"A study to assess the effectiveness of structured teaching program on prevention of breast cancer among women visiting oncology and gynaecological OPD in SMVMCH, at Puducherry"

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ABSTRACT:
Cancer is a group of diseases involving abnormal cell growth with the potential toinvade or spread to other parts of the body. These contrast with benign tumours, which do notspread. Possible signs and symptoms include a lump, abnormal bleeding, prolonged cough,unexplained weight loss, and a change in bowel movements. While these symptoms mayindicate cancer, they can also have other causes. Over 100 types of cancers affect humans.Cancer is fundamentally a disease of tissue growth regulation. For a normal cell to transforminto a cancer cell, the genes that regulate cell growth and differentiation must be altered. Theaffected genes are divided into two broad categories. Oncogenes are genes that promote cellgrowth and reproduction. Tumour suppressor genes are genes that inhibit cell division andsurvival. Malignant transformation can occur through the formation of novel oncogenes, theinappropriateover-expressionofnormaloncogenes,orbytheunder-expressionordisablingof tumor suppressor genes. Typically, changes in multiple genes are required to transform anormalcellintoa cancercell.

I. INTRODUCTION:

"Never give up. Life is worth living. There is life after cancer.""Beat cancer. Small steps everyday."
-Anonymous

Cancer is a group of diseases involving abnormal cell growth with the potential to invade or spread to other parts of the body. These contrast with benign tumours, which do notspread. Possible signs and symptoms include a lump, abnormal bleeding, prolonged cough,unexplained weight loss, and a change in bowel movements. While these symptoms mayindicate cancer, they can also have other causes. Over 100 types of cancers affect humans.Cancer is fundamentally a disease of tissue growth regulation. For a normal cell to transforminto a cancer cell, the genes that regulate cell growth and differentiation must be altered. Theaffected genes are divided into two broad categories. Oncogenes are genes that promote cellgrowth and reproduction. Tumor suppressor genes are genes that inhibit cell division andsurvival. Malignant transformation can occur through the formation of novel oncogenes, theinappropriateover-expressionofnormaloncogenes,orbytheunder-expressionordisablingoftumor suppressor genes. Typically, changes in multiple genes are required to transform anormalcell into acancercell.

Risk factors for developing breast cancer include obesity, a lack of physical exercise, alcoholism, hormone replacement therapy during menopause, ionizing radiation, an early age at first menstruation, having children late in life or not at all, older age, having a prior history of breast cancer, and a family history of breast cancer. About 5−10% of cases are the result of a genetic predisposition inherited from a person's parents, including BRCA1 and BRCA2 among others. Breast cancer most commonly develops in cells from the lining of milk ducts and the lobules that supply these ducts with milk. Cancers developing from the ducts are known as ductal carcinomas, while those developing from lobules are known as lobular carcinomas. There are more than 18 other sub-types of breast cancer. Some, such as ductal carcinoma in situ, develop from pre-invasive lesions. The diagnosis of breast cancer is confirmed by taking a biopsy of the concerning tissue. Once the diagnosis is made, further tests are done to determine if the cancer has spread beyond the breast and which treatments are most likely to be effective.

II.   REVIEW OF LITERATURE:

Sabine R. de Wild (2022) study of patients with nodular breast cancer (cN) with axillary pathologic complete response after neoadjuvant systemic therapy (NST) unlikely to benefit from axillary lymph node dissection (ALND). Therefore, less invasive axillary staging methods have been introduced to ensure response-based treatment. However, there is no evidence of their oncological safety and impact on quality of life. Methods: MINIMAX is a Dutch multicentre study including patients with unilateral invasive cN1-3M0 breast cancer. Conclusion: Less invasive axillary staging methods have already been introduced worldwide in cN patients treated with NST. Evidence is needed to support the assumption

STATEMENTOFTHEPROBLEM:

"A study to assess the effectiveness of structured teaching program on prevention of breast cancer among women visiting oncology and   gynaecological OPD in SMVMCH at Puducherry.

