In this sense, the objectives of the CRHRT are highly relevant. The need for continued SAREC support should be expressed in point form in an application to the SAREC by the Advisory Board of the CRHRT; and a comment by the AMRN and the ECSAOGS should be included with the application.

# Evaluation

## Aims

The main aim of the evaluation has been to assess what form future support from Sida/SAREC and Sida's Health Division should take to be of benefit for research capacity building and health care improvement in the field of reproductive health in the region covered by the present member countries at the Centre for Reproductive Health Research and Training (CRHRT) in Harare, Zimbabwe [1]. Specific aims have been to assess:

- the relevance, quality, and cost-effectiveness of activities performed so far by the CRHRT
- the relevance, quality, and cost-effectiveness of future plans of the CRHRT
- the need and desire for regional research and courses among gynecologists, obstetricians, and midwives in the region, and willingness of these health professionals to take responsibility for such activities
- the question whether future activities could be incorporated within the bilateral collaborations and whether facilities with employed staff are needed and if so, where such facilities should be located
- the relationship between the East Central Southern African Association of Obstetrical and Gynaecological Societies (ECSAOGS), the Africa Maternity Nurse Research Network (AMRN), and the CRHRT regarding shared activities.

## Methodology

The evaluation procedure started on November 14, 2001, with a briefing of the evaluator by Annica Sohlström and Anita Sandström of SAREC and Anders Molin of Sida. The CRHRT documentation available at Sida was copied and the evaluator was handed a copy. As a next step, the evaluator participated in the ECSAOGS conference in Addis Ababa, Ethiopia, on November 25–28, 2001, where he interviewed the following members of the CRHRT's Advisory Board: Dr. Franz Majoko (Acting Director), Stephen Munjana (ECSAOGS), Stella Mpanda (AMRN), Mike Chirenje (Zimbabwe), Christine M. Kaseba-Sata (Zambia), Siriel Massawe (Tanzania), Florence M. Mirembe (Uganda), and Caetano Pereira (Mozambique) [2–8]. The Swedish researchers involved were also interviewed: Gunilla Lindmark [9], Staffan Bergström [10], Kyllike Christensson [11], and Lennarth Nyström [12].

For the compilation of protocols and reports regarding the CRHRT, available CRHRT documents at Sida were consulted and all protocols, reports, and timetables reviewed. An unforeseen limitation was that few midwives had participated at the 2001 ECSAOGS meeting. The only midwife interviewed was Stella Mpanda [8], AMRN member and member of the Advisory Board of the CRHRT. Also, the evaluator did not attend the AMRN workshop in Arusha, Tanzania, in December 2001. The assignment did not include a visit to CRHRT in Zimbabwe.

The budget covered 3 weeks' consultancy services, plus expenses for travel to the ECSAOGS conference in Addis Ababa in November 2001, as well as travel to Uppsala and Stockholm, in Sweden. At Sida/SAREC, the evaluator was informed about the Samosa project, and the bilateral projects with Tanzania and Uganda, but evaluation of these parts has not been within the time frame of the services. The evaluator had not access to account or auditor's report.

# Program context

## Point of departure

The World Health Organization (WHO)'s *Report of the Commission on Macroeconomics and Health* [13] emphasizes that in a global health strategy, there is a real need for investment of knowledge in operational research, as well as basic and applied scientific research, in the low-income countries. As a key goal for a Global Health Research Fund, the Commission points to building long-term research capacity in the developing countries themselves. There is a need for greatly increased basic scientific research in health, including areas such as epidemiology, health economics, health systems, and national health policies. Improved epidemiological knowledge, through improved surveillance and reporting systems in the community and in the clinical setting, is a basic tool for addressing health research issues in a global strategy, and the “best practice key force for scaling up” knowledge and disseminating it [13].

Reproductive health is one area that needs urgent attention if there is to be sustainable development. Reproductive health as a scientific field embraces various disciplines, such as obstetrics, pediatrics, the basic sciences, the social sciences, nursing science, sociology, anthropology, epidemiology, public health, and health economics. A strategy for supporting reproductive health research therefore has to consider the complexity of this research field with regard to facilities at the universities and other research institutions in developing countries. Support to develop or strengthen research capacity in the field of reproductive health could therefore be directed towards various departments at local universities, including social sciences, public health, nursing science, and obstetrics and gynecology departments. The recruitment of counter-parts will naturally have an influence on the nature of further support of regional research and the success of work to promote research capacity.

SAREC is one of the actors in the effort to strengthen research capacity in developing countries and develop bilateral research cooperation. One further way to strengthen research capacity is to support developing regional networks through linking institutions, and establishing joint activities in research and training, encouraging research activities in various countries and interaction between the countries for an exchange of experiences and research outcomes [14]. In this sense, the establishment of the CRHRT should be viewed as a step in the direction of dissemination of knowledge. One focus of research programs such as this is to support a regional research network. In 2000, Sida/SAREC provided support to 52 research networks [15].

## The Swedish research training and resource base

A condition of the SAREC's policy of supporting national research development has been to provide bilateral research cooperation comprising researchers from, and a resource base in, Sweden [14]. The present Swedish resource base in reproductive health research has been consolidated both from a Scandinavian and from an international perspective. The Swedish resource base has developed along three courses over a period of 25-30 years. Firstly, three senior researchers, Staffan Bergström, Gunilla Lindmark, and Kyllike Christensson [16], have turned from previous research interests to reproductive health research in developing countries and now represent three Swedish institutions. Secondly, Swedish doctors and midwives, had postgraduate clinical services and training in developing countries during the 1970s and 1980s supported by Sida or NGOs, and back in Sweden in various ways being inspired in research training applicable in a global perspective and completing a Ph.D.: Jerker Liljestrand [17], Ulf Högberg [18], Bo Möller [19], Pia Axemo [20], Anders Molin [21], Hans Wessel [22], Kenneth Björklund [23], and Pia Olsson [24]. Thirdly, four Swedish researchers have completed their Ph.D. thesis in connection to the bilateral programs, namely, Anna-Berit Ransjö-Arvidsson,

Elisabeth Faxelid [25], Carin Nilses [26], and Tobias Andersson [27]. By the end of this year, there will be two more, Karen Odberg-Pettersson and Kenneth Challis. So far, none of the Swedish health researchers has received financial support of the SAREC-stipend for Ph.D. training.

### **Northern course capacity in a sandwich bilateral training model**

The start of the road to founding the CRHRT was bilateral research collaboration in reproductive health, which emerged in 1988–1990 between the Departments of Obstetrics and Gynaecology of the Universities of Zimbabwe, Zambia, Mozambique, and Tanzania, and the Swedish institutions the Department of Obstetrics and Gynecology/the International Maternal and Child Health (IMCH) (Uppsala University), the Department of Epidemiology (Umeå University), and the International Health Care Research (IHCAR) (Karolinska Institutet, Stockholm).

The three Swedish counter-parts, IMCH, IHCAR, and Epidemiology (Umeå), have been developing along a common course of strengthening bilateral collaboration in developing research capacity. All three departments have answered to this need by developing and offering training for master's and research degrees in a characteristic sandwich model, which fits in with the SAREC's strategy of strengthening research capacity. These course activities have been a prerequisite to the research training of the bilateral program in reproductive health. A hallmark of the Swedish work has been the development of sandwich training.

Furthermore, there has been fruitful interaction between the three sister departments while each has developed its own characteristics. Thus, Epidemiology (Umeå) is more public health-oriented while the IMCH and IHCAR are oriented more towards obstetrics and gynecology, as well as midwifery. A fourth Swedish counterpart is also coming – Division of Reproductive and Perinatal Health Care at the Department of Women and Child Health, Karolinska Institutet, Stockholm, headed by Associate Professor Kyllike Christensson [28].

For Epidemiology (Umeå) it started with the bilateral collaboration with the Department of Community Health at Somali University in 1983 (this unfortunately ended in 1990 with the outbreak of the civil war) and the Department of Community Health of Addis Ababa University in 1985. Out of this evolved the annual summer course entitled 'Epidemiology and Field Research Methods' (5 points), which started in 1988. Through the years, there have been 420 course participants, 10–15% with a research interest in reproductive health and coming from sub-Saharan Africa. Epidemiology (Umeå) also organized training courses in research methodology at the Faculty of Medicine of Zimbabwe University in 1989–1990. The training capacity at the University of Umeå itself has been further developed into a full program for a master's degree in public health, whose courses can be used to count towards a Ph.D. degree. Since 1992, 150 students have enrolled. By the year 2001, this course had become as institutionalized as is the Umeå International School of Public Health (UISPH, a WHO Collaborative Center) and at present offers the following modules for a M.P.H.: Public Health (10 points), Biostatistics (10 points), Epidemiology (10 points), Health Economics (10 points), Qualitative Methodology (10 points), Medical Sociology: Inequity in Health (5 points), Demography (10 points), Evaluation in Public Health (10 points), and Health Economics (10 points).

The Department of Obstetrics and Gynecology of Uppsala University has since 1992 offered a course in 'Sexual and Reproductive Health, and Right for gynaecologists and midwives in developing countries' (10 points). As of this year, the IMCH also offers the course. So far, 75 students from sub-Saharan Africa have enrolled in the IMCH course on 'International Training Programs in Maternal Health Care'. Meanwhile, the IMCH has been conducting a course in 'International Training Programs in Maternal Health Care', which is organized as a tripartite program, with a 4-month course in Sweden, a supervision visit to the participants' home country, and a regional seminar at which participants present



their project work. By the year 2000, 24 participants from Ghana, Ethiopia, Kenya, Egypt, Zimbabwe, Uganda, Zambia, Botswana, Tanzania, and South Africa were enrolled for the course [29]. The IMCH has also developed a master's course in international health, which includes some preparatory modules for later field assignments while others, such as 'Assessing Community Nutrition and Dietary Intake in Low-income Countries' (5 points) and 'Food and Nutrition in Low-income Countries' (3 points), are appropriate also for reproductive health research training.

Finally, the IHCAR is offering preparatory courses for field assignments, appropriate for reproductive health research as part of its research training program in World Health Issues. Its courses include modules on 'AIDS in Africa' (1 point), 'Global Tuberculosis Control' (2 points), 'Field Survey Methodology' (2 points), 'Malaria Control' (2 points), and 'Molecular Parasitology' (1 point).

### **North-south courses**

Bilateral cooperation and training raises the need for communication and contacts within the region. Coordinated by the Universities of Uppsala and Umeå, a regional network was started to "provide basic research training to all participants, doctors as well as midwives, increase communication and sharing of experience in the region, and encourage project collaboration". This networking need resulted in annual workshops, with presentations and a discussion of ongoing projects from the planning stage to results. Six further training courses were held in the region, three for midwives and three for junior doctors, introducing research methodology and the use of computers and providing training in presentation of results [30].

