

## Future Perspectives

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### Abstract

According to WHO data **more than 180 million couples** are confronted with the consequences of childlessness day by day. The consequences of involuntary childlessness are much more dramatic in developing countries, particularly for women. The most important reason for childlessness in developing countries is severe male infertility due to sexually transmitted diseases (STDs) and female infertility due to blocked tubes. Both problems can only be treated by “expensive” assisted reproductive technologies (ART) which are not available at all or only within reach of those who can afford it, mostly in a private setting.

Numerous barriers against infertility care provision in resource-poor countries are reported in this Monograph. It is clear that we need a global approach to reach the ultimate goal: the implementation of accessible infertility care services all over the world. Keystones for success include simplification of diagnostic procedures and ART methods, minimising the complication rate of interventions, providing training-courses for health care workers, paying attention to the psychosocial aspects of patients and the cultural settings. In this it is utmost important to incorporate infertility treatment into existing reproductive health care programmes. The Walking Egg Project aims to start with the implementation of low-cost “accessible” infertility services in developing countries, integrated within health care clinics dealing with good quality family planning, health education, maternity- and child care facilities.

The project needs the support of a strong network of social scientists doing research in the field of infertility, childlessness and assisted reproductive technologies in poor resource settings. This network can help the project in the preparation and follow-up of the pilot-centres including monitoring and assessment of the social, psychological, cultural, ethical and juridical aspects.

**Key words:** Affordable, developing countries, ethics, infertility, IUI, IVF, low cost ART, politics, reproductive care, simplified methods, socio-cultural.

### Introduction

It is common knowledge that infertility is not prioritised as a public health problem in most developing countries. According to the evidence available, infertility care in resource poor countries still faces a large number of barriers against providing even basic care to childless couples. The most common barriers are the following: (1) lack of interest of governments, local health care providers and research institutions for infertility care as such (2) lack of financial support by NGOs, foundations and international societies in projects linked to

infertility care, (3) inequity in access to ART (assisted reproductive technologies) services because of non-availability and/or high costs, (4) concerns about overpopulation, (5) the limited resources argument questioning that expensive techniques are justified in countries where poverty is an important issue and where health care systems still struggle with the huge problem of infectious diseases such as malaria, tuberculosis and HIV and (6) Millennium Development Goal 5 indicating that the reduction of maternal mortality has to be considered as the most important reproductive health priority, not mentioning the problem of neglected infertility care.

In most resource poor countries assisted reproductive technologies are either unavailable or very costly in so far that the large majority of the population cannot afford it. Mostly the treatment centres are located only in the capital or very large cities, which often require very long travels by the patients to reach these. The services mostly provide little or no guidance or psychological counselling making the treatment more stressful than needed. Also information about the treatment and the success-rates are frequently lacking or biased.

From a reproductive rights perspective and for reasons of social justice and equity it is our duty to provide equitable access to effective and safe infertility care in resource-poor countries as well. Time has come to change policies and to enable the delivery of comprehensive and accessible infertility care in developing countries, if possible in a project with a multidisciplinary and global approach. The contributions of socio-cultural research are helping in finding ways for braking down the barriers that exist against funding and prioritizing infertility treatment in poor resource areas. In the papers in this volume the existing barriers in various countries are scrutinized and suggestions for change indicated.

### **The Walking Egg Project**

At the Arusha Expert meeting, a co-organization of the ESHRE Special task Force on “Developing countries and infertility” and The Walking Egg npo, held in Arusha (Tanzania) December 2007, it was decided that global access to infertility care in developing countries can only be achieved when good quality but affordable infertility care is linked to more effective family planning and safe motherhood programmes.

The Walking Egg Project aims to raise awareness surrounding childlessness in resource-poor countries and to make infertility care in all its aspects, including assisted reproductive technologies, available and accessible for a much larger part of the world population.

The most important aims and actions of The Walking Egg Project are the following

#### *1. Reproductive Health Care Education*

Public education on prevention of infertility including life style, prevention of STDs and postpartum and post-abortion infections has to be improved. Therefore the incorporation of reproductive health education in general health education is mandatory. This necessitates establishing relationships with schools, community leaders, traditional healers as well as the media, producing and distributing educational materials (brochures, posters and audio-visual material).

#### *2. To study the ethical and socio-cultural aspects surrounding this topic*

Because only a few studies describe the social effects of childlessness in resource poor countries, we want to initiate and expand an international network of social science scientists to perform more research on social, psychological, cultural, ethical, religious and juridical aspects of infertility in resource poor countries, including barriers to healthcare and access to treatment.

We aim to publish overviews of findings on socio-cultural aspects and psychological of childlessness and infertility care in resource poor countries and communicate the results with a wider audience including patients, medical professionals, the press, NGO's, political and governmental institutions.

It is also our goal to monitor, assess and follow-up the socio-cultural and psychological aspects of the pilot-projects for low cost infertility services and analyse ethical issues arising during the implementation of the project. Moreover it is also needed to measure the effects of treatment, in case of success as well as in case the couple stays childless after treatment.

#### *3. To study the economical aspects surrounding this topic*

We urgently need more studies on the prevalence of childlessness in developing countries. We also have to measure the reduction in the quality of life by infertility and childlessness and compare it to the reduction caused by other common diseases in developing countries. How cost-effective is infertility treatment in comparison with other measures aimed to improve health?

