

Empowering the New Generation: Reproductive Health Awareness among Egyptian Schoolgirls: Review Article

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ABSTRACT

Background: Reproductive health awareness (RHA) among adolescent girls represents one of the most significant determinants of maternal and child health outcomes in developing countries. In Egypt, despite notable progress in education and healthcare coverage, awareness of reproductive health concepts remains limited among secondary school girls.

Objective: This review aimed and to explore the level of knowledge, prevailing attitudes, and the socio-cultural educational and institutional factors shaping reproductive health awareness among Egyptian schoolgirls. Also, to discuss barriers and promising interventions, highlighting the role of schools, parents, and national programs such as the UNFPA-supported Noura Model. **Methods:** We searched PubMed, Google Scholar, and Science Direct for Adolescent girls, Reproductive health, Egypt, Awareness, Education, Empowerment, Barriers and School health programs to synthesize evidence from national and international literature between 2015 and 2025. A narrative literature review was conducted using peer-reviewed studies, systematic reviews, and global surveillance reports published in recent years. The writers evaluated relevant literature references as well. Documents written in languages other than English have been ignored. Papers that were not regarded as significant scientific research included dissertations, oral presentations, conference abstracts, and unpublished manuscripts were excluded.

Conclusion: The findings revealed a persistent gap between knowledge and practice, driven by social taboos, misinformation, and a lack of structured education. The paper concluded recommending culturally sensitive, school-based reproductive health education integrated within Egypt's national curriculum to empower adolescent girls with accurate, comprehensive, and age-appropriate information.

Keywords: Adolescent girls, Reproductive health, Egypt, Awareness, Education, Empowerment, Barriers, School health programs.

1. INTRODUCTION

Adolescence is a period of intense physical, psychological, and social transformation. For girls, it represents a stage of reproductive maturity, during which knowledge, attitudes, and behaviors related to reproductive health begin to form ⁽¹⁾. The World Health Organization defines reproductive health as “a state of complete physical, mental and social well-being in all matters relating to the reproductive system” ⁽²⁾.

However, for many adolescent girls in developing countries — including Egypt — this definition remains aspirational rather than achieved. Limited access to accurate information, social taboos surrounding sexuality, and an absence of youth-friendly health services contribute to misinformation, early marriage, unsafe practices, and anxiety surrounding natural processes like menstruation ⁽³⁾.

Egypt, with more than 60% of its population under the age of 30, faces a major challenge in promoting reproductive health literacy ⁽⁴⁾. Studies show that although girls receive some information in biology classes, it is often fragmented, overly biological, and disconnected from real-life application ⁽⁵⁾. Moreover, many teachers and parents avoid open discussion due to cultural and religious sensitivities ⁽⁶⁾.

This review, therefore, aimed to analyze and synthesize existing literature on reproductive health awareness among Egyptian schoolgirls, to identify barriers, highlight existing interventions and to propose strategies to strengthen empowerment through education.

2. CONCEPTUAL FRAMEWORK

To structure this review:

Awareness: Knowledge of anatomy, puberty, menstruation, sexually transmitted infections (STIs), contraception, etc.

Attitudes: Beliefs, norms, stigmas, and perceptions regarding reproductive health topics.

Barriers: Social, cultural, institutional, policy-related, educational, familial, etc.

Interventions/Programs: School curricula, health services, non-governmental organizations (NGOs), youth-friendly clinics, public campaigns.

3. REPRODUCTIVE HEALTH AWARENESS AMONG EGYPTIAN SCHOOLGIRLS

3.1 Level of Knowledge

Recent research demonstrates that reproductive health knowledge among schoolgirls in Egypt remains limited and inconsistent Key findings:

A 2019 cross-sectional study in rural Gharbia (North Egypt) found that 72% of girls had inadequate reproductive health knowledge. While, most could identify puberty and menstruation as natural events, few understood ovulation, contraception, or sexually transmitted diseases ⁽⁷⁾. A study of rural schoolgirls found more than two-thirds had low reproductive health knowledge. The mean score was 12.5 out of 28, with better knowledge associated with older age and higher parental education ⁽⁸⁾.

Another large survey focused on menstrual patterns showed that while almost all participants experienced disorders like dysmenorrhea, most lacked basic information and only ~8.9% sought medical advice ⁽⁹⁾.

In academic settings, educated young women still reported gaps in awareness and understanding of available reproductive health services ⁽¹⁰⁾.

These findings indicate that although some awareness exists, many Egyptian schoolgirls have limited, inaccurate or fragmented knowledge, especially when it comes to STIs, contraception, and the full scope of reproductive health beyond menstruation.

4. FACTORS INFLUENCING AWARENESS AND ATTITUDES

4.1 Sociodemographic factors

Age, socioeconomic status, and parental education all correlate with reproductive health awareness. Girls from educated families or urban settings exhibit higher awareness than their rural counterparts. Mothers' education, in particular, plays a vital role in whether girls feel comfortable discussing sensitive topics ^(8, 11, 12).