OBJECTIVES:
1.   To assess the level of knowledge regarding breast cancer among patients.
2.   To evaluate the effectiveness of structure teaching programme regarding breast cancer among patients.
3.   To correlate the pre-test and post test results regarding breast cancer among patients.
4.   To associate the leave of knowledge regarding breast cancer with selected demographic variables.

ASSUMPTION
The health care assistant at different clinical area may have adequate knowledge regarding prevention of breast cancer among women

III.   MATERIALS AND METHODS

This chapter deals with the description of research methodology adopted by the investigatorfor gathering and organizing the data. It includes description of research approach, research design, setting of the study, population, sampling technique, method of data collection, development and description of the tool, reliability, data collection procedure, organization ofdata andplanfordataanalysis.Theanalysisisaprocessof organizing and synthesizingthedatainsuchawaythatthe researchquestionscanbe answeredandthehypotheses are tested**.**

ORGANISATION OF THE DATA
Section A: Description of the demographic variables.
Section B: Assessment of the effectiveness of structured teaching program on prevention of breast cancer among women visiting oncology and gynaecological OPD in SMVMCH atPuducherry.
Section C: Effectiveness of structured teaching program on prevention of breast cancer among women visiting oncology and gynaecological OPD in SMVMCH at Puducherry.
Section   D: Association   between   the   pre-test   and   post-test   on   effectiveness   of structuredteachingprogramonpreventionofbreastcanceramongwomenvisitingoncologyandgynaecologicalOPDinS MVMCH at Puducherry.

Percentage=obtained score/total scorex10

SCORINGINTERPRETATION:

LEVELOFKNOWLEDGE	SCORING	PERCENTAGE
Inadequateknowledge	0-8	0-32%
Moderateknowledge	9-17	33-68%
Adequateknowledge	18-25	69-100%

RESEARCH APPROACH:
A quantitative research approach was adopted for this present study.
RESEARCH DESIGN:
A true experimental research design (pre-test - post-test group design) was adopted for this present study.
POPULATION:
The population for the present study includes the women visiting oncology and gynaecological
SAMPLE:
The women visiting oncology and gynaecological OPD in SMVMCH at Puducherry
SAMPLE SIZE:
The sample size of the present study is 30 women visiting oncology and gynaecologicalOPD

SAMPLE TECHNIQUES:
In this study a purpose sampling technique were used for selecting the sample
SETTING OF STUDY:
The study was conducted in Sri ManakulaVinayagar Medical College and Hospital, a 1200-bedded hospital in Puducherry. The selection of the setting was done based on the feasibility of conducting the study and the availability of the subject after getting cooperation from the authorities.

SAMPLE CRITERIA:
Inclusion criteria:
1.   Who were available at the time of data collection
2.   Who were willing to participate in this study
3.   Womens who were visiting in oncology and gynaecological OPD in SMVMCH
Exclusion criteria:
1.   who not willing to participate patient
2.   who are not willing to participate in this study
3.   women who were terminally ill.
4.   women who were on continuous opioid

IV.   RESULTS :

A study to assess the effectiveness of structured teaching program on prevention of breast cancer among women visiting oncology and gynaecological OPD in SMVMCH at Puducherry. The findings of the studyrevealedthatOutof30samples,Majority of the women had inadequate level of knowledge , 63.3 had adequate and 13.3 had excellent level of knowledge in pre test. Majority of the women 3.3 had inadequate level of knowledge, 30 had adequate and 66.7 had excellent level of knowledge in posttest. The mean and standard deviation of level of knowledge to assess the effectiveness of structured teaching program on prevention of breast cancer among women visiting oncology and gynaecological OPD in SMVMCH at Puducherry pre test12.27+20.23andposttest5.146+3.579.
SECTIONA:DESCRIPTION OF THE DEMOGRAPHIC VARIABLES

Table4.1 Frequency and percentage wise distribution of demographic variables (N=30)

