Teenage Obstetrics Clinic – Two Years' Experience

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ABSTRACT

Introduction: In 2006, the Ministry of Health (MOH) reported approximately 1,500 teenage pregnancies a year, accompanied by 1,363 teenage abortions. This alarming trend led to the initiation of the Clinic for the Adolescent Pregnant (CARE) in KK Women's and Children's Hospital (KKH), Singapore in January 2008 to provide support and educate teenagers on the risk of sexually transmitted diseases (STD) and postnatal contraception.

Methods: A retrospective audit of the Teenage Obstetrics Clinics from January 2008 till December 2009 was performed. The audit aimed to provide an overview of the outcome of pregnancies and the contraceptive choices of teenage obstetrics patients in KKH, targeted at the risk groups for timely medical and social intervention. The main inclusion criteria were those single, pregnant below the age of 21 years and keeping pregnancy. All patients who visited the clinic were required to fill the antenatal and postnatal proforma. A total of 228 patients fulfilled the study criteria.

Results: The age group of the teenage pregnant patients ranged from 13-20 years with 39.5% having PSLE as their highest education. Most of the patients from CARE dropped out of school early with only 21.6% employed. A total of 20.1% reported previous contraceptive use, of which 97.2% used condoms and 2.8% used intrauterine contraceptive device. Condoms, oral contraceptive pills and Implanon were the popular postnatal contraceptive choices.

Conclusion: The results of this retrospective audit provide a general overview of the decisions of pregnant teenagers in KKH. The dedicated clinic hopes to continue educating teenagers in hope of improving their understanding on safe sex and contraception.

Keywords: Teenage pregnancy, sexually transmitted diseases, contraception, social intervention

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1

INTRODUCTION

Worldwide, approximately 10% of all births occur to teenage mothers (1). Teenage pregnancies have always been a mix between an obstetrical and a social problem. Teenage mothers are often disadvantaged financially, educationally and cognitively in both short and long term. Official government statistics in Singapore show an almost 300% increase over 283 cases reported in 2002 (2). However, the Department of STI Control Clinic (DSC Clinic) stated that the number of teenage pregnant patients has doubled from 283 in 2002 to 565 between January to November 2005. In 2006, MOH had quoted about 1,500 teenage pregnancies a year. This was accompanied by 1,363 teenage abortions. This is indeed an alarming trend. However, with the improvement of Ministry Of Education's (MOE) policy in advocating sexual education to schools, the teenage pregnancy rate was 2,196 in 2007 and declined by about 4% and 11% in 2008 and 2009 respectively (3).

Many, if not all such pregnancies are unplanned. The teenagers are certainly oblivious to the increased risks of their pregnancy and the challenges that are before them as they embark into the path of motherhood. Many of them also face the substantial stigma from both family and community during this critical period, where adequate care and support are crucial for the health and well-being of both mother and child.

The rise in teenage pregnancy statistics in Singapore saw the inauguration of CARE in KKH in January 2008. Since then, the clinic has successfully seen the delivery of more than 400 patients. The aim of this clinic was to provide support from a dedicated team antenatally, educate the teenagers regarding the risk of STD and also postnatal contraception. With this in mind, we hope to prevent a second pregnancy which will definitely increase the tendency of the teenager to return to school and gain employment.

This audit aims to paint an overview of the outcome of pregnancies and the contraceptive choices of our teenage obstetrics patients in KKH. This is targeted at the risk groups for timely medical and social intervention. The objective is to identify at-risk teenagers, their partners and their unique social circumstances to provide tailored, customized care to ensure the successful delivery of their babies through education, prevent further unplanned pregnancy and reduce the incidence of STDs.

METHODS

A retrospective audit of the Teenage Obstetrics Clinics from January 2008 till December 2009 was performed. The main criteria for inclusion were those pregnant below the age of 21 years, single and keeping pregnancy. Antenatal and postnatal proforma were updated and tabulated into EXCEL. Data were analysed. A total of 251 patients who visited the clinic during this period had information filled in two separate proformae. The antenatal proformae documented mostly demographic information and the postnatal proforma documented information pertaining to the delivery. Three patients were married and 3 were above 21 on their first visit. A total of 17 patients did not deliver in KKH. These patients are excluded from this audit.

RESULTS

With medical advice from a dedicated team of medical and nursing staff at the initial stage of the pregnancy, most patients were followed up by the same team throughout most of their pregnancies. A total of 228 patients fulfilled the study criteria. All pregnant single teenagers less than 21 years of age were included. They were referred from mainly other antenatal clinics, paediatric clinics and also polyclinics.

The age group of the teenage pregnant patients ranged from 13 years of age to 20 years of age as seen in Figure 1. The highest education level of the pregnant girls is illustrated in Figure 2. Most of the teenagers had PSLE as their highest education level. There were 45 patients who did not reveal their highest education level.

Amongst them:

- 95% were unplanned pregnancies
- 74.6% had partners who were involved in the pregnancy. The youngest of their partner was 15 years of age as shown in Figure 3
- 60.7% of the patients and their partners have plans for marriage
- 20.1% reported prior contraceptive use, of which 97.2% used condoms and 2.8% used intrauterine contraceptive device
- 91.0% had more than 1 sexual partner
- 35.0% of patients ever smoked, 12.7% ever drunk alcohol and 2.2% ever consumed drugs
- 90.3% subsequently had normal vaginal delivery,
 7.9% had lower segment caesarean section and 1.8% had assisted delivery

For most attendees in CARE during these two years, majority had contraceptive advice during their pregnancy by a dedicated nurse. The popular postnatal contraceptive choices were condoms, or al contraceptive pills and Implanon.

