

Hysterectomy in Adolescents

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Abstract

Introduction: 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.

Subjects and Methods: We evaluated the trends and factors that necessitated hysterectomy among adolescents seen at the University of Port Harcourt Teaching Hospital, Port-Harcourt (UPTH), Nigeria. This is a retrospective descriptive analysis of 28 cases of hysterectomies managed at the UPTH over a 17-year period. 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 one third had had a previous successful pregnancy. About half the cases resided in rural 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 invention, the need for Youth Friendly Centres/services cannot be over emphasized.

Key Words: Hysterectomy, Adolescents, Teenagers, Sexuality Education

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 procedure.²

Adolescents, broadly defined as persons between 10-19 years 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

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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 compounds 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 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 are complimented by the more radical removal of the uterus, which may have been badly traumatized, necrotic and is now a source of

haemorrhage and infection.

Although hysterectomy is a common procedure and well accepted in women in UK and America, consent for it does not come easily in Nigerian patients. Loss of the uterus comes with reduced psychological self worth as a woman because 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 the operation of hysterectomy 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 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

Of 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 17 years (28.4%) (see Fig 1). Eighteen (64%) were in the late adolescence phase.

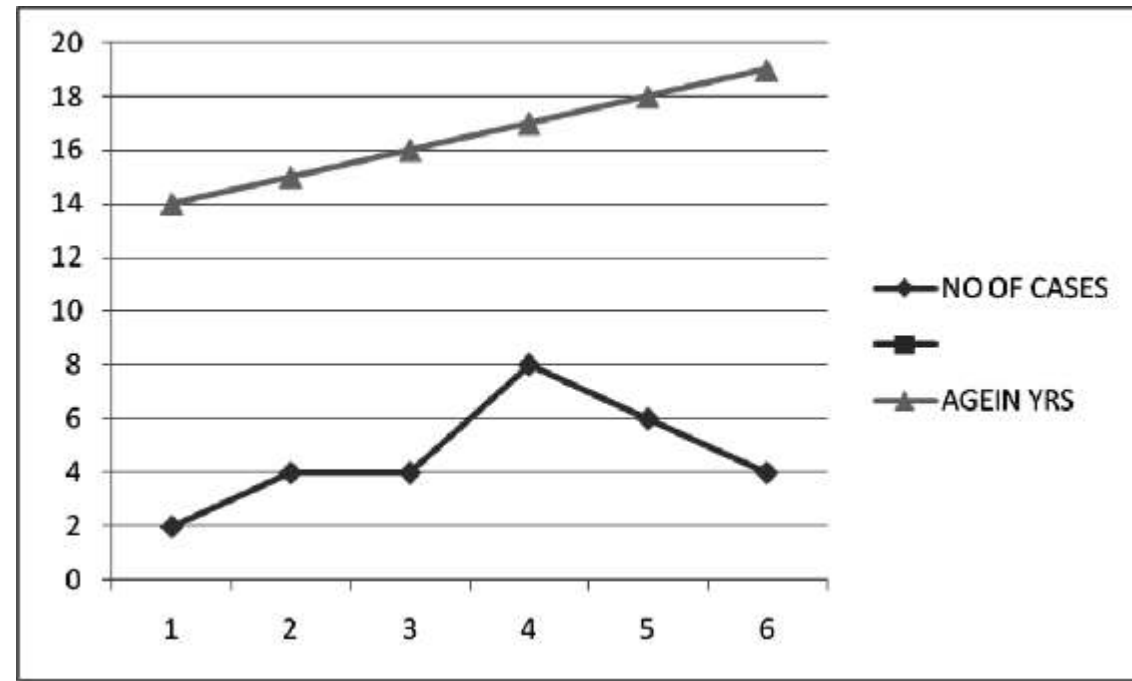


FIG 1 AGE DISTRIBUTION OF CASES OF HYSTERECTOMIES

Tables 1-3 show other demographic information of the adolescents. Parity distribution shows that 18 (64.3%) of them were nulliparous at presentation. About one-third of adolescents had at least one previous successful pregnancy at presentation. Ninety-five percent had at least primary education. Twenty-two patients (78.6%) were single and 21.4% were already married 13 patients (49.4%) were slums (Diobu, bundu water side) and 12 (42.9%) were residents in the rural areas.