The regional program of the IMCH in collaboration with Epidemiology (Umeå) furthermore offered six training courses on research methodology, analytical methods, the use of computers, and presentation of results. Tutors used had backgrounds in biostatistics, sociology, epidemiology, and obstetrics and gynecology [9, 12, 30]. Between 1992 and 1997, 150 midwives and junior doctors from Zimbabwe and Tanzania participated. As part of the same program (and included in the program's budget of 3 million SEK), annual 3-day workshops were run for the countries involved in the bilateral cooperation, hosted in succession by the participating institutions. "The workshop program included presentations of all projects from the planning stage and following their development until results could be presented and discussed." [9] [30]

### **SAREC's sub-Saharan research training and resource base**

SAREC has supported, and continues to support, bilateral cooperation projects in reproductive health research between the Swedish resource base consisting of IMCH and IHCAR and Epidemiology (Umeå) and the following sub-Saharan countries: Mozambique (Department of Obstetrics and Gynaecology, Faculty of Medicine, Eduardo Mondlane University, Maputo), Tanzania, Zambia, Zimbabwe, Uganda (Department of Obstetrics and Gynecology, Makerere Medical School, Kampala), Ethiopia (Community Health, Medical Faculty, Addis Ababa University, Addis Ababa), and Somalia (Community Health, Faculty of Medicine, Somali University). As a capacity builder for a resource base in each of these countries, this cooperation has so far resulted in seven licentiates and four doctoral degrees in the field of reproductive health. Licentiate theses have been completed by Maymuuna Omar (Somalia) (1994) [31], Nafissa Bique Osman (Mozambique) (1994), Aida Libombo (Mozambique) (1994), Jane Ndolo (Zambia), Thokozile Ncube (Zimbabwe) (2000), Restituta Shirima (Tanzania) (2000), and Diana Kidala (Tanzania) (2000). Doctoral theses have been completed by Nafissa Bique Osman [32] and Elena Maria Pereira Folgosa (Mozambique) [33], Yemane Berhane (Ethiopia) [34], Helen Lugina (Tanzania) [35], Siriel Massawe (Tanzania) [36], Ana Carla L. Granja (Mozambique) [37], Fernanda Machungo (Mozambique) [38] and Ernest Urassa (posthumously) (Tanzania). Further Ph.D. degrees completed outside the bilateral collaboration but with a Swedish supervisor have been obtained by Francis Kamwendo [39], Aboud Eltom [40], and Christine Randown from Zimbabwe (Ph.D. awarded

in Pretoria, South Africa). None has so far achieved supervision competence according to Swedish standard of associate professorship.

Others currently enrolled for their Ph.D. course under the bilateral collaborations are Margaret Mainbolwa (Tanzania), David Urassa and Godfrey Mbakuru (Tanzania), Franz Majoko, Grazyna Stanzuk, and Jeremiah Chikowore (Zimbabwe), Mesganaw Fantanhun (Ethiopia), Francisco Songane (Mozambique), Pius Okong (Uganda), and Friday Okonofua (Nigeria).

### **Regional networking**

The researchers in the bilateral projects started holding annual meetings to exchange ideas and share experiences in 1991. In 1991–1997, the IMCH acted as coordinator of those meetings, regional seminars, and research workshops on reproductive health, as well as coordinating training courses, four of which were in research methodology. This network activity was supported by SAREC, and led to the establishment of the AMRN and ECSAOGS [41].

# Findings

## Inception of the CRHRT

At a Steering Committee meeting of the above network, the need for establishing a regional Centre for Reproductive Health Research and Training was discussed. A project proposal was drafted and the CRHRT founded [42].

The mission statement of the CRHRT listed the following as its main activities [42]:

1. initiate and promoting multi-disciplinary research in reproductive health
2. facilitating human resources development and institutional capacity building through training at all levels
3. strengthening of collaborative research in the region and functioning as a resource centre in reproductive health issues
4. advocating for improved reproductive health in the region through the dissemination of research findings.

In the proposal, the CRHRT's function was seen as complementary to that of the Commonwealth Regional Health Community Secretariat (CRHCS) based in Arusha, Tanzania, which was described as "broad-based and operating at the ministerial level". The need was expressed for "a more focused centre which deals specifically with ... important things ...". A close collaboration with the WHO was envisaged, "with whom we hope to establish stronger ties". Furthermore, the regional associations of the ECSAOGS and AMRN would be closely associated with the Center "to the benefit of their members" [42].

The following areas of research and training were listed as being within the scope of the Center: (1) maternal and women's health; (2) sexually transmitted infections including HIV; (3) sexuality and sexual behavior, with special focus on adolescents; (4) perinatal mortality; (5) family planning; and (6) the role of men in reproductive health issues. A research coordinator of the Center would be available to "assist the member institutions in the development of their research priorities ...". The centre will hold research grants to which researchers from member institutions can apply. The centre's director, and research and training coordinators will form a screening board for application." [42]. It was proposed that a training coordinator be appointed to "work closely with the member institutions in identifying manpower needs at all levels ...". Also, this coordinator would "develop strategies within available resources, of addressing problems of essential manpower". [42]

Interuniversity collaboration involving several university centers/departments was mentioned, and a model (including possibilities of transfer from one educational institution to another) for the international maternal child health courses was discussed. The need for short-term courses in the following areas was described: (1) research methodology; (2) data processing and management; (3) scientific writing; (4) epidemiology and biostatistics; (5) reproductive health subspecialist skills updates; (6) STI diagnosis and management updates; (7) communication and counseling skills; (8) use of information technology databases; and (9) gender awareness and sexual rights.

In the proposal, a number of key persons from the network countries with a potential interest in the Center were mentioned: Mozambique — staff (12), midwives (4), microbiology (1); Tanzania — staff (8), other specialists (5), midwives (4), social scientist (1), epidemiologist (1); Zambia — doctors (11), midwives (6), others (5); Zimbabwe — staff (13), and midwives (13). Kenya, Uganda, Ethiopia, Angola, and Malawi were named as potential member countries, and the status in this regard of Botswana,



Lesotho, Namibia, and Swaziland was to be discussed, as was a possible connection to an already existing research network in South Africa. The IMCH, IHCAR, and Epidemiology (Umeå) were named as current northern collaborative departments for the Center.

It was proposed that facilities including a secretariat would be staffed by one Director, one Executive Secretary, and one research and one training coordinator. The administrative structure was designed to include an Advisory Board. With regard to in-country structure, each member country was proposed to have its own coordinators.

The project proposal was considered to be highly relevant in terms of capacity networking, and it was initiative coming the Steering Committee was highly appreciated as new phase capacity building in research [41]. The need for the establishment of the Center was analyzed in relation to the locality of the WHO, Africa, in Harare, Zimbabwe, and the recent establishment of the Wellcome Trust Centre for Reproductive Health Research in Durban, South Africa. In another report, Sida stressed the importance of the Center as a truly regional body and as benefiting all participating countries. However, Sida did express apprehensions that the dual function of strengthening research capacity and performing training activities would deliver more results in research than in health care performance [43].

In terms of prioritizing objectives and identifying areas of activity, the plans for the CRHRT were found to be highly relevant and Sida/Health Division decided to support the project [44]. The research objectives and application were also supported by Sida/SAREC. In the end, Sida/SAREC and Sida's Health Division decided to jointly fund the activities of the CRHRT. In March 1999, a 2-year agreement was signed between Sida/SAREC and the University of Zimbabwe's Department of Obstetrics and Gynaecology as the CRHRT's host institution [45–47].

### **The CRHRT's Constitution**

In its constitution, the CRHRT objectives were outlined as follows:

1. to contribute to the reduction of reproductive morbidity and mortality in the eastern and southern African regions
2. to facilitate research, teaching, continuing education, and training in reproductive health, with special emphasis on the needs of women, and publish and disseminate information on research results both within the region and internationally.

The *Regional Advisory Board* composed of one representative from each of the participating countries nominated and appointed by the designated institutions. Observer status with no vote was designated to the vice chancellor of the University of Zimbabwe, one representative for the contract partners and donor organisations, regional association members.

The *Regional Advisory Board* was assigned the task of developing guidelines for the allocation of funds to the Center for conducting research, developing continuing education courses, publishing, and training in reproductive health. The Board shall consider and recommend, where appropriate, the development of a degree, diploma, or certificate course, or other programs to be offered by tertiary institutions within the region should they include CRHRT training. The Director, the training coordinator and research coordinator, the national coordinator, and academics from the ECSAOGS and AMRN should comprise the *Scientific Advisory Board*. They shall act as peer reviewers for proposals for research funding, screening the proposals for final determination by the *Regional Advisory Board*. The *Regional Advisory Board* shall establish the guidelines for the appointment of national coordinators for the various aspects of the CRHRT's programs run at the national level, appointed on the basis of perceived needs in a country, either fulltime or part-time [45].

**Table 1. Proposed budget for 1998 and 2002-2004 – grants, expenses, and balance (SEK)**

Proposed budget [42]				Grants [49]	Expenses [50]	Balance [50]	Grants [50]	Proposed budget [51]		
	Year 1	Year 2	1999/ 2000	11.1.99 – 12.31.00	12.31.00	2001	2002	2003	2004	
Sida/SAREC			1,100,000 <sup>1</sup>			1,650,000 <sup>3</sup>				
Sida's Health Division			1,000,000 <sup>2</sup>							
Administrative										
Physical facilities	275,000	330,000								
Travel	600,000	750,000		450,529		-				
Equipment & consumables	1,050,000	500,000		375,090						
Communication	60,000	75,000		19,116						
Salaries	1,000,000	1,250,000		324,817						
Training activities	500,000	750,000								
Meetings/courses				400,230						
Scientific meetings/workshops										
Board meetings										
Multicenter research support	750,000	1,500,000								
Rental				118,693						
Unforeseen										
Rest										
	3,035,000	3,155,000	2,100,000	1,688,475	411,525		2,123,000	3,355,000	3,597,000	

<sup>1</sup>6.2.1999, Sida/SAREC; <sup>2</sup>11.14.2000, Sida's Health Division; <sup>3</sup>September 2001, Sida/SAREC.

## **Budget, decisions, applications, allocation, and use**

It was envisaged that the CRHRT should become self-sustaining, covering administrative costs over a 5-year period by charging a levy on research projects assisted by the Center, and fees for training courses, consultancy work, rental of facilities, and other investments [42].

For the construction and launch of the Center, a joint venture financing was proposed between Sida's health bureau and Sida/SAREC. Sida/SAREC provided 1.5 million 1998 SEK, and 2 million 1999 SEK for the Center, while Sida's Health Division financed the physical infrastructure [41], and a further Sida/SAREC budget allocation of 1.1 million 1999 SEK and 2 million 2000 SEK was planned [46].

The agreement was for January 1999 to December 2000 [48]. However, the agreement between the Center and Sida/SAREC for the 1.1 million SEK was signed at the end of March 1999. Application for the disbursement of these funds was made in April, and the funds reached the University of Zimbabwe/bank on July 2, 1999, and were available to the Center in September/October that year [49]. Because of the difficulties in assessing the funds in 1999 meaningful activities could only commence in 2000 [48]. Additionally, Sida's Health Division released its 1 million SEK by November 14, 2000 (Table 1). The changed time period (November 1999 to December 2001) was not formally agreed until August 2001, further compounding the operational problems [48]. The disbursement from Sida/SAREC for 2001 was 1.65 million 2001 SEK [50], of which 400 000 SEK was earmarked for EC-SAOGS conferences, and 50 000 SEK refunding money forwarded to Ethiopia towards the ECSAOGS conference [48] (Table 1).

The CRHRT has pointed out certain constraints involved in budgetary transfers and has proposed that further funding should be made available direct to the Center [51].

