

## **ASSESSMENT OF FACTORS MILITATING AGAINST PROPER TESTICULAR SELF-EXAMINATION (TSE) AMONG THE UNDERGRADUATE MALE NURSING SCIENCE STUDENTS OF EBONYI STATE UNIVERSITY.**

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### **Abstract**

The study assessed factors militating against proper testicular self-examination (TSE) among the undergraduate male nursing science students of Ebonyi State University. Convenience sampling technique was used to select 50 students of the department of nursing science from levels 100-500. Researcher's self-developed and self-administered questionnaire was the only instrument used for data collection. The results showed that majority of the respondents were aged 26-30years (40%), all were single (100%) and majority were in 500 level (30%). Further findings revealed that 70% respondents performed TSE but only 24% of them did it correctly (monthly) and only 80% followed the correct steps. Finally, cultural factors, shyness, stimulation of sexual desire, taboo, ignorance, dislike, forgetfulness and laziness were the main factors that militated against proper TSE adherence among these students. It was therefore; recommended that these factors militating against proper TSE compliance (adherence) should be addressed via printed media, instructional materials during lectures/seminar, health talks, outreach session and community campaigns. These will help detect early, any testicular abnormalities which will in turn promote men's fertility.

**Keywords:** Testicular, Testicular Self-Examination Adherence, And Undergraduate Nursing Science Students.

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### **Introduction**

The majority of testicular cancers or diseases that affect men's fertility can be averted by affordable cost-effective and personal (self) health surveillance intervention tool like the use of testicular self-examination (TSE). TSE is a simple and painless personal intervention procedure from the period of adolescence which is completed in three minutes to rule out testicular abnormalities like lumps, swelling and hence can be used for early detection of testicular cancer (Muliira, 2022). According to Onyiriuka & Imoebe (2020) it is a vital clinical tool done routinely (monthly) and systematically to examine the testes for young men from 15-35years to detect early testicular cancer (TC). Million-underwood and Sander (2019) stated that testicular cancer (TC) is the most common cancer in males from the age of 15-34years whereas Rosella (2024) attested that early detection and treatment of TC leads to cure. The symptoms are small, hard and painless testicular lumps which are early detectable. Also Royce

(2020) stated that TC is easily detected by TSE after a bath or shower when the skin of the scrotum is relaxed. TC is familiar but the major risk factor is undescended testes (Cryptorchidism) which is about 30-40% higher when compared with men with normal testes (Sandella, 2018).

In Nigeria, apart from reviewed literature by Uwa (Emeh) on the knowledge and performance of TSE among nursing science students that revealed high knowledge (90%) and performance (70%) with only 24% respondents practicing TSE monthly (at the recommended frequency) and 80% of them using the right steps; many surveys portrayed poor knowledge, awareness and performance of TSE among males (Huyghe et al., 2023; Ugboma & Aburoma, 2021). Even in developed countries like US and Europe, only 10.3% and 3.0% of males performed TSE at the recommended frequency and steps (monthly using inspection and feeling), Ward et al., 2024; Braga et al., 2021). There is no doubt that many factors are responsible for poor

knowledge and performance of TSE making it (TSE) improperly performed.

According to Onyiriuka & Imoebe (2020) these militating factors against proper performance of TSE among students are cultural factors and shyness. Atuhaire (2019) called these factors perceived risk-factors and barriers to TSE. Hence, the present study sought to assess the factors militating against proper TSE adherence among the undergraduate male nursing science students of Ebonyi State University.

### Methodology

The study used descriptive survey design. Fifty undergraduate male nursing science students of Ebonyi State were selected for the study by convenience sampling technique from the target population of 55 male students from 100-500 levels aged 16-40 years and all were single. The inclusion criteria were male undergraduate nursing science

students, levels 100-500 aged 16-40 years who were willing to participate in the study. The main instrument for data collection was a researcher's self-developed questionnaire drawn after the review of relevant related literature on TSE and testicular cancer (TC). A test of stability: test-retest was used to establish the reliability of the instrument which yielded a reliability coefficient of 0.84. Permission to conduct the study in the department of nursing science was gotten from the students and HOD of Nursing Science. Fifty copies of the questionnaire were administered to each of the students which were collected back after 25 minutes and a 100% retrieval rate was obtained. The responses to each question were tallied and coded manually based on four point likert scale, while descriptive statistics was used to analyze the data according to the set objectives of the study. The data were analyzed using the IBM statistical package for social sciences (SPSS) version 20 and all their variables were described in percentages.

