

## **Health care services for infertility in Sub-Saharan Africa - The case of Moshi, Tanzania.**

**Johanne Sundby, Ulla Larsen**

**Introduction:** In the time since the Cairo conference, progress has been made in several aspects of the reproductive health agenda, and the additional burden of HIV/AIDS has become a more serious issue. Little has been done in the area of infertility management in developing countries. It is documented that high levels of curable sexually transmitted diseases, complications of abortions and adverse reproductive interventions may cause infertility, and that in most of sub-Saharan Africa, secondary infertility is more common than primary. WHO has for a decade had guidelines for infertility management in the health sector, but for sub-Saharan Africa the approach outlined there, and especially access to modern reproductive technology, is limited. There is a dire need for better coordinated infertility services in countries with less resources. The aim of this paper is to describe what is currently available in an urban African setting, and to suggest some systematic health systems approaches that can be applied.

**Methods:** Moshi is a town in northern Tanzania with relatively fair access to education and health care. As part of a larger community based survey and clinical assessment of infertility in Moshi, a health care assessment was carried out. The burden of infertility clients, the care given at each institution and the referral patterns up to the highest level of care was mapped through site visits, observations and key informant interviews in a sample of the various types of health care institutions for sexual and reproductive health in Moshi, such as private and public dispensaries, family planning clinics run by non-governmental organizations, health centers, regional referral hospital, private hospitals, pharmacies and a tertiary teaching hospital, Kilimanjaro Christian Medical Centre (KCMC).

In a sample of 125 couples that had experienced problems becoming pregnant, we analyzed care seeking patterns by the female and the male partner as well as the services they had received.

**Results:** Most care facilities did have infertility clients, but the basic primary sites like dispensaries did not have much to offer for these clients. Some private dispensaries as well as some public health centers, and private hospitals can manage the clients to a certain degree. The regional hospital does offer investigations and some treatment. A systematic and comprehensive approach covering the basic elements of an infertility program was only found at the specialist tertiary level (KCMC). The cost of a full infertility investigation can be prohibitive, and it is difficult for clients to evaluate what a good service would consist of or

what the probability of a childbirth would be. The men systematically do not come for services unless directly asked for, and even then many do not turn up. They seem to resent the sperm analysis. Women are investigated even if men are not coming, making it difficult to complete a full investigation package. Services available in Moshi are diagnostic D&C, but no hormonal assays, hysterosalpingogram and eventually laparoscopy for tubal patency, sperm analysis, STD syndromic management (few tests are available), and a few other assessments. Treatment is limited to tubal surgery, with unknown success rate, and Clomiphene stimulation of ovulation. Some cases have fibromas or hyperprolactinaemia, and are treated accordingly. About one third of the infertile couples in the community based survey had not had any infertility investigation or treatment. About half of the women had received some investigation and/or treatment, while the husbands had not been seen. In about 15 % the couples have been seen together. The most typical investigations were hysterosalpingograms and ultrasound. Many claim to have had dilatation and curettage, and many have tried traditional medicines. The most common treatments were by far hormonal treatment, while a few had tubal surgery. The outcome of the complete investigation and treatment (for 58 women) was that 15 of the 38 that became pregnant, had live births (near 40%).

**Discussion:** There are services for infertility in this community, but cost factors may prohibit the poorer segments of the society to have a complete work-up. Ignorance and lack of health education on the issue also makes it difficult to appreciate what types of services one should look for. Infertility is a matter for females, and male infertility is not really addressed, nor are there currently any treatment options for the men. Few service providers had received any updated training on infertility management, and it is only at some of the secondary and the tertiary level that the approach is systematic and comprehensive. Modern ART is not available for any patients, but most resort also to traditional healers. There is also a scope for better coordination between the various levels and types of health care institutions that manage infertility, and it is envisaged that some of the more specialized family planning institutions could be capable of being catalysts for such improvements including public education on infertility prevention and care.