# Effect of Self Body Exam Guideline on Early Detection of Health Problems among Late Adolescent Females

## Thesis

Submitted for partial fulfillment of the requirements of Doctorate Degree in Nursing Sciences (Maternal & Gynecological Nursing)

## $\mathcal{B}y$

#### **Marwa Awad Mohamed Ahmed**

B. Sc. N. Ain Shams University
M.Sc. Ain Shams University
Nursing Teacher at Technical Health
Institute of Port Said

Faculty of Nursing Ain Shams University 2017

# Effect of Self Body Exam Guideline on Early Detection of Health Problems among Late Adolescent Females

### Thesis

Submitted for partial fulfillment of the requirements of Doctorate Degree in Nursing Sciences (Maternal & Gynecological Nursing)

### Supervised by:

## Dr/ Kamilia Ragab Abou Shabana

Prof. of Maternal & Gynecological Nursing Faculty of Nursing Ain Shams University

## Dr/ Eman Mostafa sayed

Assistant Prof. of Maternal & Gynecological Nursing Faculty of Nursing Ain Shams University

> Faculty of Nursing Ain Shams University 2017

# **Acknowledgement**

First and foremost thanks to Allah, the most kind and merciful.

I wish to express my deepest and grateful thanks to Trofessor Kamilia Ragab Abou Shabana, Trofessor of Maternal and Gynecological Nursing, Faculty of Nursing, Ain Shams University for her continues supervision, guidance, support and encouragement.

I would like to express my grateful thanking to Assistant professor Eman Mostafa sayed, Assistant professor of Maternal and Gynecological nursing, Faculty of Nursing, Ain Shams University for her supervision, guidance, support, encouragement and for the time she devoted to complete the work.

I also would like to express my grateful thanks to the Dean of Technical Health Institute of Port Said and the dean Technical Institute of Nursing Health Insurance at Port-said and the students for their help during the data collection

*The candidate*Marwa Awad Mohamed

#### **Abstract**

Self body exam guideline is positively enhanced adolescent females' knowledge and practice regarding early detection of their health problem. This study aimed to study the effect of self body exam guideline on early detection of health problems among late adolescent females. The design of the study was an intervention study. The study was conducted at Port-Said City, in Health Technical Institute, and Technical Institute of Nursing Health Insurance. The subjects involved unmarried female student nurse at first academic year 2014 – 2015. Sample size was 63 students. Data were collected by four Tools (a questionnaire sheet for general characteristics-medical history and self body exam knowledge, performance checklists for student contained; a standard practice list for breast self examination-Assessment of degree of hirsutism & A physical assessment checklist, follow up card and student nurses' satisfaction sheet). The study results revealed that there was a statistical significant difference between pre-intervention program compared to post 1 month and post 2 months regarding knowledge and practice regarding self body exam. Also, there were many health problems discovered by self body exam for example; female genital problems, infections, skin, and urinary disorders which represented 6.3%, 9.5%, 14.3% and 12.7% respectively. Additionally, most of female health problems were treated after referral for medical care. The study concluded that an instructional supportive guideline about self body exam was positively enhanced adolescent females' knowledge and practice regarding early detection of health problems. The researcher recommended integrating self body exam guide line in adolescent schools. *Further* researches are still needed to explore the barriers that confront practice of self body exam among adolescence.

**Key words:** Self body exam, adolescence, health problems, technical institute, hirsutism.

# List of contents

No.	contents	Page
1	Introduction	1
2	Justification of the study	4
3	Aim of the study	7
4	Review of literature	
	Chapter 1 Adolescence	8
	Chapter 2 Promotion of adolescent Self-body exam Chapter 3 Nursing roles regarding self body exam	13 48
	Chapter 5 Nursing roles regarding sen body exam	<b>T</b> O
5	Subjects and methods	75
6	Results	87
7	Discussion	107
8	Conclusion	122
9	Recommendation	123
10	Summary	124
11	References	128
12	Appendices	
13	Arabic summery	

# List of tables

No. Review tables	Page
kanananan kununun aununun aunun aun a	
1 Female physical changes during adolescent	9

No.	$\mathbb{F}_{i}$	Page
<b>1</b>	Distribution of student nurses in the study sample according to their general characteristics	88
2	Distribution of student nurses in the study sample according to their medical history	89
3	Distribution of student nurses in the study sample according to their menstrual history	90
4	Treatment of menstrual problems throughout the study phases	91
5	Distribution among student nurses regarding their correct and not correct knowledge about self body exam throughout the study phases	92
6	Distribution according to practice of nursing students' self-body exam	95
7	Students' practice of self-assessment throughout the study phases	96
8	Distribution according to student nurses' practice self assessment concerning hirsutism	97
9	Distribution according to student nurses' practice of BSE throughout the study phases	98
10	Distribution according to students' self-complaints as reported by doctors	100

