



## Republic of the Sudan





## University of Shendi

Faculty of Graduate Studies and Scientific Research

# Student nurses awareness about breast self-examination faculty of nursing in Merwe University

#### In 2018

A thesis submitted as partial full filament of the requirements for the master degree in medical surgical nursing

BY:

Nahla Ahmed Alkalifa Ali

BSC Shendi University 2010

**Supervised by:** 

Dr: Higazi Mohammed Ahmed Abdullah Awad

Associate professor –Shendi University

2018

# الآية

قال تعالي :

بِسُ مِٱللَّهِٱلرَّحْمَزِٱلرَّحِي مِ

# (وَلَسنوْفَ يُعْطِيكَ رَبُّكَ فَتَرْضَى)

الضحى :5

## **Dedication**

For every one who light the other mind by his knowledge or gave ideal instruction we dedicate this research for my father who are not scant for us by any things at any time.

For my mother who are gave us love and kindness.

For my sisters and my brothers which give me confidence and supported me

For every one who teach me letter that light my road ,my teachers and all staff in shandi university , my college and all teaching staff in Merwe university faculty of nursing students and teaching staff.

#### **ACKNOWLEDGEMENTS**

I would like to start by thanking ALLAH for this during all the conduction of this work, as a little part of his generous help throughout my life.

Hague thanks to Drhijazy professor of medical surgical nursing faculty of nursing Shandi university for him support and guidance throughout this work. I am indebted to him continuous directions willingly offered to me throughout the study.

Special thanks to my brother abdallah who help me in this study.

I am thankful to my sister and her husband my parents for life time of love and support and for instilling in me that great things through perseverance, my husband and my son Isam .the staff in merwe university faculty of nursing for sharing me so often with my work and studies, and any one gave me support or help me for presented my study in good and scientific state.

Nahla Ahmed

#### **Abstract**

**Introduction**: the incidence of breast cancer in Sudan is on the rise and account of leading cause of mortality .an understanding of the awareness on breast self examination among nursing students are important first steps which will guide the designing of intervention at rising awareness across the general population.

Aim:- this study aim to assess student nurses awareness about breast self examination

**Method:** we conducted across sectional study in august 2018 involving 120 nursing students in Merwe university data was collected using a pretested self-administrate questionnaire and analyzed using descriptive methods.

**Result :** all study group think that the breast self -examination is help in early detection of breast cancer ,33% know how to perform breast self- examination while other know part of it .94% from study group go to the doctor after found any change in the breast during breast self examination. the study showed that there is no correlation between level of education and level of awareness.

**recommendation:** provide educational program about breast self- examination and put program to found solution of barrier of breast self examination .

#### الملخص

يعتبر سرطان الثدي من الامراض الخطيرةالتي تصيب النساء وهو من الامراض التي تؤدى الى الموت يصنف السودان بين البلدان التي لديها ارتفاع في معدل انتشار مرض سرطان الثدى.

الفحص الزاتى لثدى يساعد فى الكشف المبكر لسرطان الثدى ويساعد فى سرعة الشفاء من المرض لذلك فأن وعى طلاب التمريض بأهمية الفحص الذاتي وكيفية خطواته يساعد فى انتشار الوعى فى المجتمع

الهدف : هدفة الدراسه للتعرف علي مدى وعي طالبات التمريض بلفحص الذاتى للثدى فى جامعه مروى كانت الاهداف تحدد كيفية خطوات وطرق الفحص الذاتى للثدى والحواجذ التى تعيق الطالبات للقيام بعمل الفحص الذاتى للثدى

المنهجيه: كانت هذه الدراسه الوصفيه جعلت من الاستخدام ذاتيا الاستبيان الذى ارسله الى طالبات تمريض جامعة مروى

النتيجه: اكدت كل مجموعة الدراسه بأن الفحص الذاتي للثدى وسيله جيده في الكشف المبكر لسرطان الثدى الا ان33% فقط يعرفون طريقة الفحص الذاتي للثدى و 94% من مجتمع الدراسه يرى انه لابد من الذهاب الى الطبيب عند اكتشاف اى تغيرات في الثدى اثناء البحث

التوصيات: استنادا الى نتيجة الدراسه اوصت الدراسه الى وضع برنامج تثقيفى حول الفحص الذاتى للثدى واصت بوجود الحلول التى تعوق عملية الفحص الذاتى للثدى.

