Original Article

Teenage pregnancy in Malta

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Abstract

Introduction: Underage pregnancy may blight a young woman's life. Teenage pregnancy rates vary widely across the world and have poorer pregnancy outcomes than non-teen pregnancies. Local Personal, Social and Career Development Education (PSCD) teaching is stipulated per curricula. This study was carried out by the Divisions of Education and Health in order to ascertain whether there are any differences in teenage pregnancy rates between State and non-State schools.

Methods: Ethical approval and data protection approval was obtained. The Health Division, identified pregnancies with mothers with age ≤18 years, for 2011-2015. Secondary schoosl attended were identified and an anonymised dataset was then passed on to the principal investigator for analysis.

Results: Teenage deliveries were significantly less in Non-State when compared to State schools, for each year studied, as well as for the aggregate of the total (p<0.0001). There was also a declining trend for teenage pregnancies in Non-State schools only (p=0.02).

Discussion: Abstinence-only sex education is a form of sex education that teaches abstinence from sex only. "Abstinence-plus" programs encourage sexual abstinence as the most effective means of HIV prevention and unwanted pregnancy avoidance, but also advocate condom use and partner reduction. It is suggested that the PSCD teaching methods in the different schools are compared as well as other factors that may further reduce teenage pregnancy.

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Introduction

Underage pregnancy may blight a young woman's life. Teenage pregnancy rates vary widely across the world and are known to be associated with poor antenatal attendance, smoking and a higher risk of spontaneous termination of pregnancy. They also have higher rates of perinatal mortality and morbidity due to higher rates of prematurity.[1-2] Local Personal, Social and Career Development Education (PSCD) teaching is stipulated per curricula albeit with possible variation due to different teaching methods.[3-5]

This study was carried out by the Divisions of Education and Health in order to ascertain whether there are any differences in teenage pregnancy rates between State and non-State schools. Any differences should be investigated and efforts would be focused on reducing such pregnancies to the lowest possible levels.

Methods

Ethical approval and data protection approval was sought from both Education and Health Divisions. The Health Division, via National Obstetric Information System (NOIS) at the Department of Health Information identified pregnancies with mothers with age ≤18 years, for the period 2011-2015. The Health Division, identified pregnancies with mothers with age ≤18 years, for 2011-2015. Secondary schools attended were identified as State/Non-State and an anonymised dataset was then passed on to the principal investigator for analysis.

Results

Deliveries for State and Non-State schools, as well as denominator data, calculated percentages and statistical testing are shown in table 1. Teenage deliveries were significantly less in Non-State when compared to State schools, for each year studied, as well as for the aggregate of the total.

There was also a declining trend for teenage pregnancies in Non-State schools only (chi for linear trend=5.8, p=0.02).

Table 1: *Deliveries for State and Non-State schools, annual denominator data, calculated percentages and statistical testing*

		2011	2012	2013	2014	2015	Totals
Teenage	**State**	67	47	42	33	47	236
Pregnancies	**Non-State**	13	7	8	8	2	38
Totals	**State**	7161	6885	6475	6122	5808	32451
	Non-State	4548	4582	4591	4488	4605	22814
Percentages	**State**	0.9	0.7	0.6	0.5	0.8	0.7
	Non-State	0.3	0.2	0.2	0.2	0.04	0.2
Statistical	**Chi**	17.3	16.5	13.4	8.8	32.2	85.4
Testing	**p**	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

Discussion

Teenage pregnancies are associated with poorer outcomes than non-teenage groups. These include increased risks for premature delivery, low birth weight and neonatal mortality.[2] Furthermore, infants born to mothers aged ≤17 have a higher risk for low Apgar scores at 5 minutes.[2] These findings are independent of important known confounders such as age-appropriate education level, adequate prenatal care, and smoking and alcohol usage.[1]

Several factors may lead to teenage pregnancy and these include socio-economic background and lack of education.[1-2] Clearly, the only available avenue to attempt to reduce these pregnancy rates is education.

Abstinence-only sex education is a form of sex education that teaches abstinence from sex, while simultaneously often excluding other types of sexual and reproductive health education, particularly those focusing on contraception and safe sex. Education programs which focus exclusively on abstinence have hardly been shown to delay sexual activity.[6]

On the other hand, "abstinence-plus" programs (as opposed to abstinence alone) encourage sexual abstinence as the most effective means of HIV prevention and unwanted pregnancy avoidance, but also advocate condom use and partner reduction.[7]

A Cochrane review has shown that abstinence-plus programs reduce short-term and long-term HIV risk behaviour among youths in high-income countries. The programs were not shown to cause harm. This has critical implications for abstinence-based HIV prevention policies since abstinence-plus programs are likelier superior in prevention of disease and unwanted pregnancies.[7]

Local education programs that offer support and help to minors, their partners and their parents, within the Directorate for Educational Services, are varied and include (Mr. Raymond Camilleri – personal communication):

1. A specific program for pregnant young woman, meeting three times a week.
2. A support group for mother and baby meeting once a week.
3. Program of support for parents of young mothers and fathers.
4. Prevention programs for parents of children in all Secondary schools: State, Church and Independent.
5. Prevention programs for Form 3 students about physical relationships and sexual experimentation.
6. Outreach programs targettomg specific groups of students.
7. Information Meetings by specialists in the medical, legal, educational and social fields.
8. Counselling services for pregnant minors along with their partners and parents.
9. Programs that network with other bodies and agencies.

It is suggested that the PSCD teaching methods in the different schools are analysed and that an even greater emphasis is placed on abstinence-plus programs. The programs already in place, as listed above, appear more than adequate but perhaps more could be done, of a specific analytical nature. It might be possible to identify potential causes/precipitants for local teenage pregnancy in Malta in an attempt to further decrease the teenage pregnancy rate in this country.

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