

Hysterectomy in Adolescents, in Port Harcourt, Nigeria.

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ABSTRACT

Background

Hysterectomy in adolescents is a very difficult decision to take as the consequence is always a loss of future reproductive potential. However, it may be necessary sometimes as a salvage measure.

Methods

A retrospective descriptive analysis of 28 cases of adolescent hysterectomies managed at the University of Port-Harcourt (UPTH) over a 17-year period was carried out. Variables analysed included socio-demographic factors, indications for and type of hysterectomy performed, decision level, duration of surgery and complications encountered.

Results

Majority (78%) of the hysterectomies were in adolescents aged 16 years and above. Sixty percent of them had a secondary education, 78% were unmarried and nine had a previous successful pregnancy. About half the cases resided in rural areas, while half resided in urban settlements. Seventy-one percent of the hysterectomies were abortion-related. Decisions for the hysterectomies were taken mainly by consultants and occasionally, in dire emergencies, by senior residents to prevent death from bleeding. Mortality was 21%.

Conclusion

The results suggest the need for a greater emphasis on sexuality education and expansion of sexual and reproductive health services to adolescents especially those who are sexually active. Life planning and livelihood skills training are needed to enable young people acquire value-based skills, which are essential for making safe and informed choices. With such high level of mortality from septic abortion even with intervention, the need for Youth Friendly Centres/services cannot be over emphasized.

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INTRODUCTION

Since its initial description in the 3rd century AD, hysterectomy has been a rare procedure in adolescents.¹ Indeed it was only after the era of Wilhelm Alexander Freund (1873) that it was realised that adolescent hysterectomy could be carried out as a life saving procedure².

Adolescents, broadly defined as persons between 10-19 years of age, are a vital population segment, making up one fifth of the world's population³. In Nigeria, over half of the estimated population of 140 million are younger than 17.5 years⁴. It has been documented that about 60% of adolescents in Nigeria are sexually active before their 17th birthday whilst 33% of Nigerian girls would have started childbearing before the age of 18 years⁵. Thus the chances of unintended pregnancies, induced abortions and births among adolescents would be expectedly high^{3,5}.

Attempts at termination of pregnancy are embarked upon by women of all ages and parities once a pregnancy is unwanted. However, since abortion is against the law in Nigeria, the adolescent especially if unmarried, is more likely to indulge in unsafe abortion with grave consequences. Unsafe abortions are responsible for 10-50% of the maternal death rate of 1500/100,000 in Nigeria. Low contraceptive prevalence and poverty further compound the problem⁵. In our centre, 15 to 20% of gynaecological admissions are abortion-related. Barbin et al in 1995⁶ in a community based study in the Niger delta region, showed that among sexually active adolescent girls, at least 24.1% of pregnancies ended in unsafe abortion. In a review of paediatric and adolescent gynaecological problems seen in UPTH, abortions constituted 47.7% of cases and 76.7% of them were septic.⁷

A variety of life threatening complications do occur following unsafe abortion especially in unskilled hands. If health care services are immediately available, the woman may escape grave morbidity. More commonly, however, there are long term sequelae which include chronic pelvic infection or pain and compromised reproductive function. Morbidity and mortality in these cases are related to unanticipated haemorrhage, sepsis, trauma to genital tract, instrumental injury to bowel and sometimes toxic reaction. Under such conditions, conservative management usually in the form of antibiotics, fluid/blood replacement, oxytocics, laparotomy and drainage may not suffice and may therefore be complimented by the more radical removal of the uterus, which may have been badly traumatized and necrotic, resultantly becoming a source of haemorrhage and infection.

Although hysterectomy is a common procedure which is well accepted in women the United Kingdom and America, consent for hysterectomy does not come easily in Nigerian patients, as loss of the uterus comes with reduced psychological self worth as a woman as it is an end to the natural reproductive career of a female.

It is against this background that we aimed to retrospectively evaluate the trends and factors that necessitated hysterectomy surgeries among adolescents in a Nigerian tertiary hospital, and possibly offer suggestions on ways of avoiding it.