### Results

**Table 1: Demographic data**

A	Age range (in years)	Frequency	Percentage
	16-20	5	10
	21-25	10	20
	26-30	20	40
	31-35	10	20
	36-40	50	100
B	Marital status		
	Single	50	100
	Married	-	-
C	Academic levels		
	100 level	10	20
	200 level	5	10
	300 level	12	24
	400 level	8	16
	500 level	15	30
	Total	50	100

**Table 2: Performance of TSE**

A	Performance of TSE (Do you perform TSE?)	Frequency	Percentage
	Yes	35	70
	No	15	30
B	Frequency (How often?)		
	When remembered	13	26
	Monthly	12	24
	Weekly	10	20
C	Steps used are inspection and feeling		
	Yes	40	80
	No	10	20

**Table 3: Factors militating against proper TSE adherence**

S/N	Items	SA (%)	A(%)	D(%)	SD(%)	Mean (SD)
1.	Cultural factors	25(50)	15(30)	10(20)	0(0)	3.3±0.8
2.	Shyness	10(20)	20(40)	20(40)	0(0)	2.8±0.7
3.	Stimulation of sexual desire	30(60)	15(30)	5(10)	0(0)	3.5±0.7
4.	Taboo	10(20)	10(20)	25(50)	5(10)	2.5±0.9
5.	Ignorance	0(0)	5(10)	30(60)	15(30)	1.8±0.6
6.	Dislike	0(0)	6(12)	24(48)	20(40)	1.7±0.7
7.	Forgetfulness	25(50)	20(40)	3(6)	2(4)	3.4±0.8
8.	Laziness	10(20)	25(50)	10(20)	5(10)	2.8±0.9

*Overall mean 2.725, approximately (2.73).*

All the 50 undergraduate male nursing science students that partook in the study were used for data analysis as they all filled the questionnaire completely and correctly which had 100% return rate.

Table 1 revealed students' demographic data. From the table, 20(40%) respondents (majority) were aged 26-30years while the least 5(10%) were either aged 16-20years or 36-40years. All the respondents (100%) were single while the majority

of the respondents 15(30%) were from 500 level and the least were 5(10%).

From table 2, 35(70%) respondents performed TSE while 15(30%) did not of the 35(70%) that performed TSE, 13(26%) did TSE when remembered, 12(24%) monthly while 10(20%) weekly and only 40(80%) followed the proper step of inspection and feeling while 10(20%) did not.

Table 3 showed the militating factors for proper

TSE adherence. Twenty five 25(50%) of the respondents strongly agreed that cultural factors is a militating factor against proper TSE, 15(30%) agreed, 10(20%) disagreed while nobody 0(0%) strongly disagreed.

The mean response for this factor was 3.3(0.8). 10(20%) respondents strongly agreed that shyness militated against proper TSE, 20(40%) agreed, another 20(40%) disagreed and nobody 0(0%) strongly disagreed. The mean response to this factor was 2.5(0.9). Nobody 0(0%) strongly agreed that ignorance is a barrier to proper TSE adherence, 5(10%) agreed, 30(60%) disagreed and 15(30%) strongly disagreed with a mean response to this factor as 1.8(0.6). Nobody 0(0%) strongly agreed that dislike is a hindrance to proper TSE, 6(12%) agreed, 24(48%) disagreed, 20(40%) strongly disagreed. The mean response to this factor was 1.7(0.7). 25(50%) respondents strongly agreed that forgetfulness is a limitation to proper TSE adherence. 20(40%) agreed, 3(6%) disagreed and 2(4%) strongly disagreed.

The mean response to this factor was 3.4(0.8). 10(20%) respondents strongly agreed that laziness is a constraint to proper TSE adherence, 25(50%) agreed, 10(20%) disagreed while 5(10%) strongly disagreed. The mean response to this factor was 2.8(0.9).

The factors with the mean values of equal to or greater than the decision rule of 2.5 include cultural factors (3.3), shyness (2.8), stimulation of sexual desire (3.5), taboo (2.5), forgetfulness(3.4) and laziness 2.8 where as those factors with mean values lesser than the decision rule were ignorance (1.8) and dislike (1.7). In the overall, the factors militating against proper TSE adherence have the mean value of 2.73.