## **CONTENTS**

Title	Page
Dedication	I
Acknowledgement	II
Abstract	III
	Chapter 1
	Justification
Introduction	
Justification	2—3
Objectives	
•	Chapter 2
	Literature Review
Literature	5——10
	Chapter 3
	Methodology
Methodology	11—12
1:10 til 0 til	Chapter 4
	Result
Result	13——16
TC-5011	Chapter 5
Discussion (	Conclusion and recommendations
	17—1
Conclusion	19
Recommendation	20
References	21

## **List of Table**

Page	Subject	No
Table 1	Showed the level of education of study group	17
Table 2	Showed the recourses of information	17
Table 3	Showed the thinking of study group about breast self	18
	examination regarding in help early detection of breast	
	cancer	
Table 4	Showed the known of breast self examination	18
Table 5	Showed from whom the study group learned	18
	examination	
Table 6	Showed the duration of breast self examination	19
Table 7	Showed the time of examination	19
Table 8	Showed the steps of breast self examination	20
Table 9	Showed what do after found change	20
Table10	Showed the useful of breast self examination	
Table 11	Showed the belief of study group about the breast self	
	examination is good tool for early detection of breast	
	cancer	

## **Chapter one**

#### **Introduction**

## **Justification**

## **Objectives**

#### Introduction:

Breast cancer has increasingly become an issue of public health important .in the year 2000 ,there were 10 million new cases of cancer and 6 million cancer death world wide {1-2}each year in the united state ,almost 1.5 million individuals learn that they have some form of cancer {3}.breast cancer is by far the most commonly diagnosed cancer in women ,and in the united state in 2007 ,202,964 women were diagnosed with breast cancer and 40,598 died from disease.{4}its incidence is becoming more common world wide.{5}studies have shown an increase incidence from African countries ,where low rates have previously been reported ,and estimated world total incidence of 1,45 million was expected by the year 2010 .

The high incidence and fatality rate of breast cancer as well as the high cost of treatment require that it should be of focus of high attention for health authorities and policy maker. The knowledge and attitude for breast cancer management is so low that majority of the affected patients present late in the hospital when little or nothing can be done again .this indicates a need for increase community awareness of methods for early detection for disease .although the breast cancer can not be prevented ,the risks of developing breast cancer can be minimized .diagnosis of breast cancer during the early stage of the disease has been positive liked to decrease in mortality ,morbidity and effective cost of management of disease .

There are various methods of early detection of breast cancer ,this include breast self examination .

Breast self examination involves visualization and palpation of the breast by oneself for lump, shape, texture, size and contour. The purpose of this is for a women to learn the topography of her breast, know how her normal breast feel and be able to identify changes in them should they occur in the future.

#### Justification

Breast cancer has increasingly become an issue of public health important, it is the most commonly diagnosed cancer in the woman .the high incidence and fatality rate of breast cancer as well as the high cost of treatment this indicate a need for increase community awareness of method for early detection for disease there are various method of early detection of breast cancer include breast self examination

The nurses is the very important person in the community and can be resources of information and guide the people to inform the correct method and steps of breast self examination which leads to increase awareness of community regard breast self examination.

#### **General objective:**

To study student awareness about breast self-examination.

## **Specific objectives:**

- 1-To assessnurses' level of awareness about:
- -TheMethods of breast self-examination
- the steps of breast self examination
- -The important of breast self-examination
- -The indication of breast self-examination
- 2-To associate between level of academic and level of awareness

#### chabter tow

## **Literature review**

## **Back ground:**

Activists began promoting breast self-examination in 1930 because their exhortation to not delay seeking treatment for suspicious lumps was not affecting the death rate.

In the 1960 a film demonstrating breast self-examination which was cosponsored by the American cancer society and the national institute 'was shown to millions of women.