SUBJECTS, MATERIALS AND METHODS

All cases of hysterectomies in persons aged 10 to 19 years documented in the medical records department of the University of Port Harcourt teaching Hospital (UPTH), between January 1984 and December 2000 were reviewed. Their case notes, ward and theatre records were sought and analysed with regard to socio-demographic characteristics such as age, parity distribution, educational and marital status, place of domicile, indication and type of hysterectomy, duration of surgery and complications encountered post operatively. Pyrexia was defined as fever of 38°C or greater on two consecutive occasions and wound infection as local erythema or suppuration. The records were analysed using simple frequency tables and means.

RESULTS

Out of the 30-hysterectomised adolescents during the period of study, 28 (93.3%) cases had complete records and thus were analysed. Subjects were aged between 14 to 19 years with the modal age at 17years (28.4%) (Table 1 and Fig 1). Eighteen (64%) were in the late adolescence phase. Tables 1, shows the other demographic information of the

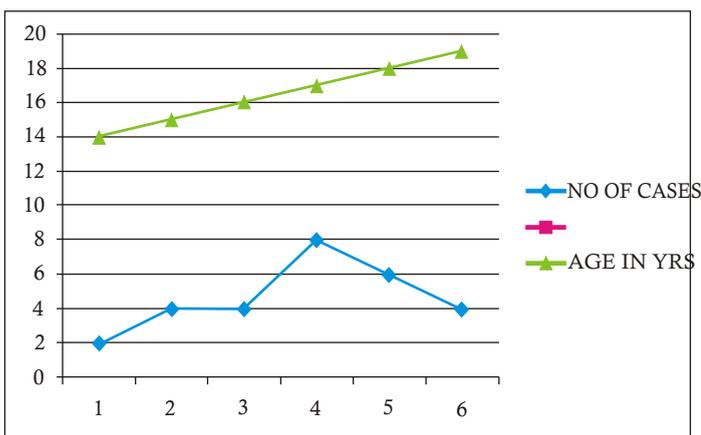


FIG 1. AGE DISTRIBUTION OF CASES OF HYSTERECTOMIES

adolescents.

Parity distribution: showed that 18 (64.3%) of them were nulliparous at presentation. About one-third of adolescents had at least one previous successful pregnancy at presentation.

Educational status: Evaluation showed that ninety-five percent had at least primary education.

Marital Status: Twenty-two patients (78.6%) were single and 21.4% were already married.

Place of Residence: Thirteen patients (49.4%) were resident in heavily populated urban areas, characterized by substandard housing and squalor (Slums) like Diobu and Bundu water front areas, while 12 (42.9%) were residents in the rural areas (Table 1).

Indications for hysterectomy: The indications for the

hysterectomies are as shown in Table 1 and Figure 2. Hysterectomy was carried out for purely obstetric indication in 6 adolescents (21.4%) whilst the majority 22(78.7%) were for gynaecological indications (Figure 2). The obstetric indications included ruptured uterus (5) and a case of protracted primary post partum haemorrhage. Gynaecological indications were induced abortion in 20(71.74%) patients and sarcoma botryoides in 2 patients (Fig 2). Conservative treatments received by these adolescents prior to hysterectomy included antibiotics, oxytocics, abdominal massage and vaginal tamponade. In 6 of the 20 induced abortion cases, prior laparotomy and drainage of intra peritoneal pus was carried out.

Cadre of surgeon

Table 1. Distribution of demographic and other variables

Parameters	Frequency distribution of variables	N (%)	Range	Mode/Mean (SD)
Age			14 - 19	17
Parity	Nulliparous Para ¹⁺⁰ Para ²⁺⁰	18 (64.3%) 8 (23.6%) 2 (7.1%)		
Marital status	Married Single	6(21.4%) 22 (78.6%)		
Education status	None Primary Secondary	1(3.6%) 10(35.7%) 17 (60.7%)		
Place of Residence	Rural area Urban area/slum Others	12(42.9%) 13(49.4%) 3(10.7%)		
Indication for Hysterectomy	Gynaecological Obstetrics	22(79.0%) 6 (21.0%)	0 15	0.41 (2.4)