S.NO	Demographicdata	Frequency(N)	Percentage(%)
1	**Ageinyears**		
	a)16-18years	0	0
	b)19-21years	5	16.7
	c)Above21years	25	83.3
2	**Educationalstatus**		
	a)Illiterate	11	36.7
	b)Primary	5	16.7
	c)Secondary	7	23.3
	d)Degree&above	7	23.3
3	**FamilyEducationalstatus**		
	a)Illiterate	12	40
	b)Primary	9	30
	c)Secondary	4	13.3
	d)Degree&above	5	16.7

4	**Incomeofthefamily permonth**		
	a)Rupees<5000/-	3	10
	b)Rupees5001–10000/-	9	30
	c)Rupees10001–15000/-	5	16.7
	d)Rupees16000orabove/-	13	43.3
5	**Maritalstatus**		
	a)Unmarried	24	80
	b)Married	6	20
	c)Single	0	0
6	**Typeofmarriage**		
	a)Consanguineousmarriage	9	30
	b)Nonconsanguineous marriage	21	70
7	**Religion**		
	a)Hindu	23	76.7
	b)Muslim	4	13.3
	c)Christian	3	10
	d)Others	0	0
8	**Typesoffamily**		
	a)Nuclearfamily	18	60
	b)Jointfamily	12	40
9	**Familyhistoryofbreastcancer**		
	a)Yes	6	20
	b)No	24	80
10	**Previousknowledgeregardingbreastcancer**		
	a)Yes	16	53.3
	b)No	14	46.7
11	**Personalhabits**		
	a)Tobocco	0	0
	b)Smoking	7	23.3
	c)Alcohol	1	23.3
	d)Nil	22	73.3
12	**Dietarypattern**		
	a)Vegetarian	3	10
	b)Nonvegetarian	1	3.3
	c)Both	26	86.7

Table 1 shows frequency and Percentage wise distribution of demographic variables among patients. Out of the 30patientswhowere interviewed, Majority of the patients 25(83.3%) of study population were in the age group are above21years. Majority of the patients, Educational status were illiterate 11(36.7%) Majority of the patients, family educational status were illiterate 12(40%)

Majority of the patients, Monthly income of the family per month were13 (43.3%)Rs.16000orabove/-.Majority of the patients were unmarried 24(80%). Majority of the patients were non consanguineous marriage 21(70%). Majority of the patients were hindureligion23 (76.7%). Majority of the patients were Nuclear family 18(60%). Majority of the patients were no family history of breast cancer 2(80%). Majority of the patients, yes previous knowledge regarding breastcancer16(53.3%). Majority of the patients were no thad Bad habits 22(73.3%). Majority of the patients were both dietary pattern 26(86.7%).

Section B: Assessment of the effectiveness of structured teaching program on prevention
Of breast cancer among women visiting oncology and gynaecological OPD in SMVMCH
At Puducherry.
Table 4.2 Assess the frequency and percentage on the level of knowledge on both pretest and posttest.(N-30)

S.NO	LEVEL OF KNOWLEDGE	Frequency(N) Pretest	Percentage(%)	Frequency(N) Posttest	Percentage(%)
1	Adequate	19	63.3	9	30
2	Excellent	4	13.3	20	66.7
3	Inadequate	7	23.3	1	3.3