In 1970 researchers began to report that women were being told to do this even though there had never been any evidence to suggest that it saved lives.

Breast self-examination was once promoted heavily as means of finding cancer at amore curable stage .

Breast is Avery vital organ of females body and females are very conscious about it as they will be depressed if they have any disease or illness related to this organ ,so prevention of disease releted this organ is very important .

#### **Definition**

Breast self-examination is a screening method used in attempt to detect early breast cancer .The method involves the women her self-looking at and feeling each breast for possible lumps, distortion or swelling. It is away to learn the normal look and feel of the breast and to check for changes every month .For early identification of breast cancer breast self- examination is an important and in expensive method .

Breast self examination is examination done by individuals to help identify any abnormality with in the breast .it involves visually and by hand examining the breasts .it should be done at the age of 20 years and monthly rather few days after an individual menstrual period when the breast are slight swollen .For early identification of breast cancer breast self-examination is an important and in expensive method .

Breast self- examination is examination done by individuals to help identify any abnormality with in the breast. It involves visually and by hand examining the breasts .it should be done at the age of 20 years and monthly rather few days after an individual menstrual period when the breast are slight swollen .Breast self- examination involve a process whereby women inspect their breasts regularly to detect any abnormal swelling ready for taking medical care .

For early recognition of breast cancer is breast self-examinations a useful tool. Breast self- examination is most important skill in prevention of breast cancer and by performing it regularly women can save themselves from getting this disease and death can prevented too. It is very simple, requires no instrument and easily performed by every women. Early diagnosis is important role in improvement of health seeking awareness is play an important role in early detection of breast cancer.

## Steps of breast self-examination:

#### In the mirror:

1- Stand undressed from the waist up in front of large mirror in a well lit room. Look at your breast ,if they are not equal in size or shape, that's OK most women's breast aren't .with your armsrelaxed by your sides look for any changes in size ,shape, or position, or any breast skin changes ,look for any puckering, dimpling, sores, or discoloration.

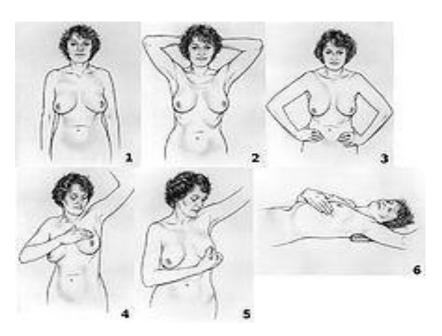
- 2- Check your nipples and look for any sores, peeling or change in their direction.
- 3- Place your hands in your hips and press down firmly to tighten the chest muscles beneath your breast, turn from side to side so you can look at the outer part of the breasts.
- 4- Then bend forward toward the mirror roll your shoulders and elbows forward to tighten your chest muscles your breast well fail forward, look for any changes in their shape and contour.
- 5- Now ,clasp your hands behind your head and press your hands forward again turn from side to side to inspect your breastsmouter portions.
  - Remember to look at the border underneath them left the breast by your hand to see it.
- 6- Check your nipples for discharge fluid, place your thumb and forefinger on the tissue surrounding the nipple and pull outward the end of the nipple, look for any discharge, repeated on your other breast.

#### In the shower:

- 1- Feel for changes in the breast, it helps to have your hands slippery with soap and water. Check for any lumps or thickening in your underarm area. Place your left hand in your hip and reach with your right hand to feel in the left armpit .repeat on the other side.
- 2- Check both sides for lumps or thickenings above and below collarbone.
- 3- With hands soapy, raise one arm behind your head to spread out the breast tissue. Use the flat part of the fingers from the other hand to press gently in to the breast. Follow an up –and-down pattern, moving from bra line to collarbone. Continue the pattern until you have covered the entire breast. Repeat on the other side.