Salaries for the Director, Executive Secretary, and research/training coordinator were established at 480,000, 120,000, and 360,000 SEK, respectively. The salary for the interim Director was set at 50% of the Director's salary [52]. To guarantee the national coordinators time for the CRHT activities a regular allowance was set. The previously proposed remuneration of 15% of the national coordinator's salary was changed to a recommendation of 5,000 SEK per month as an appropriate responsibility allowance [52]. Finally it has been set to 150 USD per month, not paid regularly, and now linked to proof of activity [48]. It was agreed that 2,000 SEK per day would be paid to course facilitators/tutors [53]. In accordance with the grants received, it was pointed out that the CRHRT would not be able to sustain funding of individual proposals, but could attempt source funding for multicenter projects [54]. Four hundred and twenty thousand (420,000) SEK has been allocated for the purchase of 12 desktop computers and one laptop for the Center's office and the member institutions [52].

In his interview with the evaluator, the Acting Director has pointed out that a delay in the transfer of funds and an unstable financial situation have hampered the establishment of the CRHRT as a regional actor [5]. Furthermore, the lack of a budget for seed money has rendered it difficult to complete the pilot studies for the Research Methodology course [5]. The fact that SAREC was represented by different workers at different times during the CRHRT's 2 years of operation has also made the mission difficult [5].

So far, no funding other than that from Sida and Sida/SAREC has been received [55], [48]. The CRHRT has been approaching Mike Mbizo of the WHO, Africa, about efforts to obtain funding for multicenter studies to be performed through the CRHRT [49]. An application was submitted to the WHO in Geneva, Switzerland, but there has been no response so far (more than 6 months after the application was made) [48]. An application to the Rockefeller Foundation was submitted in 1999 under the program of Health Research for Development, but was unsuccessful [49], [48].

The CRHRT has also approached the Commonwealth Secretariat for funding of small projects [54]. Preliminary discussions were held at the ECSAOGS meeting in Dar es Salaam, Tanzania, in March 2000, however, the CRHSA stated that it was not in a position to consider applications for financial support since its own finances were uncertain [48].

### From Steering Committee to Advisory Board

The following were identified as member departments/countries of the CRHRT: the Departments of Obstetrics and Gynaecology of Eduardo Mondlane University (Maputo, Mozambique), Muhimbili Medical Centre (Dar es Salaam, Tanzania), Makerere University (Kampala, Uganda), the University Teaching Hospital in Lusaka (Zambia), and the University of Zimbabwe (Harare, Zimbabwe) [55]. The IMCH, IHCAR, and Epidemiology (Umeå) were given as collaborative partners [55].

The Steering Committee held its constitutional meeting in Harare, Zimbabwe, in November 1999 [52]. Its next meeting was held in Dar es Salaam, Tanzania, during the March 2000 ECSAOGS meeting [54] (Table 2).

**Table 2. Members of the Steering Committee of the CRHRT, 1999 and 2000.**

Dr. J.K. Byamugisha <sup>2</sup>	Dept of Obstetrics & Gynaecology	Makerere University
Dr. Z.M. Chirenje <sup>1,2</sup>	Dept of Obstetrics & Gynaecology	University of Zimbabwe
Dr. F. Majoko <sup>1,2</sup>	Dept of Obstetrics & Gynaecology	University of Zimbabwe
Mr. S. Rusakaniko <sup>1</sup>	Dept of Community Medicine	University of Zimbabwe
Dr. C. Kaseba-Sata <sup>1,2</sup>	Dept of Obstetrics & Gynaecology	University of Zambia
Dr. Siriel Massawe <sup>2</sup>	Dept of Obstetrics & Gynaecology	Muhimbili
Mrs. S. Mpanda <sup>1,2</sup>	AMRN	—
Dr. F. Mirembe <sup>1,2</sup>	Dept of Obstetrics & Gynaecology	Makerere University
Dr. Nafissa Bique Osman <sup>2</sup>	Dept of Obstetrics & Gynaecology	Mondlane University
Dr. M. Nyambo <sup>1,2</sup>	ECSAOGS	—
Dr. R. Najjemba <sup>1,2</sup>	Dept of Community Medicine	Makerere University
Mrs. S. Mbabali <sup>1</sup>	Dept of Nursing Science	Makerere University
Mrs. C. Mudokwenyo <sup>1</sup>	Dept of Nursing Science	University of Zimbabwe

<sup>1</sup>1999, <sup>2</sup>2000.

The constitution of the Advisory Board was discussed. It was proposed that regional association should grant full voting rights to representatives of the ECSAOGS and AMRN. The first meeting of the Advisory Board, replacing the Steering Committee, was held in Harare, Zimbabwe, on November 2–3, 2000 [55]. The second meeting of the Advisory Board was held in March 2001 [53].

**Table 3. Advisory Board of the CRHRT.**

Acting Director	Dr. Franz Majoko
ECSAOGS	Dr. Stephen Munjana
AMRN	Mrs. Stella Mpanda
Zimbabwe	Dr. Mike Chirenje
Zambia	Dr. G. Mkumba
Tanzania	Dr. E. Urassa <sup>1</sup> / Dr. Siriel Massawe
Uganda	Professor Florence M. Mirembe
Mozambique	Dr. A. Bugalho <sup>2</sup> / Caetano Pereira
Vice Chancellor, University of Zimbabwe	Professor G. Hill

<sup>1</sup>Replaced by Siriel Massawe.

<sup>2</sup>Replaced by Dr. Pereira Caetano.

### **Staff and directorship, and facilities**

The CRHRT had from start no office space of its own since the original offices, at the Old Salisbury Central Hospital, were the location of the regional WHO office [52]. As of January 2000, the CRHRT rented an office in a privately owned building [49, 54], [56–59] but later succeeded in organizing offices at the University of Zimbabwe [55]. The CRHRT is now hosted by the Department of Obstetrics and Gynaecology of the University of Zimbabwe, in offices located on the main University of Zimbabwe campus [55].

*Executive Secretary* Mrs. Fungai Mafukidze was employed as Executive Secretary from January 2000 [54], but due to poor health, she had to leave, which affected the efficiency of the office [55]. A new administrative secretary replaced Mrs. Mafukidze in March 2001.

The posts of coordinator for training, and research coordinator have not been advertised since it was decided that the Director should have a role in the appointment [56]. The Advisory Board appointed Dr. Chirenda, a public health specialist, as research and training coordinator in November 2000 [55]. However, due to other commitments, Chirenda never took up the post, and the Advisory Board decided to re-advertise the position. However, this was not done because of financial uncertainties [48].

Dr. Franz Majoko was appointed as the CRHRT's interim Director. The process of recruiting a Director, research coordinator, training coordinator, and national coordinator started. It was agreed that at least one of the senior positions at the CRHRT should be held by a woman [52].

The post of Director of the CRHRT was advertised in Zimbabwe [49], but no-one suitable applied because the salary was “not attractive; ... considered too low for an international post”. Also, no tax benefit had been named [54]. In the meantime, Dr. Majoko continued as interim Director [54], but was on sabbatical leave from May to December 2000 [49].

Efforts to make the directorship of the CRHRT a University of Zimbabwe post have not succeeded thus far [53]. The University of Zimbabwe School of Medicine is in the process of establishing a College of Health Sciences. This should have been in place by January 2001 but has been delayed due to financial problems. The College of Health Sciences will have a research institute attached to it, which could provide the CRHRT with a director. The process of establishing posts for the College has been postponed until the College becomes functional [48]. The concept of a shared directorship with a

university post is supported by members of the Advisory Board [60]. Dr. Majoko's attachment to the CRHRT ended on December 31, 2001 [48].

The present status, 2002, of the Centre is idle. Mr Rusakaniko was chosen to fulfil the role of acting director until a decision is made on the future of the Centre, while the office has been kept running on the available funds. The only activity to take place was the Scientific Writing workshop. This was postponed due to the political situation prior to the elections [48]

As plans for the immediate future, the CRHRT has identified appointing the core staff of a Director, an administrative secretary, a research and a training coordinator, and office support staff. The CRHRT proposes, once a plan of activities has been established, that the Director should be employed on a part-time basis and that the post should be open to members of any department, and not just to Department of Obstetrics and Gynaecology staff at the University of Zimbabwe [51].

### National coordinators

The position of national coordinator was created to function as a national position in each of the CRHRT's member countries. The Steering Committee had in 1999 emphasized the need to identify and define the responsibilities of the national coordinators as coordinating research and training in their own countries, drawing up needs assessments, organizing courses, reporting on country activities, and networking with other university departments and institutions in reproductive health [52]. "It was suggested that their name title be changed from national to institutional coordinators. The problem with this is when you have two or more institutions that will appoint one person. It has to be appreciated that in a country with more than one participating institution, the institutions will appoint one person to represent them at a regional level." [54] The national coordinators were appointed in 2000 (Table 4).

**Table 4. National coordinators of the CRHRT.**

Zimbabwe	Dr. Thulani Magwali
Zambia	Dr. Christine M. Kaseba-Sata
Tanzania	Dr. Siriel Massawe/ Dr. Charles Kilewo <sup>1</sup>
Uganda	Dr. Robinah Naijemba
Mozambique	Dr. Nafissa Osman Bique

<sup>1</sup> acting March 2001.

The national coordinators were asked to report on their activities [53]. During the site visits, Mr. Rusanikov also identified the need for a scheduled country progress report, which should be the duty of the in-country (i.e., national) coordinators [61].

As plans for the future, the CRHRT identified the institutional coordinators as providing the link between the CRHRT and the member countries, with duties including "assessment of the research and training needs for their institutions and making information available to the CRHRT to enable it to plan its activities. The national coordinators are responsible for identifying material to be added to the RH literature database. They identify participants for training courses/symposia.." [51]

### Scientific Advisory Board

The Scientific Advisory Board consists of the Director, the research and the training coordinators, national coordinators, a social scientist selected by the Advisory Board, and two scientists/academics

nominated by the AMRN and ECSAOGS. The purpose of the Scientific Advisory Board is to evaluate research proposals. As yet, there have been no proposals for evaluation and the Board has not held a meeting. It had been planned to hold a meeting in October 2001 at which operating procedures would be discussed but due to funding problems, this was not realized [5], [48].

### **Communication**

Difficulties in communication within the regional network soon became obvious and were identified as a priority to solve. It was suggested that each member institution, and therefore, all national coordinators, would have e-mail facilities, which would include a computer, printer, modem, telephone connection, and subscription to an Internet service provider [52]. In 2000, communication was still reported as a problem [55], however, this is currently being solved [2–4, 6, 7] [5].

During the site visits to Tanzania, Mozambique, and Uganda, it was concluded that computer accessibility for staff and coordinators including an Internet connection was considered good [61, 62].

The need for a website for the CRHRT has been recognized [52], but a website has not yet been built.

### **Courses**

At the first meeting of the CRHRT in 1999, course activities were prioritized. Courses were to include database training, research methodology, scientific writing, life-saving skills, data management, and evidence-based workshops [52]. The Advisory Board expressed the need and intention to utilize local experts to conduct training courses [54]. The following course aims were stated [55, 63–66]:

- to train the staff of the CRHRT and national/institutional coordinators in skills of establishing a reproductive literature database for the member institution and the CRHRT (Literature Database, 2000) [55]
- to equip institutional coordinators with skills for translating research information into usable documents/material (Scientific Writing and Reproductive Health Literature Database, 2000)
- to develop research proposals/protocols and assist participants with the data analysis phase of their research and to assist participants with good research and writing skills (Research Methodology I–II, 2000, 2001).