The table2 shows that the frequency and percentage wise distribution for the level of knowledge on both pre test and post test. In pre test majority of patients having 19(63.3%) adequate level of knowledge, in post test majority of patients having 20(66.7) excellent level of knowledge.
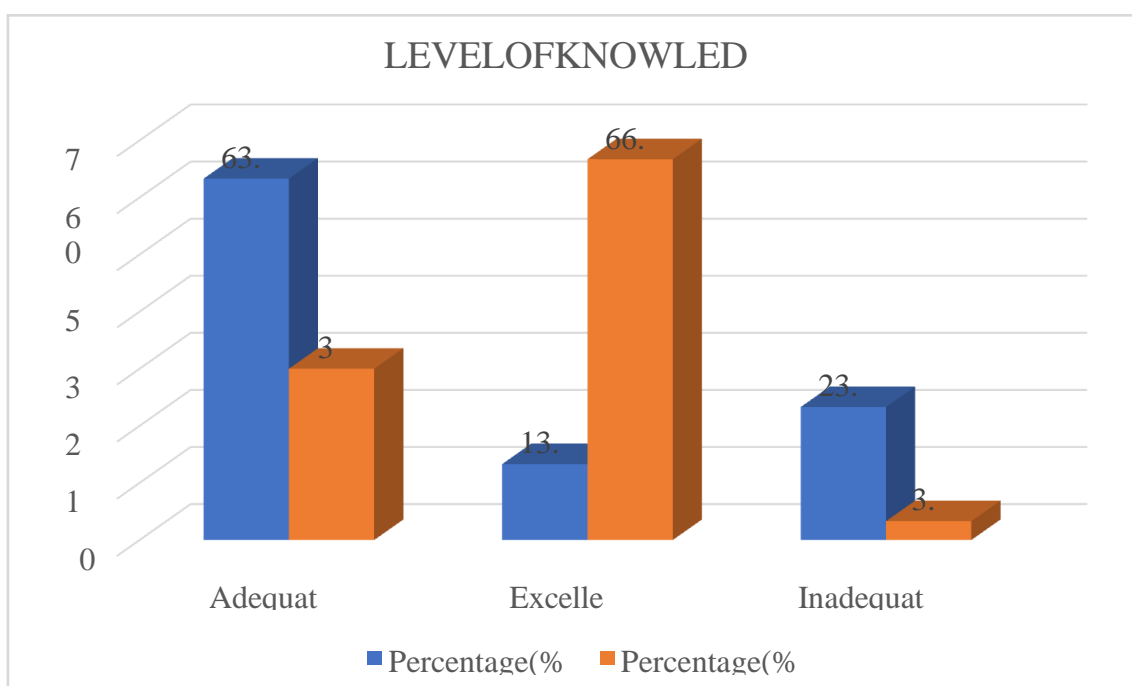

Fig 4.2representsthepercentage wise distribution on level of knowledge

Section C: Effectiveness of structured teaching program on prevention of breast cancer among women visiting oncology and gynaecological OPD in SMVMCH at Puducherry.
Table4.3 Mean and standard deviation for the effectiveness on level of knowledge.(N=30)

Sl.no	Effectiveness on level of knowlege	Mean	Standard deviation	P value
1.	Pretest	12.27	20.23	0.05
2.	Posttest	5.146	3.579	

Table4.3revealsthatmeanandstandarddeviationfortheeffectivenessonlevelofknowledge,inpretest12.27+20.23andp osttest5.146+3.579.Pvalue0.05ishighlysignificant.
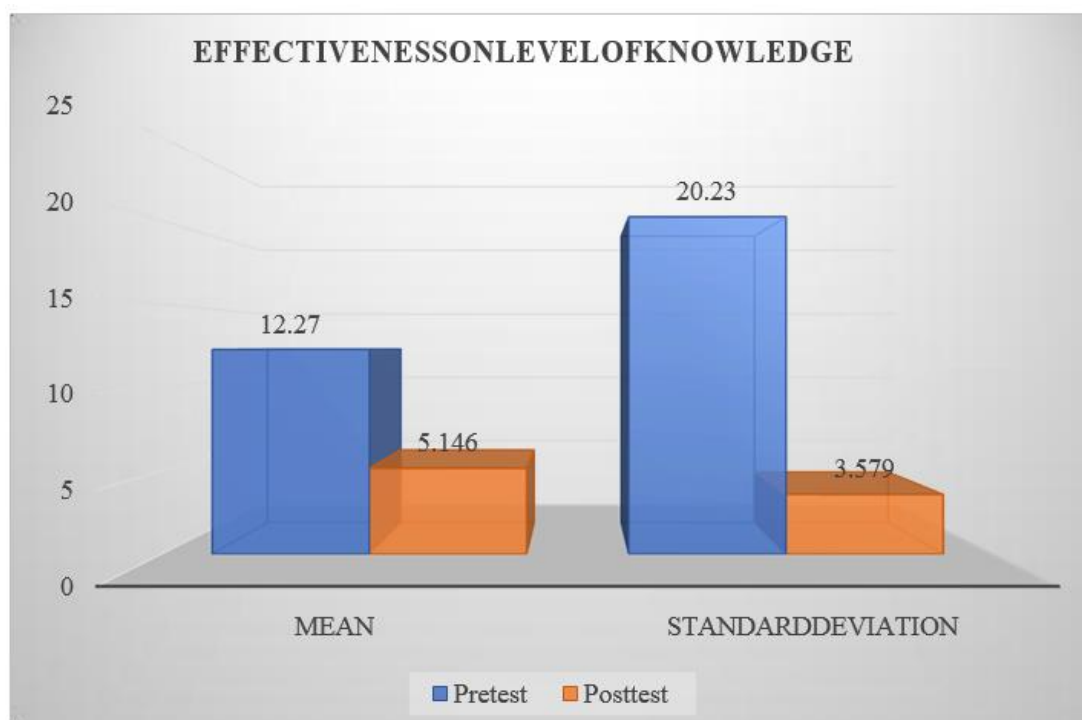
Fig4.3 represents the mean and standard deviation for the effectiveness on level of knowledge both pretest and post-test.