## Discussion

Results in table 1, revealed the students' responses age, marital and academic level. 20(40%) respondents (majority) were aged 26-30years while the least 5(10%) were either aged 16-20years or 36-40years. All the respondents (100%) were single while the majority of the respondents 15(30%) were from 500 level and the least were 5(10%). This result is in agreement with the findings that, majority of the undergraduate male nursing science students aged 15-34years were

identified by the Atuhaire (2019); Onyiriuka & Imoebe (2020) and NCI (2020), when testicular cancer (most common cancer in males and fast-growing tumour whose prognosis depends largely on time of commencement of effective therapy. Equally Carol et al., (2022) and Atcar et al.,(2020) attested that testicular cancer (TC) is the most common form of cancer among young men aged 20-40years, approximately 2000 men are diagnosed with it (TC) yearly in UK and about half of the cases are in men less than 35years of age. This may be probably because of the report of various surveys that attested to the poor awareness, knowledge and performance of TSE among adolescents and young adult males (Huyghe et al., 2023; Ugboma et al., 2021; Ugboma & Aburoma, 2023; marty et al., 2018, berger et al., 2024, Roy, 2019, Mba, 2021.

Table 2 revealed that 70% respondents performed TSE and only 24% of them did it correctly (monthly) and also 80% used the correct steps of inspection and feeling. This incorrect performance of TSE was reported by wardle et al. (2022) whereby only 3% men performed TSE monthly in their study. This is in contract with the study of Onyiriuka & Imoebe (2020) who documented 10.3% and 3.0% performance in US and Europe respectively due to poor knowledge and low rating of the importance of TSE. This poor awareness, knowledge and improper performance of TSE was also attested to by Huyghe et al., 2023; Ugboma & Aburoma, 2023). Poor knowledge and poor performance of TSE can be attributed to the levity or forgetfulness placed on TSE generally by men. This is confirmed when Carlin (2021) in her reviewed literature stated that TSE was not mentioned among the physical assessment tests. This is worrisome as TSE helps to detect this fast-growing and most common tumor affecting young men within the age bracket of 15-35 years.

Table 3 show-cased the military factors for proper TSE. Two of the striking factors pointed out by these students include the first two factors of the study: Cultural factors and shyness. This may probably be due to the tender age of most of these students, 26-30years (40%) who might not have had much experience and exposure to events of life in terms of shyness. Whereas, with regards to cultural factors, the students might not have weighed the pros and cons of any inhibition placed



on them by their culture. This finding is in consonance with that of Onyiriuka & Imoebe (2020, Umehet *al* 2019, Lyigun et al., 2016 and Brayo et al., 2020) in their survey in Benin who reported that it is not in our culture to discuss freely issues pertaining to genitals in the public. Equally, that the students may be shy to admit that they do examination of their testes and these invariably lead to low knowledge and performance of TSE. Taboo, as a factor militating against proper TSE adherence may be linked to culture or TSE forbidden on the basis of moral, custom or religious grounds.

This study also revealed other factors responsible for improper TSE adherence as stimulation of sexual desire, ignorance, dislike, forgetfulness and laziness. In terms of TSE causing stimulation of sexual desire is not out of place for males because even coitus (sexual intercourse) is both psychic and physical – by touching and undergraduate male nursing science students of EBSU inclusive. Ignorance and dislike as militating factors for proper TSE adherence have low means and standard deviations of 1.8(0.6) and 1.8(0.7) respectively. This may be probably because these students are of nursing science who have been exposed to such instructional materials on TSE which may promote their knowledge and performance of TSE. This study equally showed forgetfulness and laziness as factors that limited proper TSE adherence. These two factors are common with people in their relationship with events of life likewise nursing science students especially, when these students are preoccupied with tight academic schedule and stress.

The undergraduate male nursing science students might be at tight corner with any event not stored in their subconscious mind like trivial issues and tend to forget them easily like TSE. Also laziness as a factor that militated against proper TSE adherence may arise when these students are fatigued from tedious academic activities and therefore, may like to resort to rest to conserve their energy instead of doing any other thing else, with TSE being the least that might come to their minds at this juncture. Apart from the first two reported factors, cultural factors and shyness, these factors, (Stimulation of sexual desire, taboo, ignorance, dislike, forgetfulness, laziness and any other factor) that might militate against proper TSE adherence are not reported by the authors in the reviewed related literature. Efforts should be made to identify those factors early, reduce them and proper education provided on them so that all males will be knowledgeable about TSE and perform it monthly as to help detect early any testicular cancer or diseases.

### Conclusion and Recommendations

From the result, it was concluded that the main factors that militated against proper TSE adherence are stimulation of sexual desire, forgetfulness, cultural factors, laziness, shyness and taboo but to a less extent, ignorance and dislike.

In line with these findings, it was recommended that despite these factors that militated against proper TSE adherence, all males should be taught the proper TSE and be encouraged to perform it monthly in order to rule out testicular cancer or diseases.

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