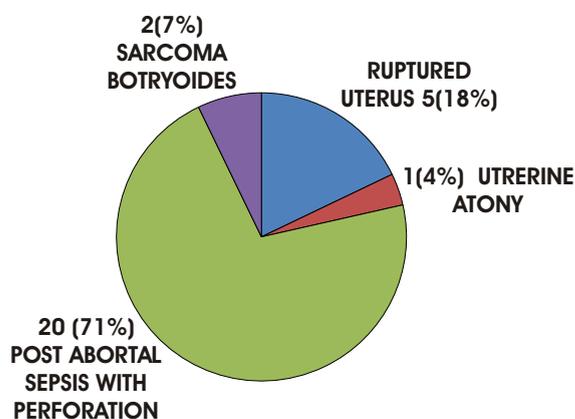


Figure 2. Indications for hysterectomy

Consultants took the decision in 14 (50%) of the cases and effected same in 6 cases (21.4%) Senior Specialist Residents took decision in 50% of cases and effected same in 22 cases (78.66%). Duration of surgery ranged from 105 minutes to 210 minutes (average of 150 minutes).

Scope of Hysterectomy

Elective (vaginal) hysterectomy was carried out in 2 cases, while majority had emergency abdominal hysterectomy with conservation of the ovaries (26). Sub total hysterectomy was carried out in 4 of the 28 cases. The others (85.6%) had total hysterectomy.

Figure 3 below shows the spectrum of complications

encountered in patients.

There were 6 mortalities (21.4%), 4 of which occurred among 6 adolescents who had previously undergone conservative laparotomy and drainage of intra abdominal pus, without improvement necessitating hysterectomy at a repeat laparotomy. The other 2 deaths were from the 2 cases of sarcoma Botyroides.

All the patients had pyrexia, wound infection and anaemia. Wound dehiscence was observed in 14cases (50%), burst abdomen occurred in 10 cases and Bowel/Bladder injuries in 4 cases. Pelvic abscess was documented in 2 cases and there was 1 case each of intestinal obstruction and pelvic haematoma. The minimum duration of stay in hospital was 22 days (5cases) and maximum spent 28 days (15cases).

DISCUSSION

environment with parents control for higher education or a job/livelihood search without restriction in movement. The latter reason could also explain the striking absence of hysterectomies in early adolescence (10-13yrs) since most adolescents in this age group are still under closer supervision of their parents than the others.

The finding that about one third of the adolescents had had at least one previous successful pregnancy corroborates the observation that 33% of Nigerian girls have started child bearing before the age 18 years^{5,9}.

The level of education shows that about 60% of them had at least secondary education and 97% at least primary education. The trend here may suggest an obvious vacuum^{3,9}, in our educational system characterized by a lack of