No.	Result tables	Page
11	Distribution of student nurses' satisfaction related to their guideline satisfaction	101
12	Relation between students' pre-intervention knowledge of self-examination and their personal characteristics	102
13	Relation between students' pre-intervention knowledge of self-examination and their medical history	103
14	Relation between students' pre-intervention knowledge of self-examination and their practice of self body exam	104
15	Correlation matrix according to students' knowledge and practice scores of self-body exam	105
16	Correlation between students' knowledge and practice scores and their general characteristics	106

# **List of Figures**

No.	Review Figures	Page
1	Breast structure	17
2	pictorial example of BSE	18
3	Breast disorders	19
4	Hirsutism appearance	21
5	Dermatologic Manifestations of Hirsutism	23
6	Modified Ferriman-Gallwey score	24
7	Vulva structure	26
8	Steps of vulvar self-exam	27
9	Skin structure	30
10	Acne appearance	33
11	Eye structure	34
12	Eye lesions	35
13	Conjunctiva inflammation	35
14	Inflammation of the Eyelid	35
15	Ear structures	36
16	Nose structures	37
17	Mouth structures	38
18	Periodontal Disease	39
19	Neck structure	40
20	Foot and legs structure	41
21	Urinary system	43
22	Nail structure	46
23	Nail discoloration	46
<b>24</b>	Ridged nails	47

No.	Result Figure	Page
1	Students' total knowledge of self-examination	93
	throughout the study phases	
2	Distribution according to self reported student	94
	nurses' sources of information ab2out self body exam	
3	Total students' practice of BSE throughout the study	99
	phases	
	g Valenti karangan kanangan kan	

# **List of Appendices**

No.	Subject
Appendix 1	Protocol
Appendix 2	Questionnaire sheet
Appendix 3	standard practice list for BSE
Appendix 4	Assessment of degree of Hirsutism
Appendix 5	Physical assessment checklist
Appendix 6	Follow up card
Appendix 7	Guide line satisfaction sheet
Appendix 8	supportive instructional Arabic guideline booklet of self-body exam

#### List of abbreviations

17-OHP :  $17\alpha$ -hydroxyprogesterone

ACTH : Adrenocorticotropic Hormone

ASGE : American Society of Gastrointestinal Endoscopy

AUA : American Urological Association

BSE : Breast Self Examination

CAH : Congenital Adrenal Hyperplasia

DVT : Deep Vein Thrombosis

FSH : Follicle Stimulating Hormone

GI : Gastrointestinal

GP : General Practitioner HFD : Hand and Foot Disease

HPG : Hypothalamic-Pituitary-Gonadal

HPV : Human Papilloma Virus

IC : Interstitial Cystitis

IEP : Individualized Education Plan

LH : Luteinizing Hormone

mFG : Modified Ferrman-Gallwey score

OCs : Oral Contraceptives

PCOS : Poly Cystic Ovary Syndromes rUTI : recurrent Urinary Tract Infection

S.E : Self examination

U S : United State

UTI : Urinary Tract Infection

VIN : Vulvar Intraepithelial Neoplasia

WHO : World Health Organization

#### Introduction

Globally, it was acknowledged that adolescents represented a major demographic and socioeconomic force, and were a major factor in influencing public health trends. It is also important to note here that adolescence is a special stage in the lives of the young people. It is a period of transformation from childhood into adulthood. It characterized by major biological, physical, psychological and behavior changes, which if not properly managed, could lead to significant exposure to risky behaviors with high consequences on their immediate and long term health and socio-economic lives (Adolescent Health Strategic Plan 2011 to 2015).

WHO identified adolescence as the period in human growth and development that occurs after childhood and before adulthood, from ages 10 to 19 years. Adolescents are depending on their families, their, communities, schools, health services and their workplaces to learn a wide range of important skills that can help them to cope with the pressures they face and make the transition from childhood to adulthood successfully. Parents, members of the community, service providers, and social institutions have the responsibility to both promote adolescent development and adjustment and to intervene effectively when problems arise (WHO, 2015).

Egypt had many important policies affecting adolescents, there was differing definitions and a lack of operational coordination among various official institutions were resulted in policies and programs that were not fully responsive to the needs of young people. Egypt's constitution provides for the protection of mothers, children, and youth as well as it guarantees the right of women to medical, physical, psychological, and social healthcare. Egypt's population policy explicitly addresses young adults only through provisions for healthcare for girls prior to marriage and premarital exams and counseling. What limited reproductive and sexual health education which young people

received has been the responsibility of families. The School Health Insurance System didn't systematically include reproductive healthcare for students, and no comparable program exists for out-of-school youth (*Policy Project, 2005*).

