Promotion of knowledge and attitude towards premarital care. An interventional study among medical students in Fayoum University

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Abstract

Premarital care is a worldwide activity aims to diagnose, treat unrecognized disorders, and reduce transmission of diseases to couples. The study was an interventional educational prospective study; its main concern was to assess and improve knowledge and attitude of 200 medical students in Fayoum University towards premarital care services; through health education intervention in the form of lecture and brochures that addresses important issues of premarital care.

The involved students were interviewed by using closed-ended questionnaires, which was distributed twice, just before the intervention and after 2 months of its date to detect the degree of knowledge remained. Eighty one percent of the sample was less than 20 years old. Males represented (40%) of it. Total knowledge score showed significant improvement from (62.44 \pm 4.98) to (69.37 \pm 3.43), especially knowledge about premarital counseling session content score increased from (9.84 \pm .776) to (11.63 \pm .766), knowledge about role of PMC in prevention of STDs as gonorrhea and hepatitis increased up to 95% and 72% respectively, and knowledge about premarital vaccination increased from 35.5% to 74% .

Total attitude score showed significant improvement from(7.89±1.1) to (13.1±.81) especially attitudes towards importance of PMC services, convention to receive such services, and refusal of marriage person with untreated infectious diseases with percents up to94%,92.5% and90% respectively after application of the health education intervention. However, females showed better attitudes than males after improvement of their knowledge about PMC.

The results reflected the importance of health education as a cornerstone element in improving knowledge and attitude towards different public's concern. The need of continuous health education programs for students to get benefits from their changed positive attitudes towards such services as they will become the future physicians.

Key words: Premarital Care, Knowledge, Attitude, Medical Students

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List of Abbreviations

• **ABCDs** : Anthropometric Factors, Biochemical Factors,

Clinical Factors, and Dietary Factors.

• **ACIP** : The Advisory Committee on Immunization Practices

• *ACOG* : American colleague of obstetricians and gynecologists

• **AFHA** :Armenian for Family and Health Association

• **AIDS** : Acquired Immunodeficiency Syndrome

• BMI : Body Mass Index

• **BMJ** : British Medical Journal

• **CBC** : Complete Blood Count

• *CDC* : Centers for Disease Control and Prevention

• **CHES** : Certified Health Education Specialist

• **DM** : Diabetes Mellitus

• FDA : Food and Drug Administration

• **HIV** : Human Immunodeficiency Virus

• **IDDM** : Insulin Dependant Diabetes Mellitus

• JAMA : Journal Of American Medical Association

• **MMWR** : Morbidity and Mortality Weekly Report

• NTD : Neural Tract Defects

• **PMC** : Premarital Care

• **RAEs** : Retinol Activity Equivalents

• **RH** : Rhesus Factor

• SPSS :Statistical Package For Social Science

• **STDS** : Sexually Transmitted Diseases

• **Tdap** :Tetanus, Diphtheria, acellular pertusis

• **UNFPA** : United Nations Population Fund Agency

• VTE : Venous Thromboembolism

• WHO :World- Health Organization

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Introduction

The fifth Millennium Development Goal (MDG) aims to improve maternal health. The two targets set for this goal are to "reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio" and "achieve, by the year 2015, universal access to reproductive Health (*Mahini* 2009).

It was evident that premarital care is a worldwide activity to prevent reproductive health hazards, sexual dysfunction, marital distress, divorce and family breakdown, so it will save the society and allow people to enjoy life (*Silliman et al, 2000 & Stanly et al, 2002*).

Premarital care is now compulsory by law, in many Arab countries including Egypt, as it provides an excellent opportunity to intervene according to identified risks (*Alam*, 2006& UNFP, 2010).

Faculty of medicine in Fayoum University is a new faculty which was constructed at 1998. Average number of graduated students is about 150 student /year. The first three educational years includes about 450 students (year2009/2010). Most of those students will be the health providers in urban or rural primary health care centers in Fayoum governorate.

This study aimed to assess and improve premarital care and attitude of medical students. Similar studies didn't take place at this university before, so our study is considered as a pioneer one in this field.

Medical students in the first three study educational years (1st, 2nd, and 3rd year students) in Fayoum University were chosen in this study as a trial to increase their awareness about premarital care services and before studying reproductive health topics in fourth year curriculum. It will be also as a trial to change their attitude towards the premarital care services.