**Table 5. CRHRT training courses accomplished 2000-2001.**

<b>Courses</b> [55] [63-66]	<b>Year</b>	<b>Course length</b>	<b>Participants</b>	<b>Facilitators</b>	<b>Total estimated cost</b>
Literature Database	May 2000	2 days	6 <sup>5</sup>	1 <sup>1</sup>	9
Scientific Writing and Reproductive Health Literature Database	July 2000	1 week	6 <sup>6</sup>	3 <sup>2</sup>	9
Research Methodology Part I	July–Aug/ 2000	3 weeks	10 <sup>7</sup>	? <sup>3</sup>	9
Research Methodology Part II	Nov–dec 2000	2	10 <sup>7</sup>	7 <sup>4</sup>	9
Research Methodology Part I	April 2001	3	9	1 <sup>1</sup>	622,350 SEK
Data Management <sup>2</sup>	Nov 2001	2	10 <sup>8</sup>	7 <sup>4</sup>	238,050 SEK

<sup>1</sup> Ms. R. Shakakata, WHO, Africa.

<sup>2</sup> Dr. D. Okello, WHO, Africa; Prof. J. Matenga, former editor of the *CAJM*; Prof. K. Mahomed.

<sup>3</sup> Members of the Clinical Epidemiology Unit (CEU), University of Zimbabwe/Uganda??.

<sup>4</sup> Dr. F. Majoko, Mr. Rusakaniko, Siziya, Chingono, and Sakutatukawa (Qualitative analysis both), J. Matenga (Skills in writing papers), Dr. D. Okello (Skills in report writing).

<sup>5</sup> *Uganda*: Robinah Najjemba; *Mozambique*: Nafissa Osman Bique; *Tanzania*: Sirel Massawe; *country*:<sup>2</sup> Joconiah Chirenda; *Country*: Singatsho; *Zimbabwe*: Jeremiah Chikovore.

<sup>6</sup> *Zimbabwe*: Dr. J. Chirenda, Ms. S. Ndhlovo, Mr. J. Chikovore; *Tanzania*: Dr. S. Massawe; *Mozambique*: Dr. Nafissa Osman Bique; *Uganda*: Dr. Robinah Najjemba.

<sup>7</sup> *Tanzania*: Dr. G. Kamugisha, Dr. C. Lipungu; *Zambia*: Ms. E. Mangani, Dr. T. Sikazwe; *Mozambique*: Dr. S. Guirruugo, Dr. S.I. Daud; *Uganda*: Dr. T. Mutyaba, Dr. C.-M. Mbasaalaki Mwaki; *Zimbabwe*: Mr. F. Tagwireyi, Dr. T. Manase.

<sup>8</sup> *Tanzania*: Ms. B. Fwaja, Dr. R. Lyamuya; *Zambia*: Dr. H. Phiri, Ms. R. Amafumba; *Mozambique*: Dr. Anna Teresa, Ms. M. Goncalves; *Uganda*: Dr. D. Kaye, Ms. G. Nalwadda Wasajja; *Zimbabwe*: Dr. T. Muti, Mrs. D. Matinyarare.

<sup>9</sup> Not known to the evaluator.

The Literature Database course took place during 1 week in 2000 in collaboration with the WHO, Africa, and was arranged for national coordinators and the research/training coordinator. The objective was to train the staff of the CRHRT and national/institutional coordinators on skills of establishing a reproductive literature database for each member institution [55].

The Research Methodology course was arranged in collaboration with the Clinical Epidemiology Unit (CEU) at the University of Zimbabwe/. The course was planned to be divided into three parts: Part I (3 weeks) – identifying a research problem, introduction to the research process and the concept of design, and writing a study protocol and proposal; Part II (2 weeks) – training in analysis of collected data; Part III – training in scientific writing [54]. The following trainers were identified as possible resource persons for courses in Research Methodology since it was recognized that each course would need a biostatistician, epidemiologist, and social scientist: 1. *Zambia*: Buleti Nsemkila, social scientist; 2. *Zimbabwe*: S. Rusakaniko, biostatistician; 3. *Tanzania*: Makwayam, biostatistician, Leshabari, sociologist; 4. *Uganda*: Simon Kasasa, biostatistician, Fred Wabwire-Mangene, epidemiologist, and Lobanga Roseline, social scientist [54].

The target group for the Research Methodology course was to be junior doctors and midwives. The intention of training the midwives and doctors in pairs has, however, not always been easily accom-



plished [8]. This was designed as a 3-part course, giving a total of 6 weeks tuition. There were different specific objectives for each part. For the 2000 cohort, all participants completed their protocols and three completed pilots.. Apart from the Ugandan cohort who are now involved in further training in Europe, all participants have continued with their intended pilots after receiving the seed grant. The *data management*, the second part of the course, was conducted successfully. The participants did not use their own data but acquired the skills necessary for data management using data sets from the Zimbabwe Demographic Survey and departmental projects. The scheduled courses titled 'Literature Database update' (July 2001) and 'Scientific Writing' (October 2001) were postponed because of a delay in accessing funds [48].

**Table 6. Proposed pilot studies, 2000 (All participants completed their protocols and all participants have continued with their intended pilots, and 'three have completed the pilots [48]).**

Title of proposed pilot study	Participant	Country
Revalence of asymptomatic bacteriuria and associated factors among pregnant women attending antenatal clinics at Muhimbili Medical Centre	G Kamugisha	Tanzania
The association between placental malaria parasitization and pre-eclampsia/eclampsia at Muhimbili National Hospital, Dar s Salaam	C Lipungu	Tanzania
Pregnancy outcome in intrapartum referrals for prolonged first stage of labour at the University Teaching Hospital, Lusaka	Ms. E. Mangani	Zambia
Sexually transmitted infections in sexually abused girl children in Lusaka, Zambia	Dr Dr. T. Sikazwe <sup>1</sup>	Zambia
To assess the immediate wound outcome associated with closure or non of subcutaneous tissues at Caesarean section	S Guirruugo	Mozambique
Non-closure of the peritoneum at laparotomy	Dr. S.I. Dau	Mozambique
Effectiveness of training nurses and midwives in cervical cancer screening	T Mutyaba	Uganda
The characteristics of male partners tof young pregnant teenage girls in Kampala, Uganda	Dr. C. Mbasaalaki Mwaki	Uganda
Cancer of the cervix knowledge, practices and beliefs among health workers and women of childbearing age in Mudzi, Zimbabwe	Mr F Tagwireyi <sup>1</sup>	Zimbabwe
A study of the effectiveness if niverapine in reducing mothertohild transmission HIV	T Manase <sup>1</sup>	Zimbabwe

It was agreed that there was a need to follow up participants who had been sponsored to attend the CRHRT courses. The participants were supposed to submit a short report after attending a course [53]. Participants of the pilot studies in the 2000/1 cohort were not sponsored. Also, not all participants have completed the course but are at various stages of development. Two participants have completed their pilot studies (one each from Zambia and Tanzania) [48].

During the site visits made by Mr Rusakaniko, course participants Dr. Mutyaba and C.-M. Mbasaalaki Mwaki from Uganda and Dr. C. Lipungu and Dr. G. Kamugisha from Tanzania were interviewed. The first-year trainees of course I, 2000, were ready to start their projects with writing a study protocol. However, they reported that they had not received their grants from the CRHRT for participation in the pilot studies due to the absence of an operational account. Consequently, no seed money has been available for the pilot studies. The first-year trainees have contributed to and spearheaded several activities in their country providing critical appraisal for student proposals, and supervising undergradu-

ate and postgraduate students. Some have started writing proposals seeking national funds, or done some teaching on research methodological issues, such as questionnaire design [61].

For the future, the CRHRT recognizes the need for Research Methodology courses answering to the specific need in the field of reproductive health research. The CRHRT proposes to introduce a more inexpensive model of running Research Methodology courses by using a tutor team, one member of the team per member country, to visit the individual member countries. By organizing a course in the member country instead of running a centralized course the cost for ten participants for a 2-week course will be reduced from 300,000 SEK to 170,000 SEK. The CRHRT foresees problems in recruiting ten participants from only one of the member countries, and has mentioned the possibility, in this case, of inviting participants from other institutions [67].

The CRHRT emphasizes the importance of evaluation of interventions in reproductive health and the fact that there are few health professionals with expertise in this field in the region. For this reason, the CRHRT has proposed to run a new 3-week course titled 'Design and evaluation of a Reproductive Health Program' at the CRHRT, including tutors from the Swedish partner institutions. It has been suggested to have a policy maker and two researchers from each member country participate in the course [67].

### **Site visits**

#### *Mozambique*

Course coordinator Mr. S. Rusakaniko paid a visit to the Department of Obstetrics and Gynaecology of the Eduardo Mondlane University, Maputo, Mozambique, on October 29–31, 2000, and met with Drs. A. Bugalho, Luisa, and Nafissa Bique Osman. At the time, the department was running two courses in research method, but the need for more training in research methodology was recognized. Mr. Rusakaniko was told that the department would benefit from the CRHRT's providing access to an epidemiologist, a biostatistician, and a social scientist. A recommendation was made to the CRHRT to assist in research methodology regarding research design, sample size determination, data processing, and statistical analysis [62].

#### *Tanzania and Uganda*

Mr. Rusakaniko also paid a visit to Tanzania and Uganda, on March 18–22, 2001.

The following ongoing research projects were identified: *Uganda*: 1 Maternal Mortality; 2 Adolescent Reproductive Health; 3 HIV and AIDS among pregnant women; 4. Contraception and abortion; Cancer of the cervix; 5. HIV awareness among adolescent. *Tanzania*: 1 Maternal mortality; 2. Anaemia in pregnancy; 3. Maternal and Child Health; 4. Post bortion Care; 5. HIV infection; 6. Vertical Transmission of HIV; 7. Vitamin A supplementation; 8. The effect of Zinc and Copper supplementation on acute diarrhoea; 9 Cancer of the cervix; 10. Placental Malaria; 11. Asymptomatic bacteriuria in pregnant women.

The member Departments of Obstetrics and Gynaecology in Tanzania and Uganda that are members of the CRHRT both have national counterparts to rely on for postgraduate training and research. In Uganda, the CEU of the Institute of Public Health for Uganda provides training, and in Tanzania, training is offered by the Public Health Department for Tanzania. The University of Uganda has five epidemiologists, three biostatisticians, and three health social scientists who can be roped in to provide support and training. Tanzania's medical training facilities have a weaker infrastructure than does the University of Uganda, with very few support staff from the Public Health Department. These professionals are overwhelmed with work, so that there is very little time for consultations with other departments. It was noted that most postgraduate students had written their study protocols with minimal

statistical advice or advice in the fields of epidemiology and statistics. An identified need of the CRHRT was input from both epidemiologists and biostatisticians in protocol development, as well as the input of a professional who would review manuscripts [61].

As a conclusion to the site visits, the following recommendations were made: (1) there is great need for close collaboration in terms of Research Methodology courses; (2) there is a need for short (1-week) courses in all the participating countries so that a larger number of participants can be involved; (3) the Data Management course should be open to more people; and (4) there is need to also have problem-based learning for country participants [61].

### **The database**

As has been mentioned previously, the 1-week course titled 'Literature Database' was held in 2000. The course participants were to be the national coordinators, and the research/training coordinator. The objective was to train the staff of the CRHRT and national/institutional coordinators in skills of establishing a reproductive literature database for the member institution and the CRHRT.