## Lying down:

- 1- Lie down and place small pillow under the right shoulder put the right hand behind ahead, place the left hand on the upper portion of the right breast with finger together and flat body lotion may help to make this easier.
- 2- Think of the breast as a face of an a clock, start at 12 o'clock and move toward 1 o'clock in small circular motion. Continue around the entire circle until reach 12 o'clock again .keep the fingers flat and in constant contact with the breast. When the circle is complete, move in 1 inch toward the nipple and complete another circle around the clock. Continue in this pattern until have felt the entire breast. Macke sure to feel the upper outer area that extend in to the armpit.
- 3- Place the finer flat and directly on top of nipple, feel beneath the nipple for any changes, gently press the nipple inward it should move easily.
- 4- Repeat this steps on the other breast, don't forget to check the upper, outer area of the breast, nearest to the armpit. {6}



#### **Methods of examination:**

The women stand in front of a mirror with the torso exposed to view .she looks in the mirror for visual signs of dimpling, swelling or redness on or near the breast. This is usually repeated in several position such as while having hand on the hips, and then again with arms held over head.

The women then palpates her breasts with the bad of her fingers to feel for lumps (either superficial or deeper in tissue) or soreness. There are several common patterns, which are designed to ensure complete coverage. The vertical strip pattern involves moving the fingers up and down over the beast. The pie-wedge pattern starts at the nipple and move out ward.

The circular pattern involves moving the fingers in concentric circles from the nipple out ward. Some guide lines suggest mentally dividing the breast into four quadrants and checking each quadrant separately.

The palpation process covers the entire breast, including the axillary tail of each breast that extends toward the axilla .this is usually done once while standing in front of mirror and again while lying down. Women that are not breast feeding gently squeeze each nipple to check for any discharge. For premenopausal women most method suggest that the self-exam be performed at the same stage of the women's menstrual cycle, because the normal hormone fluctuations can cause change in the breast.

The most commonly recommended time is just after the end of menstruation. Because the breasts are least likely to be swollen and tender at this time. Women who are postmenopausal or have irregular cycles might do a self-exam once a month regardless of their cycle. The breast self-examination takes seven to ten minutes.

#### **Indication of breast self-examination:**

Complaint of breast pain, skinchange, nipple discharge, lumps, gross changes in size or shape, or any other feature that cause concern in the patient warrant a clinical breast exam. While there is currently controversy regarding the recommendation for women to perform self-breast exam for breast cancer screening. Many breast cancers are in fact discovered by patient themselves during incidental self-breast exam {7}.

#### **Barriers of breast self examination:**

- o Lack of knowledge on how to do breast self examination.
- o Lack of knowledge and awareness about risk factor of breast cancer.
- o Time consuming.
- o Lack of adequate privacy for breast self examination.
- o Lack of detectable symptom.
- o Fearof cancer diagnosis.
- cultural and health belief.
- Forgetting to do breast self- examination each month.
- o not recognizing breast self- examination as important.

## chapter three

## Methodology

## 1-study design:

Thisdescriptive cross sectional study done in Merwe university faculty of nursing to assess their awareness about breast self examination in ( august - November 2018 )

#### 2- Study area:

The study was conducted in town in northern of Sudan in northern state near to karima far from Khartoum about 350 km.

## **3-Study setting:**

Merwe university located in Merwe in northern state in Abdoom village far from Khartoum 378KM, it composed of four collage; faculty of engineering, faculty of science & technology, faculty of administrative science, and faculty of medicine and health science which established 2016 consist of department of medicine, laboratory science, and nursing science

## **4-Study population:**

The population were all student nursing in university of Merwe they were 120 students.

## 5-Sampling and sample size :

## a- Sampling technique

All student nurse were enrolled in the study

## b-sample size:

## (120) were participated in the study

#### 6-data collection tools:

Data was collected through questionnaire was formulated by researcher, based on the literature review which divided to tow section first section demographic data, the next section regarding breast self-examination

## 7- Data collection technique:

Data was collected in week after informed the student nurses about the purpose of thestudy and it should be confidential, at the end of the lecture. Every nurse was allowed to fill the questionnaire by herself.

## 8- Data analysis:

Data were coded and then analysis computerize soft ward SPSS and EXIL were used .

Different statically measure used frequency .percentage then presented in table .

#### 9- Ethical considerations:

Permission from university of Shandi faculty of medical and health science.