Health education has been reported as a corner- stone in providing individuals with the sound knowledge about their health and improves health behaviors that enhance the wellbeing of the general population (*Nazli and Umi,2005*)

Health education intervention was used as a tool to improving knowledge and attitude of the studied students towards the premarital care services.

The information a bout premarital care package in the study was obtained from (MOHP) web site

http://www.drguide.mohp.gov.eg/newsite/E learning

Goal of the study:

Promotion of premarital care knowledge and attitude among medical students in Fayoum University.

Specific objectives of the study:

- 1) To determine the knowledge of medical students of faculty of medicine in Fayoum towards premarital care.
- 2) To identify the attitude of medical students of faculty of medicine in Fayoum towards premarital care.
- 3) To implement health education program as regards the updated information of premarital care.
- 4) To evaluate the effectiveness of health education program on the knowledge and attitude of medical students in faculty of medicine in Fayoum.

Chapter (1)

Premarital Care

Introduction:

Premarital care is a worldwide activity to prevent reproductive health hazards, sexual dysfunction, marital distress, divorce and family breakdown, so it considered as a step for saving the society and allow people to enjoy life (*Stanly*, *et al.*, 2002 & *Silliman*, *et al.*, 2001).

Premarital care is a necessity to maintain healthy marriage and reproductive performance, especially in certain conditions, like consanguineous marriage, history of congenital disorders or suspicion of serious infection. However, people perception and their acceptance to premarital care owes much to culture and social influences; which have a greater implication for launching programs in the community (*Alam*, 2006).

Freda, et al, (2006) stated that premarital care has evolved in the health care community, several professional organizations have addressed its importance for their members, and others as ministry of health and population in Egypt developed specific guidelines and integrated general practice standards to the health providers. (MOHP, 2005).

There is a little evidence that public awareness about critical opportunities for preventing reproductive causalities is high (*Moos*, 2004). The Center for Disease Control and Prevention (CDC) established working group in 2004 to held

conferences addressing preconception care issues, two conferences were held in 2005, 2007 to develop recommendations and guidelines for improving preconception health and care. Strategies were developed and planned to implement the recommendations across three areas: clinical practice, consumer roles, and public health practice (*Hood, et al 2007, Chuaung and Chen, 2008*)

Definitions of premarital care:

Premarital care is the promotion of the health and well-being of a woman and her partner before pregnancy, it considered as the primary preventive approach for couples planning for conception, it can identify and modify behavioral, medical, and other health risk factors known to impact pregnancy outcomes through prevention and management (*Chuaung and Chen, 2008*).

Premarital care is an advantage given to young couples on their way to marriage that help in making good preparation & initial adjustment to determine whether their marriage lives up to their expectations or whether they meet obstacles in reaching their goals (*kam&man*, 2000).

Premarital care is a useful approach for diagnosis and treatment of unrecognized disorders, reducing transmission of diseases to partners and offspring, providing health education as well as a convenient mean of collecting information on health of the population for planning purpose (*Hesketh*, 2003).

Goals and objectives of premarital care:

1. Improve the knowledge, attitudes and behaviors of men and women related to premarital health and reduce the disparities in adverse pregnancy outcome.

2. Integrated continuum approach of women care, will lead to higher levels of women's wellness and resulting in healthier women, pregnancies, and off springs, which are the outcomes consistent with the goals of premarital care (*Moos*, 2004).

Healthy mothers and children are the hope and dream of every country; evidence shows that promoting health in women and couples before pregnancy can promote the health of their offspring, so comprehensive health care for women before pregnancy should be done (*Chuaung and Chen,2008*).

- 3. Decrease adverse maternal and infant health outcomes (*Chuaung and Chen*, 2008).
- 4. Comprehensive premarital and preventive health care before the first pregnancy, will help in prevention and early diagnosis of health hazards which may affect couples or their offspring (*Hillemeier*, et al.,2008).
- 5. Improving premarital health care through change in the caring process offered to women in childbearing period women, including types of screening and risk reduction interventions as being an essential part of primary and preventive care, rather than an isolated visit (*Moos*, 2004).
- 6. Prevention of infections, genetic diagnosis and family counseling (prenatal diagnosis), early diagnosis and treatment when possible estimated that use of all these approaches could prevent more than 75% of congenital abnormalities (*Moos et al*, 2008).