The need for, and mechanism of, creating a database for reproductive health research in the region was discussed. Such a database must include (1) a list of publications from the member countries dealing with reproductive health over the past 3 years; (2) abstracts from proposals; (3) abstracts on ongoing research; and (4) "gray" literature, and other unpublished work within the region. It was suggested that a framework/protocol be set up for the database, and that the national coordinators would furnish the CRHRT with information from each country. It was also suggested that the Health System Research (HSR) Unit, the WHO, the International Clinical Epidemiology Network (INCLEN) [68], and the CEU of Zimbabwe University be approached in this regard. It was further suggested that the database make use of the experience of the perinatal database of Muhimbili Hospital in Dar es Salaam, Tanzania, as compiled with the assistance of the IMCH and Epidemiology (Umeå) [52].

During the course on the literature database, the UNESCO software was used but found not to be optimal for CRHRT needs. The software Scientist for Research and Health for Development (SHARED) was then tested and it appears to be the best option and user-friendly as a database for 'gray' literature [69].

During the site visits to Tanzania and Uganda in March 2001, it was determined that neither country had yet started entering research abstracts into the 'gray' literature database as had been intended by running the course offered in collaboration with the WHO, Africa, in Zimbabwe. As obstacles were discussed, it became clear that the software is not user-friendly after all, that there was too little time to work on the database, and that there is a further need to train more people in each country in the initiation and maintenance of the database. Mr. Rusakaniko also identified the need for a schedule to be adhered to [61].

### **Multicenter studies**

With assistance from the course participants, topics suitable for multicenter studies were identified and include malaria during pregnancy, adolescent pregnancy, and interventions for the prevention of mother to child transmission of HIV [48]. On the initiative of the ECSAOGS, discussions were also conducted on a multicenter study on menopause in African women. The CRHRT will facilitate the coordination of this project [53]. A concept paper for this ECSAOGS study on menopause in African women was circulated and comments were received from the public health specialist Dr. Chirenda and the biostatistician Mr. S Rusakaniko. These comments have been forwarded to ECSAOGS to secure funding [48].

### **The CRHRT and ECSAOGS**

Since all members of the Steering Committee and the Advisory Board, besides the AMRN representative, are gynecologists who are members of ECSAOGS, an unofficial link here is rather obvious. The Steering Committee and the Advisory Board held their meetings at the time of the ECSAOGS conferences in Dar es Salaam, in 2000, and Addis Ababa, in 2001. So far, the CRHRT has been part of the ECSAOGS discussion on the study protocol on the multicenter study on menopause.

### **The CRHRT and AMRN**

The Africa Midwives' Research Network has been supported by Sida's Health Division since its inception, in addition to winning a Rockefeller Award providing 3 years of financial assistance. During the biannual workshops, one of the goals and achievements has been the incorporation of workshops on evidence-based perinatal care.

In accordance with CRHRT's constitutional requirements, the AMRN has one representative on the CRHRT's Advisory Board, but since the CRHRT's member university departments are in obstetrics and gynecology, the representatives/national coordinators and other members of the Advisory Board are therefore gynecologists. One of the AMRN representative's ambitions has been to promote pair-course participation – involving one midwife and one doctor [8]. The AMRN recognizes the CRHRT as a resource for postgraduate training that AMRN is not yet able to provide [8]. The CRHRT's office in Harare could make facilities available to midwives [8]. Several members of the Advisory Board have suggested that midwives should have more influence on the CRHRT's Board, emphasizing the complementary roles of midwives and gynecologists. One solution proposed to this end is to double the number of national coordinators – so as to include one midwife and one doctor [4, 7, 8, 60].

In a letter to SAREC, a bilateral model for research training was proposed for AMRN midwives with the Division of Reproductive and Perinatal Health Care in the Department of Women and Child Health of Karolinska Institute, as Swedish collaborator. In this context, a role is foreseen for the CRHRT as coordinator for regional training and project management [28].

### **The CRHRT and its Swedish collaborators**

During its first 2 years, the CRHRT has not had a need of facilitators from its Swedish collaborators [54], and there has been no official collaboration between the CRHRT and the IHCAR [10], the IMCH [9], and Epidemiology (Umeå) [12]. Gunilla Lindmark visited the CRHRT in April 2000 and offered her expertise in the planning of the Research Methodology training courses [56]. The major hindrance to collaboration was the uncertainty in funding that prevented the CRHRT from having a working plan of more than 12 month's activities [48]. The Steering Committee have expressed the need to use local expertise [54]. The Acting Director of the CRHRT, Dr. Franz Majoko, mentioned the possibility of Swedish workers participating as facilitators if the course could be planned well in advance [5], and foresaw the need of northern expertise from Sida/SAREC for the operational research courses [51].

### **The CRHRT and partners in the region**

The CRHRT has expressed its intention to establish links and networks with various actors in the region. However, regional networking with other established organizations in the field of reproductive health was considered premature during the first year of the CRHRT's existence. "One of the problems of establishing links with many organizations when we still have a shaky financial base is creating expectations that we cannot fulfill. It is our intention to expand our networking when we have the capacity to make a meaningful contribution to the partnerships." [48]

The CRHRT has established close collaboration with the CEU in Harare, Zimbabwe. Both Dr. Majoko, and the facilitator of the courses in research methodology Mr Rusakaniko, Department of Com-

munity Medicine, are members of the INCLEN. This collaboration should have great potential as the Harare CEU, with technical assistance from the Centre for Clinical Epidemiology and Biostatistics (CCEB) at Newcastle University in Australia, plans to introduce a distance course in Clinical Epidemiology in February 2002, open to applicants who have a first degree in medicine or nursing [68].

The CRHRT has approached the Reproductive Health Division of the CRHCS based in Arusha, Tanzania, but there is no plan to collaborate nor indeed is there a possibility of collaboration [48]. The WHO, Africa, has since the inception of the CRHRT been a collaborator assisting in the literature course.

The CRHRT has also had initial contact with the newly established Regional Centre for Quality of Health Care (RCQHC), during the ECSAOGS meeting in Addis Ababa, Ethiopia [48], and there is potential for collaboration to the mutual interests of both organizations.

The Reproductive Health Research Unit (RHRU) at the University of the Witwatersrand, Johannesburg, South Africa, is running Reproductive Health Research courses. The CRHRT has held discussions with the RHRU regarding networking. The RHRU has expressed an interest in coordinating a network of African reproductive health research units but the CRHRT feels there is a need to establish itself first before joining a larger network [48].

The CRHRT has also been in touch with the regional Wellcome Centre for Reproductive Health Research in Durban, South Africa, but there has been no collaboration. Dr. Majoko, the CRHRT's Acting Director, is coordinator for the southern African regional Prevention of Maternal Mortality Network (PMMN) and leader of the Zimbabwe PMMN project. The CRHRT hosted the regional PMMN conference attended by 170 participants from 19 countries [67].

Other contacts have been with the AMDD (Averting Maternal Deaths and Disability), D Maine & A Rosenfield, Mailman School of Public Health, which has invited the CRHRT to its meetings. The CRHRT has expressed an interest in having an M.P.H. student from Columbia University, New York, attached to its department for their thesis work [48]. Finally, the United Nations Population Fund (UNFPA) country office in Harare has expressed an interest in cooperating with the CRHRT at a national level [48].

### **Future plans for the CRHRT**

The CRHRT emphasizes its potential central role in coordinating reproductive health activities, and as a resource center in the region, and stresses the importance of maintaining this network for researchers. The future plans of the CRHRT are centered on a continuation along the lines followed during the 2 years of operation, in (1) training activities; (2) development of the reproductive health literature database; (3) holding symposia/scientific meetings and workshops; (4) coordinating and networking; and (5) running multicenter research projects [67].

The CRHRT recognizes the need for Research Methodology courses answering to the specific need in reproductive health research. As has previously been mentioned, the CRHRT has proposed to introduce a more inexpensive model of running the Research Methodology courses, by using a tutor team, with one member per member country on the team, to visit the individual member countries. By organizing a course at the member department in the member country instead of running a centralized course the cost for ten participants for a 2-week course can be reduced from 300,000 SEK to 170,000 SEK. As has been mentioned, the CRHRT foresees a problem with recruiting as many as ten participants in only one of its current member countries, and has mentioned, in this case, the possibility of inviting participants from other institutions [67].

The CRHRT emphasizes the importance of evaluation of reproductive health interventions and the shortcoming in competence in this field in the region. In this regard, the CRHRT proposes a new 3-week course on ‘Design and Evaluation of Reproductive Health Programs’, to be held at the CRHRT and to include tutors from Swedish partner institutions. It has been suggested that one policy maker and two researchers from each member country be invited to participate [67].

The CRHRT further proposes to establish and maintain a reproductive health literature database. The CRHRT has mentioned the existence of a great deal of ‘gray’ literature in the region that has not been published but collected into a database for each member institution, and this the CRHRT plans to merge into a common database by using the SHARED database [69].

The CRHRT foresees a role for itself as a nucleus for the implementation of evidence-based reproductive health research by being an organizer of symposia/scientific meetings in the region. The EC-SAOGS acknowledges that the CRHRT has a more active role to play in the planning and organizing of annual ECSAOGS meetings by arranging the program, and identifying and inviting keynote speakers. In this context, the CRHRT could also organize short courses and workshops in evidence-based reproductive health care in collaboration with the Oxford, UK-based Centre for Evidence-Based Health Care, and on scientific writing in collaboration with the WHO, Africa [51].

The networking and coordinating role of the CRHRT could also be the starting point to arranging training courses in such areas as minimally invasive surgery, colposcopy, and life-saving skills, as well as playing a crucial role in coordinating multicenter research projects such as one on malaria in pregnancy, adolescent reproductive health, and HIV/AIDS interventions [51].

The CRHRT does point out that there have been constraints with regard to the transfer of funds, and proposes that further funding should be made available directly to the CRHRT [51].

As plans for the future, the CRHRT has identified a core staff with a Director, administrative secretary, a research and a training coordinator, and office support staff. The CRHRT proposes, once a plan of activities has been drawn up, that the Director should be employed on a part-time basis and that the post of Director should be open to members from any department, and not automatically be a departmental post of the University of Zimbabwe (or the Department of Obstetrics and Gynaecology at that university) [51].

As further plans for the future, the CRHRT has identified the need to use the national/institutional coordinators as a link between the CRHRT and its member countries/departments. The coordinators’ duties will include “assess the research and training needs for their institutions and make information available to the CRHRT to enable it to plan its activities. They are responsible for identifying material to be added to the RH literature database. They identify participants for training courses/symposia, [etc].” [51]



# Assessment

## Relevance, quality, and cost-effectiveness

### The CRHRT's activities so far

The overall commitment of the CRHRT must be assessed from the long-term perspective of networking and research capacity in a region where there is a shortage of qualified professionals in reproductive health care, and only two or three health professionals have a Ph.D. in reproductive health. The two-year support to the CRHRT has been granted within the framework of SAREC's strategy since the past two decades of developing research capacity in sub-Saharan countries. One ultimate goal of SAREC support is to support national capacity in research training, by which is meant research methodology courses and supervision capacity. This is of utmost in the perspective of the on-going brain drain from sub-Saharan Africa [70]. In the Swedish setting, to be a supervisor in research training, you need to be associate professor, while the Ph.D. examination is only the first step towards competence to supervise a Ph.D. student. Support of a national infrastructure in research training, and further post-doctoral training therefore will in the near future be dependent on bilateral SAREC agreements. A regional network for research should, if it is to be optimal, be an association created by professionals who have undergone research training, and provide supervision competence from the different nations in the region. Of necessity, this process of providing support for research training nationally is in the early stages, and support to a regional research network has been and should be parallel to training support. However, the potential advantages of regional networking and communication outweigh the disadvantages of member departments/countries being in an early stage of research capacity.

