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Project to Reduce the Teenage Pregnancies Through Health Education at MOH Level

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Abstract

Background: Teenage pregnancy represents a persistent public health challenge with far-reaching consequences, particularly in regions like the Egodauyana MOH area within the Colombo RDHS. This highlights the urgent need for effective interventions to address this issue.

Objective: To evaluate the effectiveness of school sexual and reproductive health education (SSRHE) as a public health awareness tool at the MOH level in reducing teenage pregnancies.

Methods: This study involved the implementation of SSRHE programs in 12 high-risk schools. The target population consisted of students in grades 10 and above.

Results: Result in 2021, a total of 75 teenage mothers had registered; 34 individuals (45.3%) belonged to Group 1, comprising teenage mothers attending school and residing in the area, while the remaining 41 individuals (54.7%) were classified under Group 2, encompassing non-resident teenage mothers. The age distribution revealed that 44 teenage mothers were aged 18–19 years, 28 were in the 16–17 age group, and three were under 16 years. In 2022, registered teenage pregnancies decreased to 68. Within this cohort, 17 individuals (26.5%) were classified as belonging to Group 1, while 51 individuals (73.5%) were categorized under Group 2. The age distribution revealed that 48 teenage mothers were aged 18–19 years, 16 were in the 16–17 age range, and four were under 16 years old. There was a statistically significant reduction in teenage pregnancies within Group 1 when compared to 2021 ($p = 0.014$). Conversely, Group 2 experienced a substantial increase ($p = 0.0000$) in teenage pregnancies.

Conclusion: This study highlights the value of inclusive SSRHE programs in reducing teen pregnancies at the MOH level as a public health education tool.

Keywords: SSRHE (school Sexual and Reproductive Health education), Teenage Pregnancies, Trend Analysis, Socio-economic Factors, Egodauyana MOH

Introduction

Background

According to the WHO sexual health is "a state of physical, emotional, mental, and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction, or infirmity. The sexual rights of all people must be recognized, defended, and upheld if sexual health is to be gained and maintained [1-2]. Students who receive high-quality sexual reproductive health education (SRH) have the information and abilities to stay healthy, avoid sexually transmitted diseases (STDs), and become pregnant unintentionally. An SRH curriculum incorporates skills and content

that target important behavioural objectives and encourage healthy sexual development while also being medically accurate, developmentally appropriate, and culturally relevant [3].

Global burden

Inadequate sexual and reproductive health education is a global challenge. According to the WHO in low and middle-income countries, there were 21 million pregnancies in adolescents aged 15-19 years in 2019. 50% of them were unintended pregnancies. Adolescent mothers are in higher risk of maternal and puerperal complications such as eclampsia, puerperal endometritis sexually transmitted diseases and systemic infections compared to women in 20-24 years. Not only adolescent mothers but also their babies are at higher risks of adverse conditions such as low birth weight, preterm birth, sexual transmit diseases and severe neonatal conditions [1-4]. High rates of teenage conceptions and deliveries are the result of this conflicting message in USA [2]. Adolescents require information, including age-appropriate comprehensive sexual education and, chances to advance their life skills, equitable health services and safe and encouraging surrounding for their good health [2]. Moreover, the most frequent causes of teenage pregnancy were found to be unhealthy peer groups, gift-based enticement, and poverty [8].

Sri Lankan burden

Sri Lanka is one of the lower income countries in South Asian region. However, Sri Lanka has lower teenage pregnancy rate compared to other South Asian countries. According to the statistics of Family Health Bureau [5-7] published in 2022, teenage pregnancy rate was 3.9% for the year 2021 in Sri Lanka [6]. 16708 teenage pregnancies were reported in 2017, among women under the age of 19 years [5-6].. It has been shown that "social causes," as opposed to "individual factors," [1,4] have mostly led to adolescent pregnancies in the majority of South Asian countries [13]. Sexual and Reproductive Health has a very important role in good health in adolescence, youth and adult life period.