Health promotion is the art and science of helping adolescents to discover the synergies between their core passions and optimal health, enhancing their motivation to strive for optimal health, and supporting them in changing their lifestyle to move towards a state of optimal health. Optimal health is a dynamic balance of physical, emotional, social, spiritual, and intellectual health. Lifestyle change can be facilitated through a combination of learning experiences that enhance awareness, increase motivation, and build skills and, most important, through the creation of opportunities that open access to environments that make positive health practices the easiest choice (*Michael and O'Donnell*, 2009).

In health care, **self care** is any necessary human regulatory function which is under individual control, deliberate and self-initiated (*D'Arcy*, *et al.*, *2013*).

The Department of Health defines self-care as "the care taken by individuals towards their own health and well being, and includes the care extended to their children, families, friends and others in neighborhoods and local communities". It includes: "the actions people take for themselves, their children and their families to stay fit and maintain good physical and mental health; meet social and psychological needs; and prevent illnesses or accidents; care for minor ailments and long term conditions; and maintain health and well-being after an acute illness or discharge from hospital" (*Department of Health*, 2005).

The promotion of self-examination remains controversial and the recommendations made by health organizations were inconsistent. For example, in the US self-examination is not endorsed by the US Preventive Task Force, the American Cancer Society frames it as a personal choice and the American College of Obstetricians and Gynecologists recommends regular monthly self-examination. In part this controversy reflects the anxiety associated with self-examination and the number of benign biopsies that may occur. Research demonstrating that, self-examination identified over half of tumors and enhanced detection of other diseases however, indicated the positive outcomes associated with self-examination (Allen, et al., 2010; Calonge, et al., 2009; American Cancer Society, 2012; American College of Obstetrics and Gynecology, 2012).

Definition of self body exam is an examination of one's body for signs of illness or disease, or careful examination of own behavior and beliefs to see whether they are good or bad, and the act or practice of checking body for symptoms of illness (American Heritage® Dictionary of the English Language,2011).

Performed regularly, self examination can alert any person to change in the body organ and aid in the early detection of disease and cancer. It should be done often enough to become a habit, but not so often as to feel like a bother. For most people, once a month is ideal, but asks doctor if you should do more frequent checks. The person may find self examination helpful than to have a doctor do a full-body exam first, to assure that any existing spots, freckles, or moles are normal or treat any that may not be. After the first few times, self examination should take no more than 10 minutes, a small investment in what could be a life-saving procedure (*The Skin Cancer Foundation*, 2015).

Although the science is still emerging, strong evidence exists for linking environmental exposures to negative health outcomes such as increased infertility, recurrent miscarriage, and early puberty in girls, reproductive tract cancers and diseases such as endometriosis (http://www.arhp.org/topics/enviro-repro-health, 2015).

These issues are of particular concern during adolescence, not only because adolescence is an important period for forming views about oneself and socio cultural ideals, but also because the onset of puberty entails bodily changes (such as greater adipose deposits, and acne) that, on average, move girls further away from societal standards of female beauty. A longitudinal study of 12–15-year-old girls has confirmed that such bodily changes are associated with increased concerns about weight and eating (*Dittmar*, et al., 2005).

Moreover, the nurse provides and directs nursing care of the client that incorporates the knowledge of expected growth and development principles, prevention and/or early detection of health problems, and strategies to achieve optimal health. The nurse promotes physical health and wellness by providing care and comfort, reducing client risk potential and managing health alterations (*National Council of State Boards of Nursing*, 2013).

Nurses playe a vital role in health promotion, including aiding clients to develop responsible, informed self-examination and self-care competency. Nurses can recommend treatment of common health problems as well as many recurrent and chronic illnesses. In many parts of the world, nurses are the main providers of primary health care including the use of prescription and non-prescription medicines. Equally, nurses had a key role in responsible consumer education about self-examination including: when to seek advice from health professionals, how to monitor effects, including adverse events; deciding when to stop examination; use of patient information leaflets, and storage and disposal of unused products (ICN/WSMI Statement, November 2002).

#### Justification of the study:

The period of adolescence was the most confusing and it was a neglected stage. This is because the adolescent is acquiring physical attributes of adulthood but less emotionally developed as an adult. One can imagine what it looks like for a girl to know have breast like adult, to be menstruating like adult women and to