Even though the conduct of the CRHRT during the first two years would have been easier if Ph D training of members of the Advisory Board had been finalized, this will be a difficulty overcome with time when the members are having their Ph.D. In the meantime, it suggests a need for support from collaborative departments. In this context, the first 2 years of the CRHRT's existence should be viewed as a pilot with the overall objective being to:

- initiate, stimulate, and coordinate multidisciplinary research in the field of reproductive health in the region
- improve capacity building, both at the institutional level and at an individual level, through workshops and courses in reproductive health
- disseminate research results in order to improve reproductive health care in the region.

What progresses and obstacles could be identified, and what has been accomplished with regard to the specific aims of initiating training activities, building a reproductive health literature database, supporting symposia/scientific meetings, and organizing workshops and multicenter research projects?

Within a budget of 3.75 million SEK (2.1 million SEK for 1999 and 2000, and 1.65 million SEK for 2001; see Table 1), slightly more than half of what was applied, the CRHRT have had 2 years to cover initiated activities. After 1 year, the Advisory Board, the nucleus of the Center, replaced the Steering Committee. The creation of the Board should be considered as a most important achievements during those 2 years, bearing the greatest potential to exert a regional networking influence. Furthermore, the CRHRT has facilitated regional communication between member countries/departments by e-mail. However, the need for a homepage has so far not been clearly identified, nor have a capacity and planning for a website been achieved.

One of obstacles encountered has been the difficulty in recruiting a permanent Director of the CRHRT. The solution of appointing a part-time Acting Director has been the best possible solution under the circumstances. However, the lack of a permanent Director has certainly hampered the CRHRT's power of initiative in many respects, regarding both the infrastructure of the CRHRT and the execution of its specific aims. Furthermore, the recruitment of research and training coordinators has been delayed, also due to the lack of a permanent Director, which likewise must have slowed up the process of initiating training activities.

The parallel formation of the Advisory Board and appointment of national coordinators may also have hampered defining the role of the national coordinators as corresponding to a need both of the member department and of the CRHRT. The portfolio for the national coordinators during the years of the CRHRT's existence has been vague. Neither their role as CRHRT representatives at the member departments/countries, and their assignment of selecting course participants and doing follow-up after the course, nor their task in developing the database has been accomplished. One possible reason could be that their role would have evolved step by step in response to a CRHRT leadership in progress, and thus also corresponded to needs of each member Department. By the end of the first 2 years of the CRHRT's existence, it can be said that the goal of using national coordinators for the purposes outlined so far has not accomplished what was outlined.

The development of a reproductive health database, which is to include a compilation and merging of 'gray' literature into a common database, as previously mentioned, has not materialized thus far although a suitable training course for the national coordinators has been developed and a more user-friendly program for a database has been identified. One reason could be that the objective of building a reproductive health database is not clearcut and the need has not been perceived among the member departments, as none has yet started with the compilation.

The pedagogic model of the CRHRT's Research Methodology courses is appropriate and will fill a gap between undergraduate studies and research training. The core training activity of the CRHRT has been this Research Methodology course, and one most promising step in this respect is the CRHRT's collaboration with the CEU at the University of Zimbabwe. Although in many respects the 3-week course in 2000 for the first ten first students was a success, the pedagogic model was not strictly applied. Only some of the participants have finalized their protocol for a pilot study, and only three have yet carried through the pilot study. Consequently, the second and third step of the course, the analysis and writing steps, have not yet been achieved.

During the first 2 years of the CRHRT's existence, a need for collaboration in the running of courses with the CRHRT's partners in Sweden, i.e., the IMCH, IHCAR, and the Epidemiology (Umeå), has not been expressed. Whether such collaboration would have strengthened the training program is uncertain, as the CRHRT within the present budget frame [48] has not been able to do continuous follow-up or provide distance training for its members. The tri-partite model of North-South courses [30] do show it could work.

The CRHRT has claimed that one difficulty it has encountered has been lack of continuity in terms of staff on the part of the donor agency. Certainly change several times of Sida/SAREC administrative officials in charge of the CRHRT during the two years [48] should have been a difficulty. Furthermore, the different roles of Sida/Health division and Sida/SAREC did not come out optimal to support the CRHRT. Whether more continuity on the part of Sida/SAREC and closer collaboration with the northern partners would have resulted in a more distinct CRHRT profile could not be answered.

The CRHRT has made contact with, and has managed to rope in, the main actors in reproductive health in the region. Thus far the only official collaborator, albeit a most promising one, is the CEU in



Zimbabwe. As the Acting Director has stated, the CRHRT has been awaiting firm ground before establishing collaboration with other regional networks in reproductive health. In this regard, there are very good prospective partners for fruitful networking. The INCLEN, RHRU, RCQHC, and the Wellcome Centre in Durban, South Africa, have already been mentioned. Other potential collaborators are the reproductive health group of the International Network of field sites with continuous Demographic Evaluation of Populations and Their Health in developing countries (INDEPTH) and the Medical Research Council (MRC) in Cape Town, South Africa, with its Perinatal Mortality Research Unit.

As the CRHRT is by definition an organization outside the boundaries of national universities and member departments/countries, allowances for responsibilities, activities, and salaries for employees have of necessity not been following university terms.

## **The CRHRT's future plans**

So far, there has been no full application for a continuation of the CRHRT. In the document outlining the future plans of the CRHRT, 9.1 million SEK has been quoted for a 3-year period, and it is suggested that the CRHRT continue along the lines of the previous 2 years of work, (1) organizing training activities; (2) developing a reproductive health literature database; (3) organizing symposia/scientific meetings and workshops; (4) coordinating and networking; and (5) running multicenter research projects [67].

The issue of directorship of the CRHRT is crucial for the sustainability of the CRHRT. It has been suggested that the Director should ideally have a university affiliation, which would possibly overcome the recruitment difficulties of past years. Also, with the planned development of a resource base at the CRHRT, there are evident advantages to having a university affiliation in the long term. The same argument also applies to the national coordinators who should ideally be affiliated to their national universities.

The envisaged role of the CRHRT with regard to multicenter studies should likewise be viewed from a long-term perspective. The goal is to develop advanced national as well as regional research capacity, and obtain funding from external agencies. In this aspect, the CRHRT could play the role of promoter in the future.

## **The Reproductive Health Literature Database**

The issue of the CRHRT Reproductive Health Literature Database must be viewed in the context of the numerous ongoing worldwide initiatives of providing free access of scientific information to low-income countries by the Internet. Through the Health InterNetwork Access to Research Initiative (HINARI), as of January 2002, almost 1,500 scientific journals are accessible free of charge via the Internet to medical/health institutions in 67 of the world's poorest countries. Thus, a large percentage of journals on obstetrics and gynecology, midwifery, public health, epidemiology, medical sociology, and health economics are accessible [71]. Furthermore, Sida's support of the website SciDev.Net, whose aim it is to promote the dissemination and free access to science and knowledge in low-income countries, is important also in the context of the CRHRT [72, 73].

Consequently, a first priority in this respect of developing a regional network such as CRHRT's should be to ensure the access of all member departments/countries to the Internet and build a CRHRT website with links to HINARI and SciDev.Nets. Through this, the process of the CRHRT's own database will develop. Proceedings and abstracts from the ECSAOGS and AMRN conferences and meetings should form part of the CRHRT website. Certainly, access to regional 'gray' literature could be one essential element of the website for members.

## **Postgraduate training and the CRHRT**

The need and desire for regional research and courses is well recognized by the CRHRT and is part of the overall strategy of SAREC. However, the role of the CRHRT and national universities in this regard must be elucidated.

There is a special need for postgraduate courses to fill the gap between undergraduate education and research training. They should provide graduate training and prepare participants for research training. This could be a regional role for the CRHRT. All members of the Advisory Board have confirmed the need for such a role to be part of the CRHRT's course activities.

However, academic research training is beyond the scope of the CRHRT. SAREC's strategy for strengthening research capacity must be realized through bilateral university collaborations. Nevertheless, the CRHRT could in the future act as a regional intermediate for a university interchange of academic courses in the region. It could play a role in recognition, and adaptation, of different university courses for a standardized system of regional diploma certification.

In order to strengthen research training, in accordance with SAREC's strategy, north-south collaboration therefore has to be enhanced in the foreseeable future. This does not suggest that the Swedish way of providing research training is always optimal for reproductive health research in developing countries. Indeed, a Swedish Ph.D. thesis in medicine, estimated to require 4 years fulltime studies, takes on the form of a summary, with scientific papers attached as appendices ("sammanläggningsavhandling") rather than monographs. This implies that there is more focus on a supervised process of producing scientific papers (design, data collection, analysis and writing, and publishing of papers). This system is in contrast to the American system of Ph.D. writing, which is more focused on methodological training. The establishment in Sweden of master's training (M.P.H.) in public health illustrates a trend towards a more formalized academic preparation for research training. With increasing importance of the social sciences in medical research, the Swedish system of medical research training has its shortcomings, and compulsory courses in research at Swedish universities may consequently be inadequate and may not always answer to the need of special research topics. This is more evident in the field of public health, epidemiology, medical sociology, and the nursing sciences, all of which are very relevant to reproductive health research. Therefore, a M.P.H. as a first degree towards the research training, or a set of M.P.H. courses, might be the appropriate complimentary addition to the formalized Swedish Ph.D. training, answering to the need of research capacity in reproductive health. Thus, a prerequisite for research training in reproductive health should address the broad needs, while specially designed research courses for gynecologists and midwives will only make up a small part of required research courses.

The above has implications for the SAREC's goal of strengthening research capacity. One outcome of bilateral research collaboration is the granting of Ph.D. degrees, a first step towards supervision capacity in fields such as reproductive health. However, without support at the faculty level in developing formal research methodology courses, as well as time for training when the Ph.D. students are at their home university, local research training capacity will not follow.

In this context, the role of the CRHRT as an organizer of courses could be twofold. Firstly, there is a value in introductory, preparatory courses for junior doctors and midwives. Secondly, the CRHRT could play a role in the future as coordinator of multicenter studies and postdoctoral research in the region.

However, the space between the above two, viz. research training, is a long-term process of local university research capacity and therefore this must be incorporated in bilateral programs of the SAREC. At present, only one of the CRHRT's Swedish partners, UISPH, offers a comprehensive set of courses covering the field, while the IMCH and IHCAR so far have run more focused courses in special areas.

There is a need for regional actors, such as the INCLEN (the CEU in Zimbabwe and Uganda). An example in this regard is the new distance course on 'Clinical Epidemiology and Biostatistics' of Newcastle University in Australia, arranged with the CEU in Zimbabwe, which could be very relevant to reproductive health research. The already established CRHRT collaboration with the Oxford-based Centre for Evidence-Based Health Care is another example of collaboration and the role of the CRHRT as mediator for training.

It is premature at this point to answer the question whether the CRHRT's future activities could be incorporated in the existing bilateral collaborations or whether facilities with employed staff are needed and, if so, where they should be located. Certainly, academic research training cannot be an assignment for the CRHRT, although the CRHRT can play a networking role as organizer of introductory courses and courses in operational research.