Section D: Association between the pretest and posttest on effectiveness of structured teaching program on prevention of breast cancer among women visiting oncology and gynaecological OPD in SMVMCH at Puducherry with their selected demographic variables.

Table 4.4 Association between the pretest and posttest on effectiveness on level of knowledge with their selected demographic variables.   (N=30)

S. no	Demoraphic data	Pretest						Posttest						X2 dfP value
		Adequate		Excellent		Inadequate		Adequate		Excellent		Inadequate		
		N	%	N	%	N	%	N	%	N	%	N	%	
1	**Age in years**													
	a)16-18years	0	0	0	0	0	0	0	0	0	0	0	0	**5.240 2 0.073*S**
	b)19-21years	2	6.7	1	3.3	2	6.7	1	3.3	3	10	1	3.3	
	c)Above21years	17	56.7	3	10	7	23.3	8	26.7	17	56.7	0	0	
2	**Educational status**													
	a)Illiterate	8	26.7	1	3.3	2	6.7	3	10	7	23.3	1	3.3	3.048 6 0.756 NS
	b)Primary	3	10	1	3.3	1	3.3	2	6.7	3	10	0	0	
	c)Secondary	5	16.7	1	3.3	1	3.3	3	10	4	13.3	0	0	
	d)Degree & above	3	10	1	3.3	3	10	1	3.3	6	20	0	0	
3	**Family Educational status**													
	a)Illiterate	8	26.7	2	6.7	2	6.7	5	16.7	6	20	1	3.3	3.268 6 0.775 NS
	b)Primary	6	20	1	3.3	2	6.7	2	6.7	7	23.3	0	0	
	c)Secondary	3	10	0	0	1	3.3	1	3.3	3	10	0	0	
	d)Degree & above	2	6.7	1	3.3	2	6.7	1	3.3	4	13.3	0	0	
4	**Income of the family per month**													
	a)Rupees<5000/-	2	6.7	1	3.3	0	0	1	3.3	2	6.7	0	0	5.896 6
	b)Rupees5001–10000/-	5	16.7	2	6.7	2	6.7	4	13.3	4	13.3	1	3.3	