Country profiles, with existing data on resources, needs and resource gaps for infertility services and service integration into already existing structures have to be made. These studies are urgently needed to select the countries which have to be chosen to implement the first pilot-centres.

#### *4. Simplifying techniques of diagnosis and treatment of infertility: a simplified “one-stop clinic for the diagnosis of infertility”*

The feasibility of a model of centralized expertise with a one-stop diagnostic strategy in developing countries will be examined. The one-stop approach implements the responsibility of diagnosis and immediate management policy. The consequences of the results for the management of the couple have to be discussed with them on that same day. A protocol for the anamnesis and examination of the infertile couple has to be standardized and it has to be examined which simple diagnostic tests have to be performed.

### 5. Simplifying techniques of diagnosis and treatment of infertility: To study the effectiveness of simplified IVF

A strategy would be the use of a simple incubation system in tubes avoiding the necessity of expensive CO<sup>2</sup> based incubators and laminar-flow chambers. A prospective study comparing this very low cost simplified system with regular IVF is ongoing in Genk, Belgium. The first results of this new method are promising and reassuring.

### 6. The implementation of accessible infertility services into (existing) reproductive health care programmes

The ultimate aim is to establish accessible low-cost infertility services in developing countries with affordable, effective, safe and standardized diagnostic and therapeutic procedures, and protocols. The integration of infertility management into sexual and reproductive health care programmes and a reduction of costs are considered prerequisites for implementing “new reproductive technologies” in developing countries. Simplifying ART procedures and minimising the complication rates will be mandatory.

### 7. The organisation of training-courses for fertility specialists and paramedical health care providers

Training courses have to be organized on a regular basis with emphasis on the diagnosis and prevention of infertility in developing countries. Table I gives an overview of the training courses we have in mind. We will need the support of experts in the field, who

are capable to tutor the training courses at the highest level in a very short time, taking into account the experience of the trainees and the quality of facilities that can be expected in the new pilot-centres.

### 8. Data registration

Following training, quality control, regular audit and systems of accreditation and registration should be implemented in order to maintain appropriate standards of care. It is our aim that within each pilot-centre the data will be registered already from the start, if possible “online”.

### Need for research collaboration and socio-psycho/counselling support

Depending on the countries where the first pilot projects of the Walking Egg project will be carried out, researchers with experience in that particular country (or region) could be involved in conducting studies. Various research questions/objectives and study designs can be considered, including the following:

- (1) Studies to prepare the design of the different treatment and counseling procedures, ethical guidelines and informed consent forms for pilot-clinics delivering accessible and affordable infertility care.
- (2) Qualitative interviews can be used to assess the way infertility services are actually delivered in these clinics during the pilot phase, including the experiences and viewpoints on feasibility and accessibility of the health care staff.

**Table I.** — Key categories of the training courses.

- Reproductive health care education basic course  
→ Target group: **nurses, midwives**
- A general and medical anamnesis of both partners and basic clinical examination  
→ **clinician (medical)**
- Screening for infections and STDs  
→ **clinician (medical, paramedical)**
- How to perform and evaluate a hysterosalpingography and/or hystero-salpingo-contrast-sonography  
→ **clinician (medical, paramedical)**
- Standard Operational Procedures for the gynaecological and fertility ultrasound scan  
→ **clinician (medical, paramedical)**
- Basic semenology training course according to WHO 2010 manual  
→ **laboratory staff, (paramedical)**
- Sperm washing procedures  
→ **laboratory staff, (paramedical)**
- Mini-hysteroscopy  
→ **clinician (medical)**
- Documentation and registration  
→ **administrative staff (clerical)**

- (3) Semi-structured or qualitative interviews are the best tools to investigate the acceptance and effects of treatment procedures on subfertile couples – women and men – undergoing infertility treatment at different stages with special attention to the way they experience treatment practices, in particular aspects of quality of care. The counselling process has to be investigated with special attention to psychological strength, social support and cultural ideas.
- (4) Assessing social repercussions of performing infertility treatment procedures at conjugal, family or community level with special attention to economic consequences and other implications in the cultural-religious domain. This can easily be done by means of ethnographic / qualitative research.
- (5) Studies looking into issues of stigmatization and means to de-stigmatize infertility, the role of patient organizations, the media (soaps and TV-news, magazines and popular journals, examples of VIP's etc).
- (6) Post-intervention studies are needed to investigate (a) changes in life, with or without child and (b) the socio-cultural response of the family and community.

## Conclusion

The implementation of accessible infertility care services is not an unrealistic dream anymore. The success of the Walking Egg Project will largely depend on our ability to optimise these techniques in terms of availability, affordability and effectiveness. Many studies suggest and prove that the cost per ART cycle can and will decrease substantially although the exact price reduction have not been calculated yet.

To be successful the project has to be global with a very strong socio-cultural, psychological, ethical and economical component. It will need the support of a strong network of social scientists supporting the project by discussing the various socio-cultural, psychological and ethical aspects of biomedical infertility care in poor-resource areas. This network will be crucial in the introduction and follow-up of accessible infertility care services in resource poor countries.

The contributors to this volume and the initiators of the Walking Egg Project are, each in his or her own way, trying to achieve an improvement of the fate of the childless couples in poor resource areas. Hopefully through these and other efforts NGO's, governments, regional and local health institutions, and other important organizations will also become interested and active in improving treatment and prevention of infertility in the non-Western world.

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