### **The relationship between the ECSAOGS, AMRN, and the CRHRT**

The relationship between the CRHRT and the ECSAOGS and AMRN is a core issue as most of the professionals in reproductive health are midwives and doctors. The professionalization of midwifery and obstetrics practice and research in the region by necessity has given the doctor and the midwife complementary roles, and not competitive ones. In this regard, a strengthening of research capacity must not only comprise different perspectives but it must also represent mutual interests. Within the research field of reproductive health, training must meet the different training needs of midwives and doctors, both in the same programs but also separate in broad collaboration faculty or university wise, not only department wise. Besides developing research capacity, which could strengthen the complementary roles of midwives and doctors at the national level, the CRHRT may play the role of regional networker.

Midwives are currently represented on the Advisory Board of the CRHRT by the chairperson of the AMRN, as of this year Helen Lugina. The national coordinators are all doctors who represent the member Departments of Obstetrics and Gynaecology. Members of the Advisory Board have proposed that the representation of midwives be increased, both at the regional and at the national level. The present weak position of midwives on the Board hampers the potential of the CRHRT to provide the facilities and act as a negotiator in regional reproductive health research advocacy.

Currently, a close relationship exists between the ECSAOGS and the CRHRT. These links could be strengthened even further and one possible area might be for the CRHRT to participate in the planning of the ECSAOGS conferences, suggesting symposia and inviting guest speakers, arranging courses in connection with the conferences, editing abstracts submitted electronically, and publishing proceedings and abstracts on its website. The advantage of a CRHRT more profiled towards the ECSAOGS could imply continuity and more evidence based professional body.

## Conclusions and Recommendations

The overall objectives of the CRHRT are to contribute to the reduction of reproductive morbidity and mortality in the eastern and southern African regions. Other objectives are to facilitate the conducting of, from a gender perspective with special emphasis on the needs of women, research, teaching, continuing education, and training in reproductive health and publish and disseminate information on research results within the region and internationally.

Specific objectives are to (1) initiate and promote multidisciplinary research in reproductive health; (2) facilitate human resource development and institutional capacity building through training at all levels; (3) strengthen collaborative research in the region and function as a resource center in reproductive health issues; and (4) advocate improved reproductive health in the region through the dissemination of research findings.

During the first 2 years of operation, the CRHRT has had a part-time Acting Director. University-affiliated directorship albeit desirable has not been achieved. Facilities with employed staff have been established. An Advisory Board has been created and includes the most prominent professionals in reproductive health in the member countries. Networking facilities for the Internet have been established, although a website with the envisaged reproductive health database still has to be built. So far, there have been no national activities of the CRHRT through representatives in member departments/countries. The CRHRT has started a course training program of the highest relevance, although follow-up and a more focused course strategy have not yet been provided. Also, no funding other than from Sida and Sida/SAREC has yet been obtained.

Future support by Sida/SAREC for research capacity building should continue to be channeled by supporting university/faculty capacity. However, Sida/SAREC should be aware that a Swedish Ph.D. is estimated to require 4 years fulltime studies, and that must be covered ensured within bilateral agreements. For those outside bilateral agreements Sida/SAREC support to Ph.D. posts should also be open for applicants from low-income countries.

The role for supporting the need expressed by the establishment of the CRHRT will be more in dissemination of knowledge, networking with the member countries, interacting with other centers and NGOs, and organizing preparatory methodology courses and research courses. With regard to research courses, the CRHRT could be a regional guide for an interuniversity exchange to compensate for deficiencies at the national level. In terms of networking, the CRHRT should also consider expanding its membership. For example, Botswana, Rwanda, Malawi, Namibia, and Kenya, among others, would most certainly benefit from becoming members of the CRHRT. As regional networker, the CRHRT would benefit if its Director and national representatives had university affiliations. Another most important role for the CRHRT is as promoter for the ECSAOGS and AMRN, and furthermore, as a bridge builder for complimentary roles of midwives and doctors. In this regard, midwives need better representation on the CRHRT's Board and at national level.

The argument that SAREC support for the CRHRT is premature within a long-term strategy, i.e., before a more consolidated national resource base is established in each country, has some relevance. However, the processes of supporting national research capacity and regional networking should ideally be parallel processes.

The first 2 years of the CRHRT's existence should be viewed as a pilot with the ultimate goal in mind of developing independent research capacity. In this sense, the objectives of the CRHRT are highly

relevant. The present evaluation should be viewed as one part of a long-term evaluation of the CRHRT with regard to capacity building in reproductive health research in the region. The next step should be further dialogue. The present evaluation should be referred to the CRHRT's Advisory Board for comments, and to the AMRN and ECSAOGS for consideration. The discussion document of the CRHRT outlining future plans should be developed into an application to SAREC for funding for a forthcoming period.

## Lessons learned

The main aim of the evaluation according to terms of reference could properly be answered in this report even though 3 weeks consultancy services was insufficient. By having access to previous reports and promemorias regarding the Centre, documentation retrieved by the evaluator cost-effectiveness of neither activities performed by the Centre nor future plans can be fully answered. The aspect of shared activities between AMRN and the Centre could not answered properly due to unforeseen low midwife participation at the ECSAOGS conference. Towards the simplistic issue whether CRHRT activities should be incorporated within bilateral collaborations or continue as a physical center, ie in Zimbabwe as all within the Advisory Board agreed upon, I have tried my best to answer with the complexity of issue. The present political standpoint of Sida/SAREC towards support to Zimbabwe have not been taken into consideration. For Sida/Health Division and Sida/SAREC the main lesson learned should be that an inception of a network center for reproductive health research requires continuity of funding and support, and probably northern collaborator involvement in its initial stage.

# Appendices

## Terms of reference for evaluation of the Centre for Reproductive Health Research and Training, Harare, Zimbabwe

### *Background*

SAREC has had bilateral cooperation projects with Mozambique, Tanzania, Zambia and Zimbabwe since the late 80ies. The researchers within these projects started holding annual meetings for exchange of ideas and sharing of experiences in 1991. Discussions for the formalisation of the network started around 1995 and Uganda joined the network in 1996. Several meetings were held by representatives of the member departments to discuss the establishing of the Centre. Sida/SAREC and Sida/Health division then decided to jointly fund the activities of a centre. Meetings of the steering committee resulted in the production of a project proposal and the constitution establishing the centre. A two-year agreement was signed between Sida/SAREC and the University of Zimbabwe as the host institution in March 1999.

The main activities of the centre are to:

- initiate, stimulate and coordinate multidisciplinary research within the field of reproductive health of significance for the region
- improve capacity building both at an institutional and individual level through workshops and courses in reproductive health
- disseminate research results in order to improve reproductive health care in the region.

The acting director for the Centre has from the start been Dr Franz Majoko. The disbursement of funds was for various reasons delayed in 1999 and the activities of the centre did not start until 2000. The agreement was therefore extended to also include 2001. Sida/Health division made one disbursement in 2000 to the centre.

The activities so far carried out by the centre have mainly been courses and workshops with participants from the member countries. No research activities have taken place.

### *Purpose and scope of the evaluation*

The main aim of the evaluation is to assess how a future support from Sida/SAREC and Sida/Health Division should be designed to be of best benefit for research, capacity building and health care improvement in the area of reproductive health in the region in Africa covered by the present member countries at the Centre.

### *The assignment (issues to be covered in the evaluation)*

The consultant should evaluate the following:

Relevance, quality and cost-effectiveness of activities performed so far by the Centre.

Relevance, quality and cost-effectiveness of future plans of the Centre.

The need and desire for regional research and courses among gynecologists, obstetricians and midwives in the region. The willingness to take responsibility for such activities among these persons.

If future activities could be incorporated within the bilateral collaborations or if a physical centre with employed staff is needed and where it should be placed.

The relationship between ECSAOGS (East African Association of Obstetrical and Gynecological Societies), AMNR (Africa Maternity Nurse Research Network) and the Centre regarding shared activities.

#### *Methodology, evaluator and time schedule*

Dr Ulf Högberg, Umeå University will be contracted for the evaluation.

The consultant should visit Sida and meet with Anders Molin at Sida/Health division and with Anita Sandström, Barbro Carlsson and Annica Sohlström at Sida/SAREC. These meetings should take place in November and December, 2001.

The consultant should meet Professor Gunilla Lindmark at Uppsala University and Professor Staffan Bergström and Associate Professor Dr Kyllike Christensson at Karolinska Institutet.

The consultant should visit the ECSAOGS meeting in Addis Ababa and the Advisory Board meeting of the Centre in Addis Ababa in November 25–30 and have discussions with representatives for the Centre as well as gynaecologists, obstetricians and midwives attending the meeting.

The consultant should read previous reports and promemorias regarding the Centre.

The consultant will make his own travel arrangements.

#### *Reporting*

The report should be written in English and the format and outline of the report shall follow the guidelines in Sida *Evaluation report – a Standardised Format* (see annex 1).

A draft report should be submitted to Sida/SAREC by the latest, February 28, 2002. A final version in hard copy on diskette should be submitted to Sida/SAREC not later than four weeks after comments have been received from Sida and the involved departments.

Subject to decision by Sida, the report shall be published and distributed as a publication within the Sida Evaluations series. The report shall be written in Word 6.0 for Windows (or in a compatible format) and should be presented in a way that enables publication without further editing.



## INTRODUCTION

The Centre was established by a network composed of University departments of Obstetrics & Gynaecology in Mozambique, Tanzania, Uganda, Zambia and Zimbabwe. SAREC / SIDA has funded research projects in reproductive health in four of these countries since 1987 and these countries had established a loose network which held annual meetings to exchange ideas. The regional partners, with funding from SIDA (SAREC) has established the Centre to coordinate research and offer training for the network. Sub-Saharan Africa has similar health problems and a common approach is needed in addressing them. The region encompasses more countries that are willing to utilise the Centre for training and research in reproductive health, whose membership will be formalised later.

Since there are many players in the field of sexual and reproductive health, the Centre plays the essential role of research coordination so that partnerships can be encouraged and the risk of duplication of effort are minimised.

The regional associations of Obstetricians and Gynaecologists, (ECSAOGS) as well as the Africa Midwife Research Network (AMRN) are closely associated with the Centre to the benefit of their members.

## OVERALL OBJECTIVE:

To reduce reproductive morbidity and mortality in the region through research, training and dissemination of results at national, regional and international levels.

## SHORT TERM COURSES OFFERED:

- Research methodology
- Data processing and management
- Scientific writing
- Epidemiology and biostatistics
- Reproductive health sub-specialist skills updates
- Communication and counselling skills
- Use of information technology databases
- Gender awareness and sexual rights



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## COLLABORATING PARTNERS

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UPPSALA University  
**SWEDEN**

Dept. of Epidemiology & Public Health  
Umea University  
**SWEDEN**

International Health Care Research  
Karolinska Institute  
Stockholm  
**SWEDEN**



## OBJECTIVES:

- To facilitate, commission and co-ordinate multi-disciplinary / multi-centre reproductive health research.
- To identify training needs in the member countries and co-ordinate training courses in reproductive health.
- To liaise with policy-makers on reproductive health issues.
- To create research information database for reproductive health related matters for the region.
- To co-ordinate the dissemination of research findings at national, regional and international levels.