Permission from university of Merwe faculty of nursing

Verbal consent from participants after explaining of research objective.

## **Chapter four**

# Result

Table (1) showed the level of education of study group

Percent	Frequency	
16%	19	First year
35%	41	Second year
30%	35	third year
19%	25	Fourth year

Table (2) showed the recourses of information

percent	frequency	Item
5%	6	Never heard
28%	34	Multi media
20%	24	Lecture
5%	5	Internet
42%	51	Medical staff

Table (3) study group thinking about importance of breast selfexamination in help early detection of breast cancer

percent	frequency	Item
100%	120	Think that
0%	0	Don't think that

Table (4)study group knowledge about phases of breast selfexamination

percent	frequency	Item
57%	68	Know part of it
10%	12	Don't know
33%	40	Know all step

Table (4) source of information study group learned from

Percent	Frequency	
45%	54	university
16%	19	hospital
12%	15	friend
27%	32	internet

Table (4)study group knowledge about duration of breast selfexamination

Percent	Frequency	
3%	4	weekly
75%	98	monthly
15%	18	Don't know

Table(7) study group knowledge about time of examination

percent	frequency	
12%	14	During menstrual period
67%	80	Week after menstrual period
21%	26	Don't know

Table (8) study group knowledge about steps of breast selfexamination

percent	frequency	
36%	43	Stand in front of mirror
12%	15	Put the hands in the side of body
23%	27	Look for change in size, shape and color of breast

10%	12	Put the arm above head and looking for change
12	15	Press the nipple by the thumb and index
2%	2	In lying position use right hand to assess left breast
1%	1	Use left hand to assess right breast
4%	5	Palpate tow breast in standing and sitting position

Table(9) study group action( consultation ) when found changes

Percent	frequency	
5%	6	Ask friend
94%	113	Go to the doctor
1%	1	nothing

Table (10) study group comment about benefit of breast selfexamination

percent	Frequency	
78%	94	Early detection of breast cancer
22%	26	Discover change in the breast
0	0	Good exercise to breast

## **Chapter five**

#### **Discussion**

#### **Conclusion**

#### Recommendation

#### **Discussion**

This study was conducted to the student nurses to assess their awareness about breast self examination descriptive cross sectional study on Merwe university .the study group involve 120 students .the present study show that most of them in second year 35%, most of them heard about breast self examination from medical staff 42%, the result show that all the participants think that the breast self examination is help in early detection of breast cancer by 100%. 33% know that how to perform breast self examination this may increase the rate of breast cancer and this leads to increase mortality rate , and 57% know part of breast self examination and 10% does not know how to perform it ,45% of them learned to do breast self examination from university, so it is important to provide more information about breast self examination inside the lectures. most of the participant choice the true way after discover any change in the breast during breast exam94% this is good step to prevent breast cancer, the study showed that most of the participant know the duration of the exam but they didn't perform it. most of participant 78% believe that the breast self examination is useful in early detection of breast cancer . about the steps of breast self examination the result show that most of the participant stand in front of the mirror and observation of change in the breast without touch their breast .the result show that there is no correlation between the level of education and awareness.although that the

100% of study group think that the breast self examination is good tool and important in early detection of breast cancer;35% just know how to perform the steps of breast self examination. is study there for reveals that most participants awareness of breast self mination among nurses students in Merwe university is very much on the low side we there for recommend that more awareness about breast self examination should be carried out and directed to the nurses students by teaching staff ,health workers should intensify health education on breast self examination when they come to the clinic.

#### **Conclusion**

Based on study result the study group think that the breast self examination is help in early detection of breast cancer 100% but most of them did not how to perform it, just 33% of them know how to perform it.

The study highlight the need for educational program to create awareness regarding breast self examination

#### Recommendation

based on study result recommended that:

- 1. provide educational program about breast self examination
- 2. provide information about important of breast self examination
- 3. provide work shop abut breast self examination and how to perform it
- 4. apply poster supported with picture in the lab of university and in hospital
- 5. encourage the nurses to do the breast self examination and learn their family
- 6. health education
- 7. put program to found solution of barrier that interrupt breast self examination

#### **APPENDEX**

#### **REFRENCES**

1-parkin DM. global cancer statistic in the year 2000 . lancet oncol,2001,2:533-43.{PubMed}.

