

Providing an obstetric fistula service

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Introduction

Maternal mortality and morbidity in developing countries remain tragically high; the published rates are probably underestimated because statistics are taken from hospital-based records, to where the mother in labour is taken, but only as a last resort when all other avenues available to the rural community have been exhausted. The mothers arrive dehydrated, weak, frightened and in shock, mainly because they are from remote areas, have no transport, are poor and have no local health facility.

Hospital services are inadequate and where they do exist there is a lack of manpower, inadequate medical supplies and low professional morale. The labouring mother must then await the service provider, but often this is too late and serious complications ensue, including death.

The WHO estimates that 8% of all maternal deaths in the developing world are caused by prolonged unrelieved obstructed labour. However, many mothers survive but are left with serious trauma, e.g. an obstetric fistula, and are then abandoned by their husbands, shunned by neighbours, cared for (but at a distance) by relatives, and not provided for by health professionals, who should give them hope.

Thus the aims of the developing a fistula service are to provide a user-friendly, efficient and accessible service for women with obstetric fistulae in developing countries, where because there are no or inadequate maternal health facilities, this condition is prevalent.

Pre-requisites

The perceived need and/or demand

In countries where maternal mortality and morbidity are high there is a correlation with the incidence of obstetric fistulae; thus it is assumed that such countries will require a fistula service. The other method of determining the need is directly from the number of patients with obstetric fistulae presenting to a health facility. The origin of these patients is an important factor, i.e. locally from near the facility or from more remote areas. Another important factor is why they present to that facility, i.e. whether it is cheaper than others,

or even free, whether the services are user-friendly with welcoming staff, if the patients are well-received despite their injuries.

The actual need

Determining the need for a fistula service is difficult; if there is a high maternal mortality then it can be presumed that there are many obstetric fistulae, but in populations where women are not of small stature, where girls do not marry young, or where there is a minimum of obstetric care, then there may not be a correlation with maternal death rates. However, low maternal mortality does not always mean low morbidity; the deaths may be unrecorded and the maternal morbidity may be high.

Ideally a small study should be carried out in an area where women with obstetric fistula have given birth and the prevalence of obstetric complications in relation to obstructed labour assessed. If such complications are common then a feasibility study should be undertaken to determine the size and type of health facility.

Government permission

Once a feasibility study is completed and the facts are available, this should be discussed with the government of the country and compared with existing government policies and health-service development plans already approved. Every effort should be made to work in full collaboration with the government health department, either at district level or centrally. This will avoid duplicating programmes planned in any one area.

Government support

Where governments receive multilateral or bilateral funding this may be channelled into special projects that affect the nation, e.g. obstetric fistula, surgical intervention and its overall management, as part of a 'reproductive health' package. When plans are devised for new government health facilities, previously highlighting the need for an obstetric fistula service in that particular area may encourage governments to include a relevant facility in new hospitals as an important part of service provision.

In many countries the provision of manpower is solely the responsibility of the government. Staff will be required from the government work force, whether medical doctors or nurses, and thus good co-operation with the government is essential.

Types of service provision

The provisions listed are the ideal; simpler health facilities may be essential when the service is particularly important to the community.

A fistula hospital

The best fistula service is a hospital with complete surgical, medical, nursing, laboratory, radiology and other support services. Such a facility should have an outpatients department, preoperative accommodation (either as wards or hostels), inpatient facilities, an operating theatre with a suitable operating table (Fig. 1), facilities for autoclaving and sterilizing, a pharmacy, a physiotherapy unit, an X-ray department, kitchen, laundry, doctor's office, nurse's station, canteen, changing rooms and administration department, with all the corresponding personnel.

A health centre

The next best facility is a small health centre of 10–20 beds, with a small specially adapted operating theatre, where a regional or district hospital nearby can give support if needed, e.g. a laboratory and radiology, and where other more costly facilities are available.

A hospital wing

A separate wing of a district or regional hospital next to the main hospital is another option, where the patient



Fig. 1. The operating facilities at the Addis Ababa Fistula Hospital.

with an obstetric fistula can be nursed among other women in a similar condition. If such a wing is very small then integration with other patients may be advisable.

Outreach services

Using the regional or district hospital for occasional visits by teams of specialists doctors and nurses is another option, whereby the local doctor can 'collect' patients and when there is a predetermined number, the team visits, bringing the required equipment, medicines and supplies, and carries out the surgery needed.

Recommended requirements

Professional

The main professional requirement is for one obstetric gynaecologist, surgeon or physician who will have received training in obstetric fistula repair and be skilled in operating techniques pertinent to pelvic and vaginal surgery. In addition to this, two qualified nurses and three to four primary level health workers are needed, e.g. nursing aides, for every 25 patients. The nurses should know how to manage and nurse the patient before and after surgery, and be able to teach others about the management of obstetric fistula. The nursing aides may be recruited from previous fistula patients, especially those unable to return to normal life after the injury they have sustained.

Other support staff, e.g. laboratory technicians, X-ray technicians, guards, laundry workers, kitchen workers, drivers, and administrative staff will be employed according to the size of the establishment and available funding for salaries. This may be developed gradually from a small and simple to a larger and more structured facility.

Buildings

The essential requirement for the building is that it is in keeping with the social and cultural norms of the community. Multi-storey buildings are not in sympathy with the rural communities from which the affected women originate; the building should have outdoor areas with trees and grass where the patients can sit or lie when not in bed. Moreover, a lawn or grassed area will absorb urine well without leaving a puddle, and improves the morale of these patients. Small buildings connected by outdoor corridors or walkways are ideal because the pervasive smell of urine is allowed to escape more readily, and the women can navigate more easily in these familiar surroundings.