4.2 Cultural and religious norms

Religious and cultural taboos around discussing sexual topics often limit what is taught or openly discussed. Teachers may feel embarrassed and parents may not approve ⁽¹³⁾.

Misconceptions rooted in tradition (e.g., myths around menstruation, virginity, and premarital sex) persist ⁽¹⁴⁾.

4.3 Institutional/Education system barriers

A major structural problem is the absence of comprehensive sexuality education (CSE). While Egypt's biology curriculum once included chapters on human reproduction, these were removed or diluted in some editions ⁽¹⁵⁾.

Teachers often lack training and pedagogical materials to discuss sensitive health issues. Without clear guidance, many skip or minimize reproductive content ⁽⁴⁾.

4.4 Access to services & information

Youth-friendly reproductive health services are still rare. Girls report feelings of fear and shame when seeking care for reproductive issues. Many facilities lack female health

workers or confidentiality policies, further discouraging adolescents ⁽¹³⁾. Alternative sources of information when school or family do not supply information, adolescents turn to peers, media, internet, but these may provide misleading or incomplete data ⁽¹⁶⁾.

5. BARRIERS SPECIFIC TO THE EGYPTIAN CONTEXT

A study identified several perceived barriers that hinder educated young women in Egypt from accessing sexual and reproductive health services.

Among the most commonly reported obstacles were the negative attitudes of healthcare providers, where many participants expressed fear of being judged, blamed, or treated disrespectfully by doctors or nurses when seeking reproductive health advice or services. Misinformation and misconceptions within the community also emerged as a major challenge, as social taboos surrounding sexual and reproductive issues often discourage open discussions or seeking professional help. Cultural and religious norms were another critical barrier; participants noted that discussing reproductive health was often viewed as shameful or inappropriate for unmarried women.

Furthermore, health system barriers, such as the lack of youth-friendly services, limited privacy, and inadequate counseling made access even more difficult. Although logistical issues like distance and transportation were mentioned, they were considered less significant compared to the strong social and attitudinal barriers that dominate the Egyptian context. These barriers intersect to create a systemic information deficit, leaving girls vulnerable to early marriage, unsafe practices, and psychological distress ⁽¹⁷⁾.

6. INTERVENTIONS AND HEALTH EDUCATION PROGRAMS

Some programs have made progress, notable ones include:

6.1 The "Noura Model" (UNFPA Egypt)

The Noura Model (2023) aimed to improve access to reproductive and menstrual health information for adolescent girls through community engagement and school partnerships. It provides educational sessions on hygiene, self-esteem and gender equality. Early evaluations report increased confidence and knowledge retention among participants ⁽¹⁸⁾.

6.2 Youth-Friendly health services

Joint initiatives by the Egyptian Ministry of Health and United Nations Population Fund UNFPA promote youth-friendly clinics in selected governorates. These centers offer confidential counseling, menstrual care and family planning education ⁽¹⁸⁾.

6.3 NGO and School-Based Interventions

Local NGOs such as **Etijah** and **Nahdet El-Mahrousa** conduct peer-education sessions, theatre workshops, and media campaigns to normalize reproductive health discussions among adolescents. These initiatives highlight the value of peer-to-peer learning, which is often more culturally acceptable ⁽¹⁹⁾.

7. DISCUSSION

From the evidence, several themes emerge:

There is substantial knowledge gap among schoolgirls especially in rural or lower socioeconomic status (SES) backgrounds. Menstrual health is better understood than other reproductive health topics.

Attitudes are shaped heavily by cultural norms, family background, and educational exposure. Misconceptions and stigma remain strong barriers.

Education systems are not yet fully delivering comprehensive, age-appropriate, culturally sensitive reproductive health education. Teacher training, curriculum content, and institutional support are weak links. Interventions show promise but need scaling up, integration into national curricula, and sustainable funding.

8. CONCLUSION

Reproductive health awareness among Egyptian schoolgirls is improving slightly through targeted programs, but large gaps still exist in knowledge, attitudes and access to services. Social and institutional barriers prevent many adolescents from receiving full, accurate, and meaningful education in this domain. Empowerment through education is possible but requires coordinated policy, cultural sensitivity and sustained intervention.

9. RECOMMENDATIONS

- Integrate comprehensive reproductive health education into the national school curriculum, from intermediate through secondary levels. This should be age-appropriate, include biological, psychological, social, and rights dimensions.
- Teacher training programs must be established to prepare educators to deliver reproductive health education comfortably and competently including dealing with cultural sensitivities.
- Engage parents, religious and community leaders to build acceptance and reduce stigma around reproductive health topics.
- Expand youth-friendly health services in schools and communities, making them accessible, confidential and acceptable to adolescents.
- Use media, technology and digital platforms to provide reliable information, counter misinformation

and reach adolescents who lack access to school or health services.

- **Monitoring & evaluation:** Systematic studies to measure effectiveness of interventions, awareness levels, attitudes and behaviours over time; disaggregate data by urban/rural, socioeconomic status and age.

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