Associated factors

The study aligns with previous research highlighting the social factors contributing to teenage pregnancies, such as low education, poverty [1-8], subcultural influences, family, community pressures and limited social opportunities [4]. Young women with lesser levels of education, lack of reproductive and sexual education [5-6, 13] and less aware of the negative effects of early motherhood; and they play little to no part in decision-making, which essentially limits their capacity to delay childbearing to later ages [10-12]. Inadequate school infrastructure, and poor performance by students; can influence the teenage pregnancy [3-17].

General Objective

The study aimed to evaluate the effectiveness of school sexual and reproductive health education (SSRHE) in reducing teenage pregnancies in Egodauyana MOH, the area with the highest teenage pregnancy rate in Colombo RDHS in 2021, amidst the devastating COVID-19 pandemic.

Specific Objectives

1. To detect the effectiveness of school students aged 12–18 years on Sexual and Reproductive Health Education (SSRHE) conducted by health staff in

the selected school in the Egodauyana MOH area.

2. Build awareness among schoolchildren aged 12–18 to prevent teenage pregnancies in the Egodauyana MOH area.

Methodology

Study design: cross-sectional study

Study setting: To detect the self-perceived effectiveness of school students aged 12–18 years on sexual and reproductive health education conducted by health staff in the selected schools in the Egodauyana MOH area. Expert Panel and Curriculum Developed: Community doctors, academics, consultants, MOHs, AMOHs, and medical personnel made up the expert panel. All worked together to create the SSRHE curriculum for students in grades nine and up. All 12 schools in the Egodauyana MOH area, with a focus on high-risk schools, were selected. Implementation of the intervention was done by an expert panel of MOH and AMOH

Study period: 2022 January to 2022 December.

Study population: Students in grades 9 and above in schools in the Egodauyana MOH area

Inclusion criteria: students in grades 9 and above who participate in sexual and reproductive health education programs in the schools in the Egodauyana MOH area.

Exclusion criteria: students in primary schools and students who do not participate in sexual and reproductive health education.

Sampling Technique: All 12 secondary schools were selected in the MOH area.

Study Instruments: a data extraction form for trend analysis and an interviewer-administered questionnaire for associated factors.

Data Collection: Data collected by MOH/AMOH using an interviewer-administered questionnaire. Privacy and confidentiality are ensured.

Data Analysis: Performed using Statistical Package for Social Sciences (SPSS) version 23.0. Prevalence, trends, and socio-economic factors were analysed with the Chi-square test.

Results

Comparison of Teenage Pregnancies in 2021 and 2022:

In 2021, a total of 74 teenage mothers were registered in the Egodauyana MOH area. Among these, 34 individuals (45.3%) belonged to Group 1 (teenage mothers attending schools and residing in the area), while the remaining 41 individuals (54.7%) were classified under Group 2 (non-resident teenage mothers).

In 2022, the number of registered teenage pregnancies decreased to 68. Within this

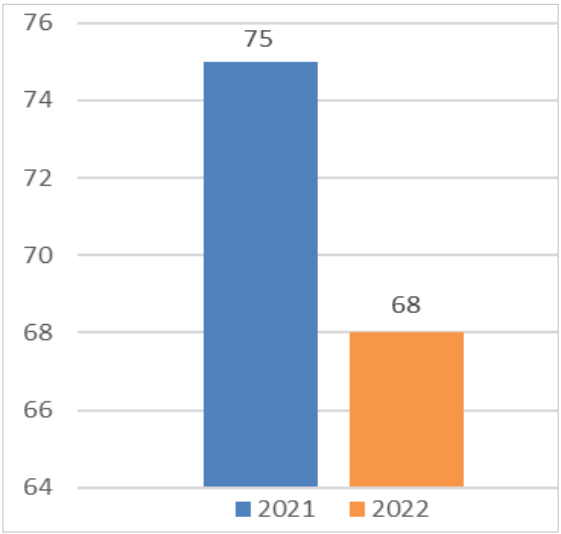

Figure 1: Comparison of Teenage Pregnancies in 2021 and 2022

cohort, 28 individuals (41.7%) were classified as belonging to Group 1, while 40 individuals (58.3%) were categorized under Group 2.