	c)Rupees10001–15000/-	4	13.3	0	0	1	3.3	0	0	5	16.7	0	0	0.425 NS
	d)Rupees16000or above/-	8	26.7	1	3.3	4	13.3	4	13.3	9	30	0	0	
5	**Marital status**													
	a)Unmarried	15	50	3	10	6	20	8	26.7	16	53.3	0	0	4.4442
	b)Married	4	13.3	1	3.3	1	3.3	1	3.3	4	13.3	1	3.3	0.108 NS
	c)Single	0	0	0	0	0	0	0	0	0	0	0	0	
6	**Type of marriage**													
	a)Consanguineous marriage	7	23.3	1	3.3	1	3.3	1	3.3	7	23.3	1	3.3	4.1012
	b)Non consanguineous marriage	12	40	3	10	6	20	8	26.7	13	43.3	0	0	0.129 NS
7	**Religion**													
	a)Hindu	18	60	2	6.7	3	10	8	26.7	15	50	0	0	**10.1584**
	b)Muslim	0	0	2	6.7	2	6.7	1	3.3	3	10	0	0	**0.038*S**
	c)Christian	1	3.3	0	0	2	6.7	0	0	2	6.7	1	3.3	
	d)Others	0	0	0	0	0	0	0	0	0	0	0	0	
8	**Types of family**													
	a)Nuclear family	13	43.3	2	6.7	3	10	4	13.3	13	43.3	1	3.3	1.7822
	b)Joint family	6	20	2	6.7	4	13.3	5	16.7	7	23.3	0	0	0.410 NS
9	**Family history of breast cancer**													
	a)Yes	3	10	1	3.3	2	6.7	1	3.3	4	13.3	1	3.3	4.4442
	b)No	16	53.3	3	10	5	16.7	8	26.7	16	53.3	0	0	0.108
10	**Previous knowledge regarding breast cancer**													
	a)Yes	11	36.7	3	10	2	6.7	4	13.3	11	36.7	1	3.3	1.1832
	b)No	8	26.7	1	3.3	5	16.7	5	16.7	9	30	0	0	0.553 NS
11	**Personal habits**													
	a)Tobocco	0	0	0	0	0	0	0	0	0	0	0	0	0.9134
	b)Smoking	3	10	2	6.7	2	6.7	2	6.7	5	16.7	0	0	0.923 NS
	c)Alcohol	1	3.3	0	0	0	0	0	0	1	3.3	0	0	
	d)Nil	15	50	2	6.7	5	16.7	7	23.3	14	46.7	1	3.3	
12	**Dietary pattern**													
	a)Vegetarian	2	6.7	0	0	1	3.3	2	6.7	1	3.3	0	0	2.5734
	b)Non vegetarian	0	0	0	0	1	3.3	0	0	1	3.3	0	0	0.632 NS
	c)Both	17	56.7	4	13.3	5	16.7	7	23.3	18	60	1	3.3	

(*-p <0.05 significant,*-p <0.001highlysignificant,NS-Nonsignificant,S-significant)

The table 3 depicts that the demographic variable, *age in years and religion* had shown statistically significant association between the effectiveness of structured teaching program on prevention of breast cancer among women visiting oncology and gynaecological OPD in SMVMCH at Puducherry with selected demographic variables.

The other demographic variable had not shown statistically with selected demographic variables respectively.

V.   CONCLUSION:

A study to assess the effectiveness of structured teaching program on prevention of breast cancer among women visiting oncology and gynaecological OPD in SMVMCH at Puducherry The findings of the study revealed that Out of 30 samples, Majority of the women

23.3   had inadequate level of knowledge , 63.3 had adequate and 13.3 had excellent level of knowledge in pre test. Majority of the women 3.3 had inadequate level of knowledge , 30 had adequate and 66.7 had excellent level of knowledge in post test The mean and standard deviation of level of knowledge to assess the effectiveness of structured teaching program on prevention of breast cancer among women visiting oncology and gynaecological OPD in SMVMCH at Puducherry pretest 12.27+20.23 and post test 5.146+3.579.

NURSING IMPLICATIONS:

The study had implications for nursing practice, nursing education, nursing administration and nursing research.

NURSING PRACTICE:

The staff nurses must have some knowledge about prevention of breast cancer among women.

NURSING EDUCATION:

The nurse educated the clients about prevention of breast cancer in the hospital settings and handling of women. Provide a necessary health education, provide a activity therapy or routine works etc.,

NURSING RESEARCH:

Numbers of studies are being conducted to assess the effectiveness of structured teaching program on prevention of breast cancer among women visiting oncology and gynaecological OPD in SMVMCH at Puducherry. women are mostly inadequate in knowledge. Different studies have to be conducted further prevalence rate of prevention of breast cancer among women

NURSING ADMINISTRATION:

Nurse's administrators can make necessary steps to spread awareness about prevention of breast cancer. Nurse's administration can organize awareness program or some participation events about prevention of breast cancer at SMVMCH.