## AREAS OF RESEARCH AND TRAINING:

- Maternal and women's health.
- Sexually Transmitted Infections (STI) including HIV.
- Sexuality and behaviour, with special focus on adolescents.
- Perinatal mortality.
- Family planning and unwanted pregnancies.
- Men as partners in reproductive health.

## INFORMATION:

The Centre's address is :

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Swedish International Development Cooperation  
Agency (SIDA / SAREC)

## CENTRE FOR REPRODUCTIVE HEALTH RESEARCH AND TRAINING



Centre for Reproductive Health  
Research and Training

*The CRHRT is  
committed to the  
advancement  
of the science,  
skills and  
partnerships in  
Reproductive  
Health in East,  
Central and  
Southern Africa.*

## References

1. SAREC, *Terms of reference for evaluation of the Centre for Reproductive Health Research and Training, Harare, Zimbabwe*. 2001. p. 3.
2. Caetano, P., *Personal interview, nov 2001*. 2001.
3. Chirenje, M., *Personal interview, nov 2001*. 2001.
4. Kaseba-Sata, C., *Personal interview, nov 2001*. 2001.
5. Majoko, F., *Personal interview*. 2001.
6. Massawe, S., *Personal interview, nov 2001*. 2001.
7. Mirembe, F., *Personal interview, nov 2001*. 2001.
8. Mpanda, S., *Personal Interview, Nov 2001*. 2001.
9. Lindmark, G., *Personal interview, Dec 2001*. 2001.
10. Bergström, S., *Personal interview, Dec 2001*. 2001.
11. Christensson, K., *Personal interview, Dec 2001*. 2001.
12. Nyström, L., *Personal interview*. 2001.
13. Sachs, J., *WHO Report of the Commission on Macroeconomics and Health*. 2001, WHO: Geneva.
14. SAREC, *Research Co-operation I An Outline of Policy, Programmes and Practice*. 1998, Sida, Department of Research Co-operation, SAREC: Stockholm.
15. SAREC, *Science for Development . Searching for Keys to the Future*. 2000, Department for Research Cooperation, SAREC, Sida: Stockholm.
16. Christensson, K., *Care of the newborn infant: satisfying the need for comfort and energy conservation*. 1994, Karolinska Institutet: Stockholm. p. 45.
17. Liljestrand, J., *Maternal morbidity i Mozambique*, in *Dep of Obstetrics and Gynecology*. 1985, Uppsala University: Uppsala. p. 34.
18. Högberg, U., *Maternal mortality in Sweden*, in *Dep Obstetrics and Gynecology*. 1986, Umeå University: Umeå.
19. Möller, B., *The outcome of pregnancy and antenatal care in rural Tanzania*, in *Dep Obstetrics and Gynecology*. 1988, Uppsala University: Uppsala. p. 46.
20. Axemo, P., *Pregnancy outcome in Mozambican women with special reference to intrauterine infection*, in *Dep Obstetrics and Gynecology*. 1995, Uppsala University: Uppsala. p. 48.
21. Molin, A., *Dilatation of the cervix in first trimester abortion*, in *Dep Obstet & Gynecol*. 1991, Karolinska Institutet: Stockholm. p. 59.
22. Wessel, H., *Pregnancy outcome and mortality among women in Cape Verde*, in *Dep Obstetrics and Gynecology*. 1998, Karolinska Institutet: Stockholm. p. 48.
23. Björklund, K., *Pelvic pain in pregnancy: studies on symphyseal distention, serum relaxin levels and the influence of living conditions*, in *Dep Obstetrics and Gynecology*. 1999, Uppsala University: Uppsala. p. 47.
24. Olsson, P., *Antenatal midwifery consultations; a qualitative study*, in *Dep of Nursing*. 2000, Umeå University: Umeå. p. 68.
25. Faxelid, E., *Quality of care for patients with sexually transmitted diseases in Zambia*, in *IHCAR*. 1997, Karolinska Institutet: Stockholm. p. 79.
26. Nilses, C., *Health in women of reproductive age: a survey in rural Zimbabwe*, in *Dep Obstetrics and Gynecology*. 2000, Uppsala University: Uppsala. p. 65.

27. Andersson, T., *Survival of mothers and their offsprings in 19th century Sweden and contemporary rural Ethiopia*, in *Epidemiology*. 2000, Umeå University: Umeå. p. 47.
28. Christensson, K., Johansson, Eva, Lugina, Helen, *Letter of Interest. Development of an academic network for capacity building of nurse/midwives in Kenya, Tanzania, Zambia and Zimbabwe*. 2001, Division of Reproductive and Perinatal Health Care, Department of Women and Child Health, Karolinska Institutet.: Stockholm.
29. Lindmark, G., Axemo, Pia, Dahlbäck, Elisabeth, *Sexual and Reproductive Rights, Advanced International Training Programme Africa, 1999, Part II, Kadoma, Zimbabwe, February 2000, Reports of participants*. 2000, International Maternal and Child Health (IMCH), Department of Women's and Children's Health, Uppsala University.
30. Lindmark, G. *Poster-text*. 2001.
31. Omar, M.M., *Women's health in rural Somalia*, in *Epidemiology*. 1994, Umeå University: Umeå. p. 38.
32. Bique Osman, N., *The impact of maternal morbidity on fetal growth and pregnancy outcome in Mozambique*, in *IHCAR*. 2000, Karolinska Institutet: Stockholm. p. 43.
33. Pereira Folgosa, E.M., *Role of genital infections on pregnancy outcome in Mozambique with emphasis on syphilis*, in *Microbiology*. 2000, University of Lund: Lund. p. 56.
34. Berhane, Y., *Women's health and reproductive outcome in rural Ethiopia*, in *Epidemiology*. 2000, Umeå University: Umeå. p. 61.
35. Lugina, H.I., *Women's postpartum concerns and midwives' reflection on postpartum care: studies in Dar es Saalam, Tanzania*, in *IMHC*. 2001, Uppsala University: Uppsala. p. 77.
36. Massawe, S., *Anaemia in Women of Reproductive Age in Tanzania*, in *Department of Women's and Children's Health, Section for International Maternal and Child Health (IMCH)*. 2002, Uppsala University: Uppsala. p. 64.
37. Granja, A., *Maternal deaths in Mozambique – An audit approach with special reference to adolescence, abortion and violence*, in *Division of International Health (IHCAR), Department of Public Health Sciences*. 2002, Karolinska Institutet: Stockholm. p. 61.
38. Machungo, F., *Maternal outcome of pregnancy in Mozambique with special reference to abortion-related morbidity and mortality*, in *Division of International Health (IHCAR), Department of Public Health Sciences*. 2002, Karolinska Institutet: Stockholm. p. 62.
39. Kamwendo, F., *Acute pelvic inflammatory disease (PID): aspects of diagnosis, aetiology and sequelae epidemiology and prevention*. 1999, Uppsala University: Uppsala. p. 60.
40. Eltom, A.B.A., *Thyroid function and iodine nutrition in women during pregnancy and in their neonates: studies among Sudanese subjects*. 2000, Uppsala University: Uppsala. p. 89.
41. Bålöw, R.-M., *Insats-PM Stöd till fortsatt regionalt forskningssamarbete i södra Afrika och till förberedelser för ett center i Zimbabwe för forskning och utbildning inom området reproduktiv hälsa*. 1998, Sida. p. 10.
42. Majoko, F., Chipato T, Hill G, *Project Application, Regional Centre for Reproductive Health Research and Training*. 1998, Regional Steering Committee (Mozambique, Tanzania, Uganda, Zambia and Zimbabwe), Department of Obstetrics & Gynecology, University of Zimbabwe, Zimbabwe University. p. 26.
43. Sassarsson, P., Molin A, *Study of Project Proposal for Regional Centre for Reproductive Health Research and Training*. 1998, Sida. p. 9.
44. Molin, A., *Beslut om insatsstöd till CRHRT*, A. Nordström, Editor. 2000.
45. *Constitution of Eastern and Southern African Centre for Reproductive Health Research and Training*. 1999.
46. *Agreement on Support to the programme "Co-ordination of regional research activities in reproductive health"*. 1999. p. 6.



47. *Beslut of Insatsstöd till CRHRT*. 2000. p. 5.
48. Majoko, F. 2002.
49. Majoko, F., *Centre Report for Sida/SAREC, April 1999 – April 2000*. 2000, CRHT. p. 3.
50. Majoko, F., *Request for disbursement of funds for 2001*, K.a.M. Björklund, Anders, Editor. 2001.
51. Majoko, F., *Future plans for CRHT – Discussion document for SIDA and SAREC*. 2001, CRHT. p. 5.
52. Majoko, F., *Minutes steering committee, CRHRT, 1999-12-13*. 1999, CRHRT. p. 14.
53. Majoko, F., *Minutes of second advisory board meeting, 22–23 March 2001*. 2001. p. 5.
54. Majoko, F., *Minutes steering committee, CRHRT, March 2000*. 2000, CRHRT. p. 8.
55. Majoko, F., *Centre for Reproductive Health Research and Training, Report for 2000*. 2000, CRHRT. p. 11.
56. Lindmark, G., *Memorandum från möte om “Regional Reproductive Health Centre, Department of Obstetrics and Gynecology, University of Zimbabwe”*, A. Sohlström, Editor. 2000.
57. Stahl, M., *Letter*, F. Majoko, Editor. 2000.
58. Majoko, F., *Re: Centre operations and funding*, M. Stahl, Editor. 2000.
59. Sohlström, A.a.M., Franz, *Agreed minutes from Sida/SAREC’s visit to the Centre for Reproductive Health and Training, Harare, May 2–9 May, 2000*. 2000.
60. Munjana, S., *Personal interview*. 2001.
61. Rusakaniko, S., *Report back on the visit to Uganda and Tanzania 18–22 March 2001*. 2001, CRHT: Harare.
62. Rusakaniko, S., *Site visit – Report on the visit to Mozambique*. 2000, CRHRT. p. 4.
63. Majoko, F., *Timetable, Data Management Course, 27.11–08.12.2000*. 2000, CRHRT.
64. Majoko, F., *Summary and comments on Evaluation of 2000 Data Management Course*. 2000, CRHRT. p. 2.
65. Majoko, F., *Course participants Reproductive Health Research Methodology and Data Management Course – 2000*. 2000, CRHRT. p. 1.
66. Majoko, F., *Course participants Scientific Writing and Literature Database July 17–21, 2000*. 2000, CRHRT. p. 1.
67. Majoko, F., *Future plans for CRHRT, Discussion document for SIDA (Health Division) and SAREC*. 2001, CRHRT. p. 6.
68. INCLEN, *INCLEN-Africa Objectives, International Clinical Epidemiology Network*. 2002, <http://www.inclenafrika.org>.
69. SHARED, *SHARED (Scientist for Research and Health for Development) Database, User manual*. 2002, SHARED, Scientist for Health and Research for Development, [www.africashared.org](http://www.africashared.org).
70. Aredo, D., *The Brain Drain From Ethiopia*. Ethiopian Development Forum, 2000. 1(3): p. 1–19.
71. HINARI, *Health InterNetwork Access to Research Initiative*. 2002.
72. [www.scidev.net](http://www.scidev.net), *SciDevNet, News, views and information about science, technology and development*.
73. [www.inasp.org.uk](http://www.inasp.org.uk), *Programme for the Enhancement of Research Information*, Inasp, International Network for the Availability of Scientific Publication (Unesco).

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