Age Distribution of Teenage Pregnancies in 2021 and 2022 - Group 1:

The age distribution of teenage mothers in Group 1 for 2021 revealed that 44 were aged 18-19 years, 28 were in the 16-17 age group, and three were under 16 years old.

In 2022, within Group 1, 48 teenage mothers were aged 18-19 years, 16 were in the 16-17 age group, and four were under 16 years old.

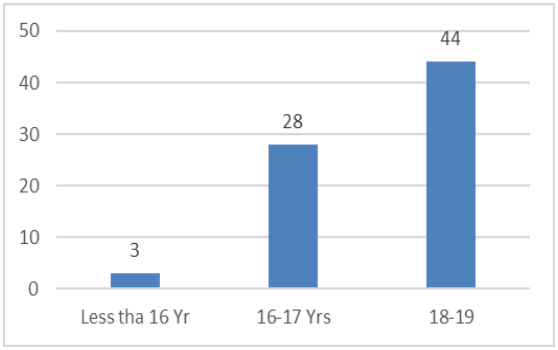

Figure 2: Age distribution of teenage pregnancy 2021

The results of the study indicate that in 2021, a total of 74 teenage mothers were registered within the area. The age distribution revealed that 44 teenage mothers were aged 18-19 years, 28 were in the 16-17 age group, and three were under 16 years old.

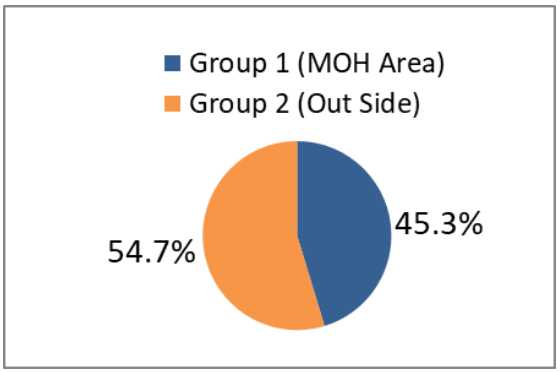

Figure 3: Group 1 and 2 percentage

Among these, 34 individuals (45.3%) belonged to Group 1, comprising teenage mothers attending schools and residing in the area, while the remaining 41 individuals (54.7%) were classified under Group 2, encompassing non-resident teenage mothers.

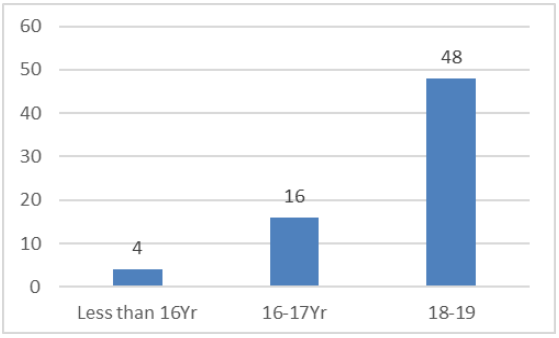

Figure 4: Age distribution of 2022

The age distribution revealed that 48 teenage mothers were aged 18-19 years, 16 were in the 16-17 age group, and 4 were under 16 years old.

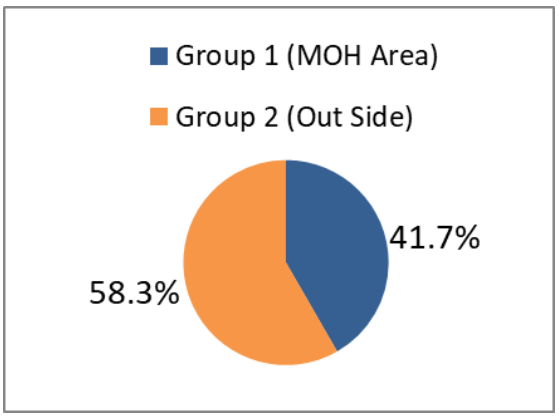

Figure 5: Percentage of teenage pregnancy in 2022

In 2022, the number of registered teenage pregnancies decreased to 68 in 2022. Within this cohort, 28 individuals (41.7%) were classified as belonging to Group 1, while 40 individuals (58.3%) were categorized under Group 2.

