

Short Report

Adolescent reproductive health: observations in a hospital setting

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Introduction

Adolescents comprise a large proportion of the population in many developing countries. In Malawi, 21.5% of the total female population are girls aged 10 to 19 years (MALAWI, 1987). In many developing countries teenage girls suffer devastating complications of early pregnancy and sexually transmitted diseases, either resulting in high maternal mortality in this age group or permanently affecting their future reproductive capacity (WHO, 1987; HARRISON, 1989). There is little published information describing the pattern of gynaecological morbidity found in adolescents in developing countries; baseline data are needed in order to develop appropriate services.

I evaluated the contribution of teenagers to gynaecological in-patient care at the Queen Elizabeth Hospital, Blantyre, Malawi, which serves a population of about 600000. Written case notes for each admitted patient are stored centrally after discharge. All files for 1994 and 1995 were reviewed. If the age was recorded as <20 years, the following information was abstracted; diagnosis, treatment, duration of admission, and whether referred or not. Cross-checks were made with a central admissions register. Patient confidentiality was maintained by using numbered abstracts. Data were entered and analysed using Epi-Info, v. 6.03.

Table. Diagnoses of gynaecological in-patients aged <20 years in Queen Elizabeth Hospital, Blantyre, Malawi (1994-1995)

Diagnosis	No. of cases
Complications of abortion	932 (81.0%)
Septic abortion	81 (9%)
Criminal abortion	25 (3%)
Molar pregnancy	2 (0.2%)
Ectopic Pregnancy	11 (1.0%)
Sexually transmitted disease	29 (2.5%)
Pelvic inflammatory disease	88 (7.6%)
Bartholin's abscess	30 (2.6%)
Fistula ^a	8 (0.7%)
Trauma to genital tract	4 (0.3%)
Congenital abnormality	2 (0.2%)
Dysfunctional uterine bleeding	26 (2.3%)
Dysmenorrhoea	19 (1.6%)
Total	1153 (100%)

^aRecto-vaginal or vesico-vaginal fistula.

Results

A total of 7176 files was available; 2% did not have the age recorded, in 19% the age was recorded as <20 years, and in 22% of these the age was ≤16 years. Teenage girls accounted for almost 20% of the admissions.

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The majority of admitted teenagers (85%) came from Blantyre or its immediate suburbs. Most came to the teaching hospital directly; only 13% had been referred via a primary health care centre or district hospital.

Between 24 and 72 teenagers were admitted each month. There was no seasonal pattern or relationship with school holidays. The average duration of admission was 5 d.

A written diagnosis in agreement with the presenting complaint (cross-checked the gynaecologists) was recorded in 1153 sets of notes (Table). Complications of abortion constituted the majority of these, 12% were complicated by sepsis and/or the result of induced abortion. A free admission of attempted criminal abortion was recorded in 25 cases.

Pelvic inflammatory disease (PID), Bartholin's abscess or sexually transmitted disease (STD) together formed 13% of the diagnoses. PID was associated with a palpable pelvic abscess in 17% (15/88). Only patients with severe STDs were given in-patient treatment. These included 11 with condylomata acuminata and/or vulval warts, 4 with herpes simplex, 3 with syphilis, 3 with lymphogranuloma inguinale and one with candidiasis.

Congenital abnormalities included imperforate vagina and congenital vaginal stenosis. Trauma to the genital tract included 2 cases of rape.

Sixty-five per cent (815/1259) of the teenagers required surgery. In accordance with admission diagnoses, these were mainly curettage and manual vacuum aspiration. Referred patients were as likely to undergo surgery as non-referred patients (odds ratio 1.25, 95% confidence interval 0.84-1.75). There was no recorded death.

Discussion

Young adolescents are a particularly vulnerable group and it is worrying that one in 5 of the girls admitted were aged 16 years or younger. Complications of abortion, PID and STD were the most important reasons for admission. This differs from patterns of morbidity in industrialized countries. In the Oxford region (UK), termination of pregnancy was the commonest cause for admission in girls aged 15 and 16 and childbirth of termination for girls aged 17-19 years; inflammatory disease of the ovary and fallopian tubes was far less common (HENDERSON *et al.*, 1993). Other studies reported that menstrual irregularity, dysmenorrhoea, pelvic pain and problems of breast development formed the majority of presenting complaints (ACOG, 1991).

Between 30% and 50% of pregnancies in sub-Saharan Africa are unplanned and often unwanted (WHO, 1993). In Malawi, legal abortion is not available on demand. Contraception is used by an estimated 1% (rural) to 7% (urban) of women (MALAWI, 1994). Family planning methods are often reserved for older, married women and most sexual relations in adolescents continue to take place without the use of contraceptives or protection against STDs (JUSTENSEN *et al.*, 1992; LEMA & HASSAN, 1994). The degree to which teenagers are prevented from using contraceptives by socio-economic barriers rather than unavailability needs to be assessed.

Induced abortions are invariably under-reported (ROGO, 1993). The 25 cases of induced abortion in this study were an under-estimate and most, if not all, cases of septic abortion must be assumed to be the consequence of unsafe, illegally induced abortions (AGGRAWAL & MATI, 1982). In Africa, unsafe abortions are estimated to account for 13% of maternal mortality (WHO, 1993) and in many cases will account for the relatively high maternal mortality figures reported in the younger age groups (HARRISON, 1989).

The high incidence of PID and STDs among young girls has been reported by others. Amongst 181 teenagers seen at both antenatal and gynaecology outpatients

clinics in Ethiopia, 92% were seropositive for one or more STDs and clinical evidence of PID was found in 43% (DUNCAN *et al.*, 1994). Among 410 unmarried teenage girls in Nigeria, 42% reported having experienced either an abortion or an STD (BRABIN *et al.*, 1995). In many cases the results was irreversible damage to the reproductive tract.

These data reflect in-patient admissions and late presentation—many more cases presumably within the community, unrecognized and unreported. However, the analysis does illustrate the situation in most hospitals in developing countries with regard to both the case load and the types of problems encountered. There is a lot that can and needs to be done to promote reproductive health in adolescents.

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Announcement

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