2-pisani p ,Bray F,parkin DM.estimate of the world wide prevelance of cancer for 25 sites in the adult population .Int j cancer .2002,97:72-81 {PubMed}.

3-Thomas p, neoplasia "in :Robbins and cotran pathologic basis of disease . 7<sup>th</sup> ed Kumar V,abbas K.A Fausto N, editors, Singapore:Elsevier.2006,p,270

4-UScancer statistics working group. Atlanta (GA): department of health and human services ,center for disease control and prevention and national cancer institute,2010.{last accessed on 2012 may 24}. United state cancer statistics:1999-2007. Incidence and mortality web based report, available from:htpp"\\www.CDCgov\uscs.

5- Adebamowo CA, Adekunle OO. Case controlled study of the epidemiology risk factors for breast cancer in Nigeria .Br j surg, 1999, 86:665-8. {PubMed}.

6-text book of oncology for nurses, Anupama tamarakar , second edition ,volume tow, page 62

7- American cancer society ,2002 breast cancer fact and figure .retrieved April 30,2002,from www.cancer.org

# <u> ڛۣ۫</u>\_مِٱللَّهِٱلرَّحْمَٰزِٱلرَّحِيـمِ

# استبيان مدي وعي طالبات جامعة مروي كلية التمريض عن الفحص الذاتي للثدي

1/ المؤهل الجامعي:		
ا-المستوي الاول ( )	ب- المستوي التاني (	(
ج- المستوي الثالث ( )	د- المستوي الرابع ( )	(
2\ هل سمعت بالفحص الذاتي للثدي؟		
١-ابدا		
ب- من وسائل الاعلام ( )		
ج - من محاضرة ( )		
د - من الانترنت ()		
ه-من كادر طبي ( )		
3/هل تعتقدي ان الفحص الذاتي للثدي	، يساعد في الاكتشاف المبكر لسرطان	طان الثدي؟
ا ـ اعتقد ( ) ب	ب-لا اعتقد( )	
4/ هل تعرفي كيفية الفحص الذاتي للثد	ي ؟	
ا-اعرف جزء منه () بالا	لا اعرف ( )ج-اعرفه جيدا ( )	
5/ اين تعلمتي الفحص الذاتي للثدي ؟	•	
ا-الجامعة ( ) ب- المستشفي ( )	() ج- عن طريق صديقة ()	(
د – عن طريق النت ( )		
6/كم عدد مرات الفحص الذاتي للثدي	ې ؟	

ا-اسبوعيا () ب- شهريا () ج- لا اعلم ()
7/ماهو انسب وقت للفحص الزاتي ؟
ا-اثناء الدورة الشهرة () ب- اسبوع بعد الدورة الشهرية ()
ج- لا اعلم ()
8/ طريقة الفحص الذاتي تكون:

الوقوف امام المرآة
وضع الكتفين والزراعين بشكل مستقيم علي جانب الجسم
البحث عن تغيرات ف شكل وحجم ولون الثدي
رفع الزراعين فوق الراس والبحث عن التغيرات
الضغط علي الحلمة باستخدام السبابة والابهام
الاستلقاء علي سطح مستو واستخدام اليد اليمني لتحسس الثدي الايسر
استخدام اليد اليسري لتحسس الثدي الايمن
تحسس الثديين ف وضعية الوقوف والجلوس بتمرير اليد لفحص الكتل جانبيا وراسيا

# 9/ اذا لاحظتي اي تغيير اثناء الفحص الذاتي ماذا تفعلين ؟

( )	ا-استشير صديقة
	ب-اراجع الطبييب ( )

ج-لاشئ ()

# 10/ ماهي فائدة الفحص الذاتي ؟

ا-الاكتشاف المبكر لسرطان الثدي ( )ب-اكتشاف اي تغييرات في الثدي ( ) ج-تمارين جيدة للثدي ( )

شكرا علي حسن تعاونكم