There was a statistically significant reduction in teenage pregnancies within Group 1 when compared to 2021 ($p = 0.014$). Conversely, Group 2 experienced a substantial increase ($p = 0.0000$) in teenage

pregnancies due to the temporary residence of pregnant mothers at Premaniwasaya, a famous orphanage for pregnant mothers.

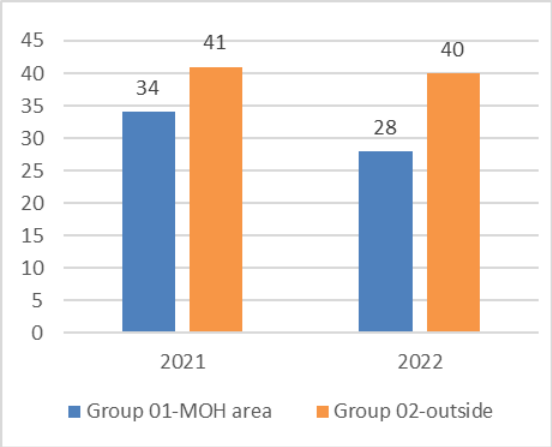

Figure 6: Group 1(Within MOH area) Group 2 (outside MOH area) comparison 2021 and 2022

Discussion

The findings indicate a statistically significant reduction in teenage pregnancies within Group 1 (teenage mothers attending school and residing in the area) from 2021 to 2022. This supports the notion that inclusive SSRHE programs implemented in high-risk schools can contribute to lowering teenage pregnancy rates among students. Possible reasons for this reduction include the targeted approach of the SSRHE programs, increased awareness, and a supportive environment within schools.

Conversely, Group 2, comprising non-resident teenage mothers, experienced a substantial increase in teenage pregnancies. This raises questions about whether eased restrictions in 2022 might have led to more non-resident teen mothers relocating to areas with better healthcare accessibility (premaniwasaya), contributing to the observed surge in pregnancies. It highlights the need for tailored interventions for non-resident teen mothers and underscores the complex factors influencing their reproductive health. External factors like the pandemic may have influenced the observed trends.

The study underscores the value of inclusive sex education programs in reducing teen pregnancies. While school-based initiatives proved effective, the discussion emphasizes the need for additional support, especially for non-resident teen mothers.

The discussion concludes by acknowledging the strengths and limitations of the SSRHE program. Continuous education is identified as a strength, emphasizing the need for sustained efforts. Challenges include non-participation, teacher disinterest, subcultural influences, and the pervasive impact of poverty.

Conclusion

A study highlights the value of inclusive sex education programs in reducing teen pregnancies in the MOH area. Further, adolescent pregnancies among schoolchildren also showed a decreasing trend, with 38 reported in 2021 and 25 in 2022. School-based initiatives prove effective, but additional support is necessary for non-resident teen mothers.

Recommendation

To address the identified limitations, the study suggests the importance of engaging all social groups, emphasizing the value of positive feedback from female students, and highlighting the crucial role of support from education directors and regional directors of health services. Additionally, the findings suggest a need for targeted interventions for non-resident teen mothers, possibly involving collaboration between MOH areas.

The need for a national policy for SSRE and prevention of teenage pregnancy through the Ministry of Health and Education is mandatory.

Ethical Clearance

It was obtained from the ethical review committee of Kothalawala Defence University, Rathmalana, Sri Lanka, and RDHS Colombo.

Administrative Clearance

It was taken from the Provincial Directorate of Health Service Western Province, the Regional Directorate of Health Service, Colombo, and the school authorities of the Egodauyana MOH area.

There is no conflict of interest.

Acknowledgement

A study highlights the value of inclusive sex education programs in reducing teen pregnancies. School-based initiatives prove effective, but additional support is necessary for non-resident teen mothers.

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