DISCUSSION

Majority of the patients from CARE dropped out of school early but only 21.6% of them were gainfully employed. However, the statistics of dropouts as per MOE for teenage pregnant students saw an overall drop from 3% in 2005 to 1.5% in 2009 ⁽³⁾. This is most likely due to the school counselors working hand in hand with the parents and community partners to support pregnant students. We see this as an encouraging move as the school counselors would follow-up with these cases and encourage the students to return to school postnatally.

With this in consideration, CARE has made it a policy that all teenage pregnant patients be referred to the medical social workers. The aim of this move is to ensure that the pregnant teenagers, their partners and also parents get support to prepare them for labour and also life with the incoming baby. The social workers in KKH would also follow the teenagers up till discharge. For complicated cases, these teenagers and family would have access to the social workers for advice and support after discharge.

From CARE, majority of the teenagers' partners (33.8%) were serving National Service at the time of their pregnancy. This would suggest that income for the 'new family' may not be sufficient. Hence, it would be essential to involve the respective parents and other family members for financial support. We also found a strong age discrepancy in the relationships that resulted in teenage pregnancy. Only about 28% of all partners who gave their ages during the study are within the age group of 15-19 years as illustrated in Figure 3. Majority of the patients involved family members, especially their mothers in care plans for the baby.

We identified mistakes from unplanned pregnancies. However, future consequences of adolescent childbearing are most likely attributable to social and environmental factors rather than solely on maternal age ⁽⁴⁾. Therefore, attending a dedicated antenatal clinic with dedicated staff, allows the teenage adolescents to have a familiar environment and hence, be more proactive and positive regarding management of their labour and pregnancy.

CARE has a dedicated nurse to counsel the pregnant teenagers regarding contraception. It is being done throughout the antenatal and also postnatal visits. The aim is to educate the teenagers on the various types of contraception. We hope that the teenagers become more educated regarding sex and STDs. This information must be long-lasting or uneducated teenagers will grow into uneducated adults (5). Sex education in Europe is based on the World Health Organization's definition of sexuality as a lifelong process, inclusive of knowledge regarding contraception. With this, we aim to work on gradually developing CARE to form as a platform to impart education regarding sex and STD over their antenatal period and gradually postnatal period too.

Contraceptive advice in the two years in CARE was found only to be moderately effective. As of May 2011, 25 patients (11%) had subsequent termination of pregnancy and 20 (8.8%) subsequently delivered again. By being able to prevent another unplanned pregnancy, we believe that it gives the mother an opportunity to return to school and also to gain employment. Once there is more than one unplanned kid in a family, the financial constraints to the family certainly increases. We believe that effective contraception use among first-time adolescent mothers can reduce the risk of a rapid repeat pregnancy.

CONCLUSION

The obstetrical and gynaecological risks that teenage pregnancy entails have been well documented. This review further confirmed that teenage pregnancy is a growing public health issue which may represent social problems. In light of this, this review reflects the urgent need for effective programmes to target vulnerable populations, especially the teenage obstetrics group.

This two year experience shows a general overview of the decisions of our pregnant teenagers in KKH. The dedicated clinic hopes to continue to educate these teenagers in improving their knowledge regarding safe sex and contraception. This helps in future planning of child bearing, giving young couples an option to manage their social circumstances. More awareness among primary care providers should also be raised on the availability of this service for pregnant teenagers.

Figure 1. Age distribution of patients (n = 228)

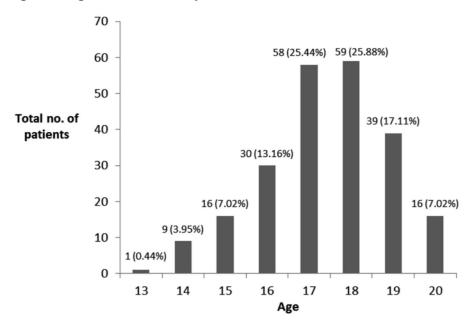
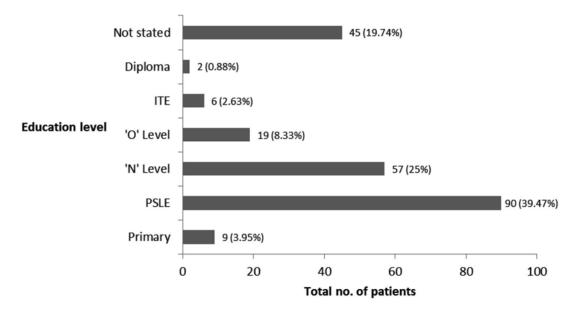


Figure 2. Highest education level of patients (n = 228)



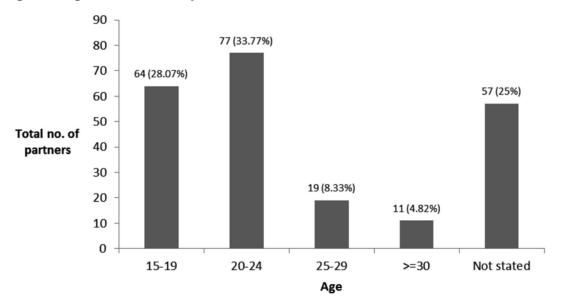


Figure 3. Age distribution of partners (n = 228)

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