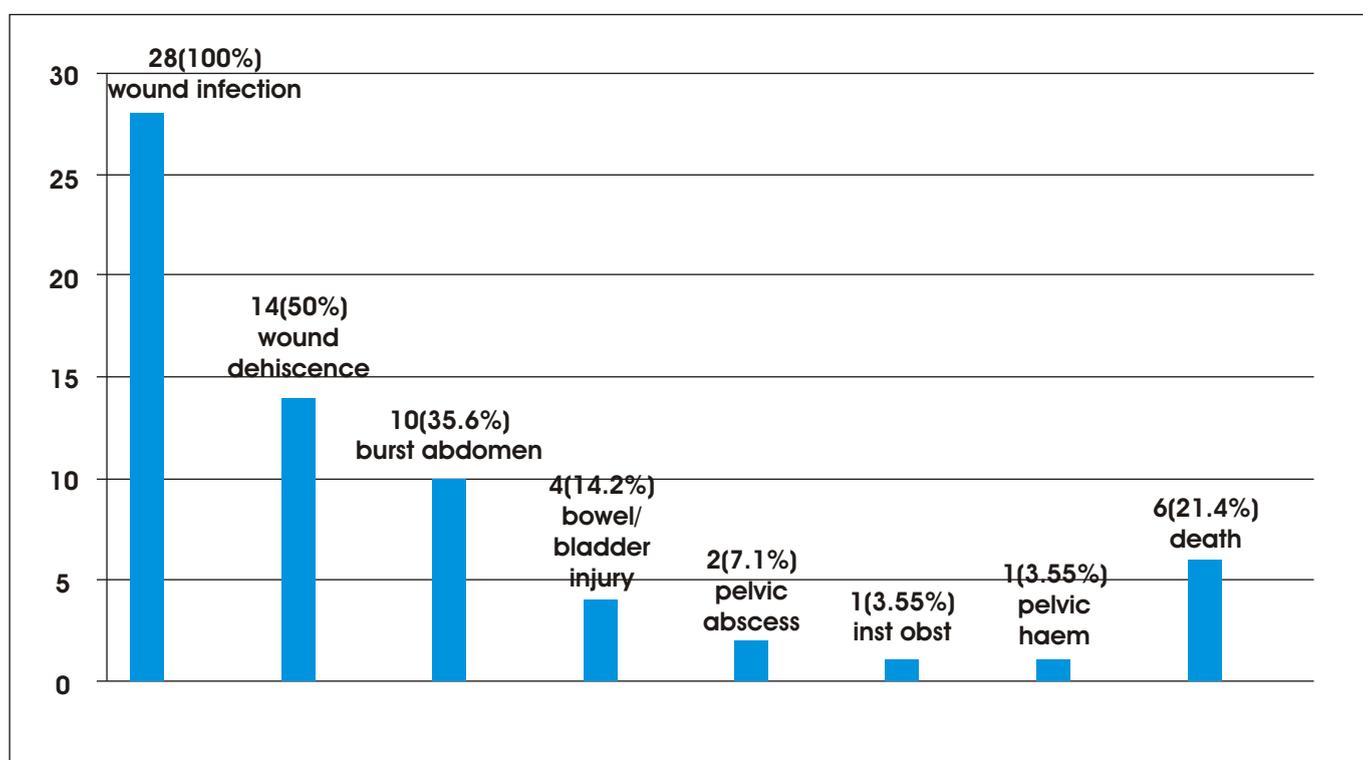


Figure 3. Spectrum of complications

Majority of the adolescents that had a hysterectomy during the study period were aged 16 to 19 years. The modal age was 17years. There was a gradual rise from age 14 to16years and then an exponential increase between 16 and 17years which was followed by a gradual decline in the hysterectomy rates after age 17. Although the reason for the decline after the age of 17 is not quite certain, the postulations are that maybe many of them had learnt from their previous mistakes or that contraceptive uptake had improved or that some of them may have started more stable relationships that would have preserved some pregnancies that hitherto would have been terminated. The critical age of 16 years is significant because it has been documented by some authors that it is at this age that most adolescents are sexual debutantes in Nigeria^{5,6}. It is also the period when most adolescents have left the home

comprehensive sexuality education, moral instruction and parent-child communication.

The observation that 12 adolescents were resident in rural areas as compared with 13 from the city slums suggests that the wave of sexual behaviour and sexuality problems do not have any predilection for either the rural or urban adolescents. Rather, what is apparent is that we seem to be losing the gains of rural conservative and moral life^{3,10}, a possible effect of globalization which is exposing our adolescents to sexual behaviours that contravene previously accepted cultural norms.

The fact that the indication for most of the hysterectomies was trauma to the uterus from unsafe abortion is a reflection of the high incidence of induced abortion in our environment

⁶⁻⁹. Lack of services tailored to the need of adolescents and low or irregular contraceptive practice ⁷⁻¹⁰ are also strong contributory factors.

Considering the future reproductive health implication and immediate threat to life, any decision to go ahead with such a procedure like hysterectomy in an adolescent will necessarily demand high level decision making, experience and expertise. This is reflected in the number of cases handled directly by the consultants and senior registrars in this series. In retrospect, such decisions seem to have been justified by the fact that of the 6 mortalities, 4 (66%) occurred among those in who hysterectomy was initially delayed and conservative laparotomy and drainage done, in contrast to no mortality in those cases where hysterectomy was done without delays.

The sad cases of these adolescents are instructive stories of the high price our society pays for the failure of its formal or informal institutions to adequately address the needs of adolescents, particularly those who are disadvantaged by poverty, educational failure, family instability and neglect. In an abortion restricted society like ours, there is the need to introduce timely comprehensive sexuality education, secondary surveillance and guidance, so that adolescents can be taught life planning and negotiation skills which are essential for making safe and informed choices ^{3,10-12}.

Training of doctors and individuals on the prevention and management of unsafe abortions remain indispensable tools in reducing abortion related hysterectomies in our environment. Indeed hysterectomy in an adolescent from unsafe abortion brings sexual and reproductive health at crossroads. It therefore calls for ethical rehabilitation, psychological and moral reorientation and economic empowerment of the at-risk as well as victims for a focused career even during their life after hysterectomy.

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