BIBLIOGRAPHY

BOOK REFERENCE:
[1].   BasavanthappaBT   .Nursing   Research, New   Delhi;   Jaypee   Brothers Medical Publishers(p)Ltd.
[2].   Brunner   and   Suddarth ,"Textbook   of   Medical   Surgical ",12th   edition   wolters   kluwers pvtltd,New Delhi.PgNo:1247-1249
[3].   Lewis,Colier, Hettkemper,Dirksen.MedicalSurgicalNursing.6thed.MosbyPublication.
[4].   JoyceMBlackEstherMataserinJacob.MedicalSurgicalNursing.ClinicalManagementforContinuityofcare.5thed.NewDelhi:Harcourt BraceandCompany.
[5].   Suresh K Sharma, Nursing Research and Statistics, Published by Elsevier, A Division Of Reed Elsevier India Private Limited.
[6].   Abdellah, G.Faye, Eugene Levene, Better Patient Care Through Nursing Research London:TheMac Million PublishingCompany..
[7].   KothariCR,Research methodology-methodsand techniques.2ndeditionNew.
[8].   LuckmannandSorensons.MedicalSurgicalNursing.4thed.   Philadelphia:W.BSoundersCompany;1997.

JOURNAL REFERENCE
[9].   Dr.Ilango S Parthasarathy "Predictors of breast cancer among women attending atertiary care hospital in Puducherry-A case-control study" *International Journal ofSurgery Science*2020;4(2):289-293www.surgeryscience.com
[10].   LynnSymondsLocally"advancedbreastcancer(LABC),Inflammatorybreastcancer,HER2negative,Neoadjuvant,Sunitinib,Paclitaxel,D oxorubicin,Cyclophosphamide"*ClinicalBreastCancer*,Vol.22,No.1,32–42©2021(http://creativecommons.org/licenses/by-nc-nd/4.0/)
[11].   Mina Shenouda "Effect of Tart Cherry on Aromatase Inhibitor-Induced Arthralgia(AIA) in Nonmetastatic Hormone-Positive Breast Cancer Patients" *Clinical BreastCancer,*   Vol.   22,   No.   1,   e30–e36   ©2021
[12].   (http://creativecommons.org/licenses/by/4.0/)
[13].   JunZhou"ManagementofBreastCancerPatientsDuringtheCoronavirusDisease2019Pandemic"*ClinicalBreastCancer*,Vol.22,No.1,e1– e7©   2021
[14].   https://doi.org/10.1016/j.clbc.2021.04.014
[15].   Sabine   R   "MINImal   vs.   MAXimal   Invasive   Axillary   Staging   and   Treatment AfterNeoadjuvantSystemicTherapyinNodePositiveBreastCancer"*ClinicalBreastCancer*,   Vol.   22,   No.   1, e59–e64   ©2021
[16].   (http://creativecommons.org/licenses/by/4.0/)
[17].   FengYe"The Influence of Hormone Therapy on secondary diabetesmellitusinBreast Cancer: A Meta-analysis" *Clinical Breast Cancer*, Vol. 22, No. 1, e48–e58 ©2021(http://creativecommons.org/licenses/by-nc-nd/4.0/)
[18].   FarkhondaAlizada"assessmentofIndianwoman'sknowledge,significaneandpreventive practices" *International Journal of Recent Scientific Research* Vol. 12,Issue,04 (B),pp.41496-41498,April,2021http://www.recentscientific.com
[19].   S.   Lavanya   "Prevalence   Of   Breast   Cancer   Among   High   Risk   Women   In SelectedRuralAreasAtPuducherry"*PONDICHERRYJOURNALOFNURSING*VOL2ISSUE3SEP -DEC 2018