A minimum facility will comprise a room with one or two couches for outpatients, easily accessible for those

women waiting nearby, either under trees or under a shelter with slatted benches to allow for urine leakage. The reception area for registration may be a porch or veranda with a table and chair, with either a filing cabinet for records or, eventually, a storeroom for the files. A preoperative room or small dormitory should be provided for women to stay while awaiting surgery; this is less structured than a ward, but the patients should be taught how to keep it clean. The women can be instructed in simple chores to help to integrate them back into the working population.

Other facilities of a full hospital are:

- Toilet and shower facilities for pre-admission cleaning, and a room for bowel care and shaving, etc.
- An inpatient ward for the number of patients likely to undergo surgery on over a 3-week period (Fig. 2).
- A fully equipped operating theatre (a full list of facilities can be supplied upon request), with a sterilization room, toilet, doctor's office, changing rooms, tea-room and scrub area.
- A laboratory (fully equipped, list supplied upon request).
- A laundry department with facilities to dry washing in the wet season.
- A kitchen to supply the meals for patients, with additional high-calorie meals for weak patients.

Optional extras include:

- An X-ray room behind lead-lined walls, with a simple-to-operate machine (this is not essential).
- A physiotherapy unit is a useful addition.
- A room for literacy and health/hygiene classes is recommended, as patients with fistulae are often illiterate; if their hospitalization is prolonged they will benefit from this teaching.



Fig. 2. The main ward in the Addis Ababa Fistula Hospital.

- A maintenance department for repairs.
- A generator room if possible.

Obstetric fistula centre

An obstetric fistulae centre should have all the above except possibly the laboratory, X-ray unit and generator, and a smaller operating theatre, perhaps obtaining surgical packs from a district hospital.

Hospital wing

For this facility it is useful to have a separate entrance to the obstetric fistula outpatients department; often the other patients are offended by the odour of women who have an obstetric fistula. Being part of a larger facility it is presumed that the hospital can provide the other services to the women. The wing should have a separate preoperative room, operating theatre (although sterilization facilities can be central) and postoperative ward. A separate physiotherapy unit is also ideal, as the women having physiotherapy usually still leak and the odour can be offensive to other patients.

Outreach using a local health institution

For this system, whatever is available locally can be used; the mobile team carry all the required equipment with them. The minimum requirements of the host health facility are: good lights; an adequate operating theatre, with a good operating table equipped with stirrups and shoulder supports, and that can be placed in the Trendelenberg position; facilities for sterilization; available beds for operated patients; and adequate nursing staff to care for the patients after surgery. A full list of the surgical equipment and supplies is available on request.

Budget

Capital

The capital cost can be estimated according to the prevailing market conditions in a given country. For a given budget the initial outlay may include:

- Buildings and the furnishing of required structures.
- Training of specialist doctors in fistula surgery and of nurses in fistula management.
- Initial outlay for equipment, supplies and medicines; re-ordering should be calculated into the recurrent costs.
- Vehicle(s) for transporting patients and possibly staff, and for use in the Outreach facility.

- An administration room with filing cabinets, computers and a desk; the initial order of charts and cards for patients, with re-ordering carried over into recurrent costs.

Recurrent

Each country should arrange a suitable method, location and means for regular ordering for the service-provider centre. The ongoing needs will include:

- Maintenance of buildings, e.g. painting, cleaning of roofs and gutters, washing of windows, plumbing, electrical and carpentry repairs.
- Ongoing training of staff to maintain high standards.
- Re-ordering of recurrent stock requirements.
- Regular servicing of any vehicles for safety and good management.
- Re-ordering of administrative stock for efficient management of the service provider.
- Electricity, water, postage, rent, Internet use, etc.
- Inflation.
- Salaries for staff.
- Miscellaneous.

Project proposal

In writing a project proposal it is important to determine the feasibility of the facility in the light of available resources and manpower, and to keep within the limitations of what is possible and already known.

The proposal should be well considered and carefully planned, incorporating if possible government policies for Reproductive Health in the country or region/district for which the facility is planned. Presenting the proposal simultaneously to non-governmental organizations and charities may be useful; governments are more likely to endorse projects that have funding already pending.

A brief proposal should include a 'problem statement' or/and the magnitude of the problem, the aims and objectives, purpose, and work-plan, including the time frame and how the results will be monitored and evaluated. A brief description of the facility and an estimated budget, both capital and recurrent may be requested.

For obtaining funding, many donor organizations have specific proposal formats, which should be used; these will follow much the same format as that presented to the government for approval, but the donor may want more information about costs, with architect's drawing and blueprints, contractor's estimates, and pro-formas for purchases made by the hospital for the project.

Some donors will visit the site and have a resident or visiting consultant to safeguard the donor agency's interests. Others will give a direct gift, asking for a



Fig. 3. The forgotten fistula patients.

detailed report upon completion of the project. Careful records of all spending must be maintained for auditing.

Conclusion

The needs of women with an obstetric fistula may not appear to be urgent, because they have survived prolonged labour, but providing this important service will undoubtedly help to relieve the plight of these 'forgotten' women (Fig. 3). Of the 2.9 million women in Ethiopia who deliver babies each year, 8700 will develop obstetric fistulae, reflecting the dismal picture of obstetric care in rural communities in many developing countries of the world. To encourage anyone seeking to provide such a service, the pleasure on the face of a young woman cured of her obstetric fistula after a disastrous delivery is the greatest of rewards.

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