Figures 2a and b show the indications for the hysterectomies. Hysterectomy was carried out for purely obstetric indication in 6

adolescents (21.4%) whilst the majority 22(78.7%) were for gynaecological indications (IIb). 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 (IIa). Conservative treatments received by these adolescents prior to hysterectomy included antibiotics, oxytocics, massages, vaginal tamponade. In 6 of the 20 induced abortion cases, prior laparotomy and drainage of intra peritoneal pus was carried out.

Table 1
Parity Distribution

Nulliparous	18	64.3
Para¹⁺⁰	8	23.6
Para²⁺⁰	2	7.1

Table 2
Educational Status

None	1	3.6
Primary	10	35.7
Secondary	17	60.7

Table 3
Marital Status

Married	6	21.4%
Single	22	78.6%

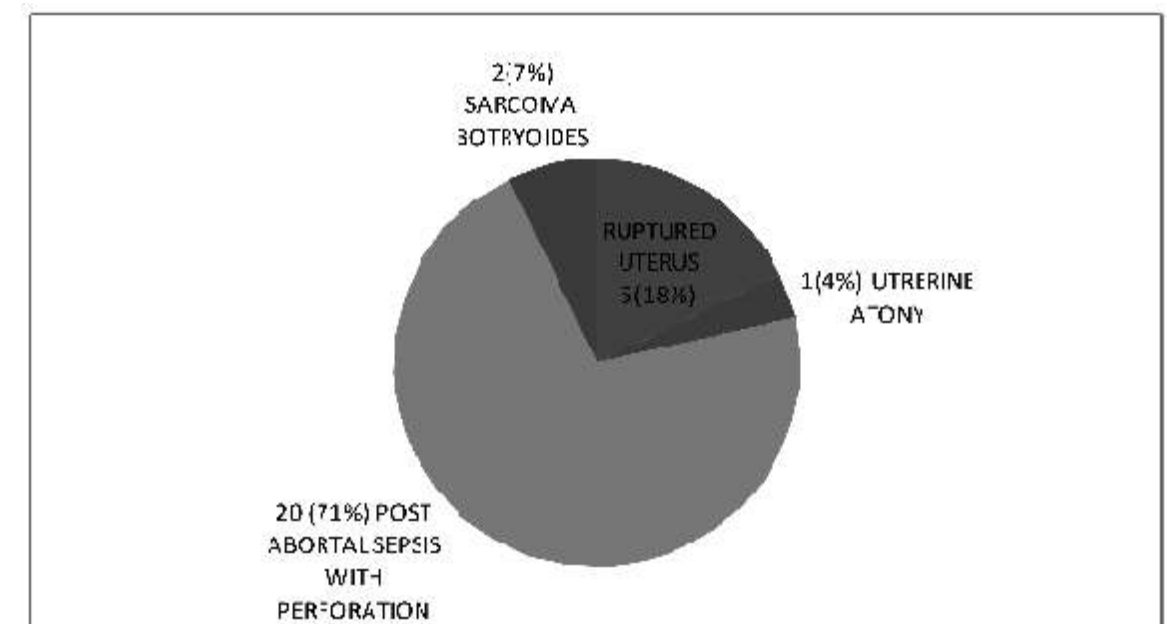


Figure 2a Indications for Hysterectomy

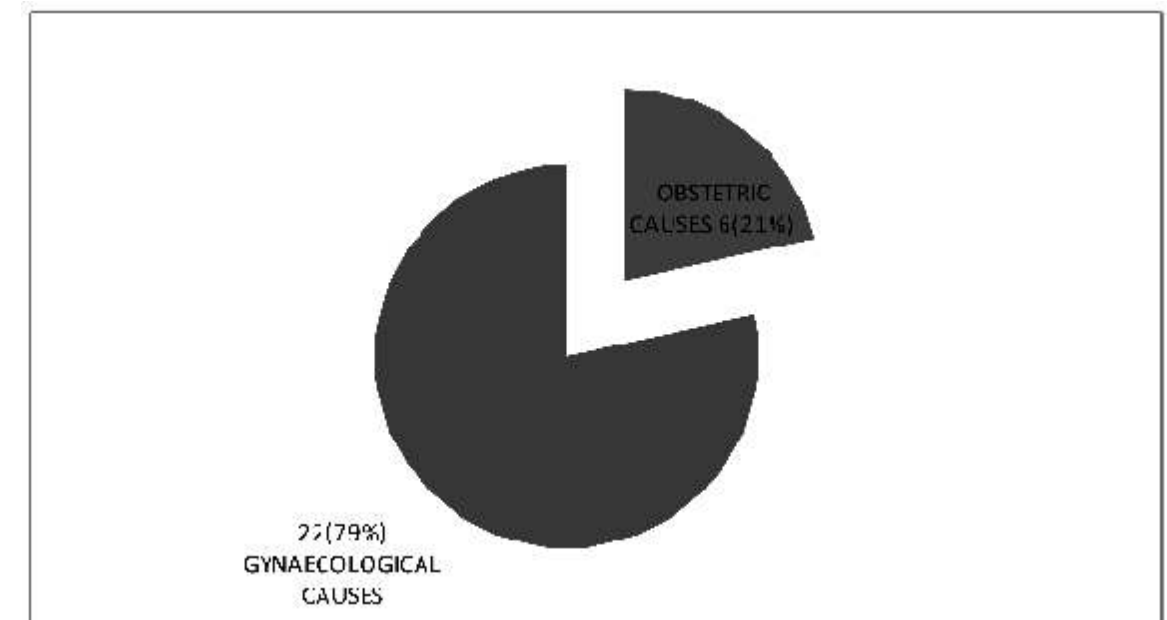


Figure 2b

Cadre of surgeon

Consultants took the decision in 14 (50%) of the cases and effected same in 6 cases (21.4%) Senior Specialist Residents took decision inn 50% of cases by 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 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

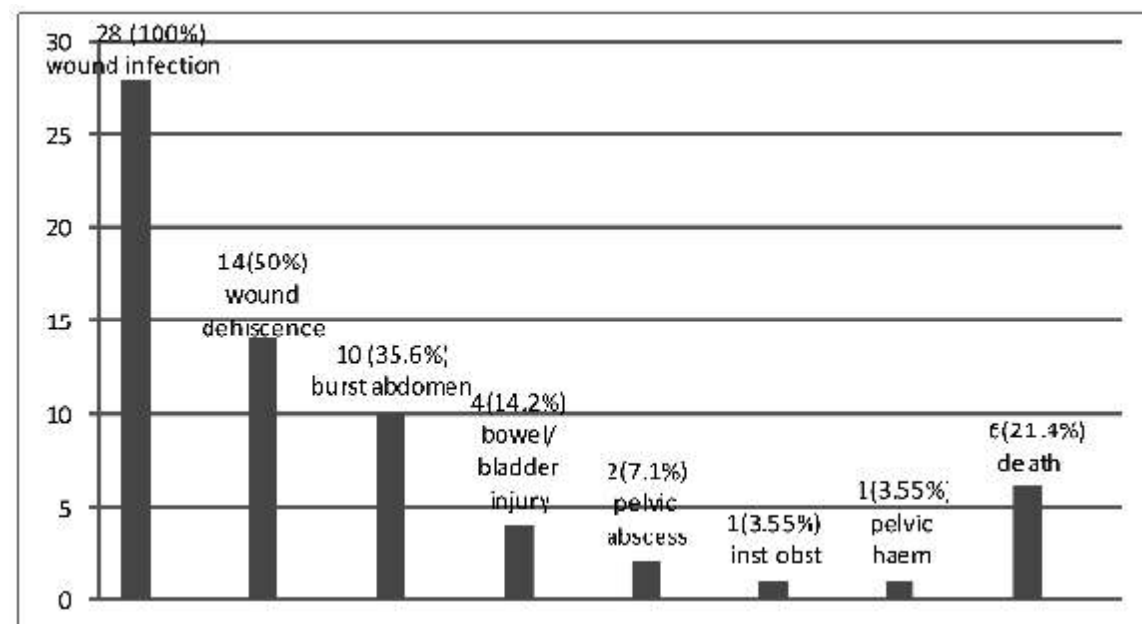


Figure 3: Complications in the Patients

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 14 cases (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

Majority of the adolescents that underwent

hysterectomy during the study period were aged 16 to 19 years. The modal age was 17years. There was a gradual rise from age 14 to 16years 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 absorbed 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 are sexual debutantes in Nigeria^{5,6}. It is also the period when most adolescents have left the environment of their parents for higher education or a job/livelihood search. The latter reason could also explain the striking absence of hysterectomies in early adolescence (10-13yrs) since most of these ones 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 with comprehensive sexuality education and moral instruction or with 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 most of the hysterectomies were indicated because of 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 practice⁷⁻¹⁰.

Hysterectomy in adolescents requires expert attention and skill. Considering the obstetrics potential of the young adolescent female, decision to go ahead with the procedure was seriously considered by senior members of the department as life saving measures. This is reflected in the number of cases handled directly by the consultants and senior registrars. 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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