

The KAP Study on TSE in Salak Tinggi, Sepang, Selangor

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ABSTRACT

Although testicular cancer can be prevented by early detection, the cancer screening itself, or known as Testicular Self-Examination (TSE), is not widely known or performed among men in Malaysia.

A cross-sectional study was conducted with a combination of stratified and simple random sampling. The study was conducted via a face-to-face interview using a standardized questionnaire. The data was analyzed using SPSS (Statistical Package for Social Sciences) Version 20.0.

The awareness of TSE was low (23%) but among those who were aware, 78% have good knowledge regarding TSE. Most of them also showed good attitude towards TSE. The prevalence of practice among male respondents aged between 18-50 years were quite high (66.7%). Statistically there was no association between knowledge and practice status ($p>0.05$).

In conclusion, TSE awareness among the community was inadequate and not everyone who was aware of TSE has good knowledge, attitude, and practice regarding this self-examination. Therefore, interventions should be held to enhance the population's knowledge on TSE and this will indirectly increase the practice and attitude towards TSE.

Keyword: *Testicular Self-Examination,*

INTRODUCTION

Testicular cancer which is a tumour that shows excellent cure rates, represents between 1% and 1.5% of male neoplasm and the most common presenting symptom is the painless swelling in the testis. [1] Advances in multimodal treatment (surgery chemotherapy, and radiation) have made the

disease one of the most curable cancers, particularly when the diagnosis is made early in the clinical setting. The estimated 5 year mortality rate among all cancer patients is 4%. [2] Testicular self-examination (TSE) is an important clinical tool for early detection of testicular cancer. Most testicular cancer can be found in an early stage when TSE is practiced, resulting in good prognosis of the disease condition. [3]

A study conducted in the year 2007 [4] shows that the prevalence of the participants who had never done testicular self-examination is almost half of the sample (41%), meanwhile 5% of the respondents practices TSE once a month or more about 10 or 11 times per year. A research in 2008 indicates that while all had heard of testicular cancer, knowledge about testicular cancer and TSE practice among focus group participants was poor, very little was known. In addition, only two of the 12 men practiced TSE regularly. [5]

The prevalence of TSE is higher in those with a higher knowledge score. This suggests that education might improve self-detection and this is recognized in other studies. [6] Raising awareness, teaching the value of self-monitoring of one's body, and increasing comfort with interactions with the health care system may serve as a secondary benefit of TSE promotional efforts. [7]

Thus the aim of this study were to determine the knowledge and attitude status towards TSE among respondents, and also practice status of TSE among males aged 18-50 years in Kampung Salak Tinggi, Sepang.

MATERIALS AND METHODS

A cross-sectional study was done on the residents of Kampung Salak Tinggi, aged between 18-80 years old. The population sample consisted of a total of 268 houses. Stratified random sampling was conducted to choose the respondents' house, followed by simple random sampling to select the respondent within the household.

Data was collected through face to face interview using a set of validated questionnaire consists of 15 questions from three different sources, which were Knowledge ($\alpha=0.7$), [3] Attitude ($\alpha=0.82$) [7] and Practice ($\alpha=0.79$). [6]

Knowledge, attitude and practice responses were scored using Likert-type scale as follows: 0=strongly disagree, 1=disagree, 2=agree and 3=strongly agree. A total score was then computed according to each domain, namely knowledge, attitude and practice, by summing individual scores. Knowledge and attitude domains were classified as good (total score within 11-15) and poor (total score within 0-10). Practice domain was classified as yes (total score within 11-15) and no (total score within 0-10). Fisher's exact test was used to test the association between knowledge status and practice status of TSE. The level of significance was set at $p < 0.05$ and confidence level at 95%.

RESULT

A total of 139 subjects participated in this study, which gave a response rate of 91.4%. The mean age of the respondents was 42.5. Majority of the respondents were women (60.4%), married (79.1%), work in private sector (16.5%) and have secondary education (46.8%).

Table 1: Awareness Status of TSE among respondents

Awareness status	Frequency	Percentage
Yes	32	23.0
No	107	77.0
Total	139	100

Only 23% out the total respondents had awareness on testicular self-examination (Table 1). However, among those who were aware of TSE, 78.1% had good knowledge status (Table 2).

Table 2: Status of TSE Knowledge among respondents who are aware of TSE

Knowledge status	Frequency	Percentage
Good	25	78.1
Poor	7	21.9
Total	32	100

It seems that good knowledge regarding TSE were mostly shown among males (64.0%), age group between 21 to 30 years old (44%) and married (80.0%) (Table 3).

Table 3: Knowledge Status of TSE by Socio-demographic

Socio-demography	Knowledge Status	
	Good n (%)	Poor n (%)
Gender		
Male	16 (64.0)	3 (42.9)
Female	9 (36.0)	4 (57.1)
Age		
18 - 20	0	0
21 - 30	11 (44.0)	2 (28.6)
31 - 40	1 (4.0)	2 (28.6)
41 - 50	7 (28.0)	0
51 - 60	3 (12.0)	2 (28.6)
61 and above	3 (12.0)	1 (14.3)
Marital Status		
Single	4 (16.0)	1 (14.3)
Married	20 (80.0)	6 (85.7)
Divorcee /Widow	1 (4.0)	0
Occupation		
Unemployed	7 (28.0)	0
Government Sector	4 (16.0)	0
Private Sector	4 (16.0)	1 (14.3)
Pensioner	4 (16.0)	1 (14.3)
Self-employed	5 (20.0)	2 (28.6)
Housewife	1 (4.0)	3 (42.9)
Education		
No formal education	1(4.0)	0
Primary education	0	1 (14.3)
Secondary education	12 (48)	1 (14.3)
Tertiary education	12 (48)	5 (71.4)
TOTAL	25 (100)	7 (100)

Table 4: Attitude Barriers encountered by the respondent (N=32)

Statements	Agree n (%)	Disagree n (%)
Doing testicular self-examination seems funny.	11 (34.4)	21 (65.6)
Doing testicular self-examination will take too much time	7 (21.9)	25 (78.1)
Doing testicular self-examination is unpleasant.	8 (25.0)	24 (75.0)
Testicular self-examination is embarrassing	8 (25.0)	24 (75.0)
Performing TSE would cost me a significant amount of money and time.	3 (9.4)	29 (90.6)

With regards to attitude towards TSE as depicted in Table 4, most of the respondents disagreed that TSE takes too much time (78.1%) or is costly (90.6%). They also equally disagreed that performing TSE is unpleasant and embarrassing (75%). However, 34.4% seemed to perceive TSE as funny.

Table 5: Prevalence of TSE Practice among male respondents aged 18-50 years

Practice status	Frequency	Percentage
Yes	24	66.7
No	12	33.3
Total	36	100

As shown in Table 5, the prevalence of practice among male respondents aged between 18 to 50 years in Kampung Salak Tinggi was 66.7%.

Table 6: Prevalence of practice of TSE according to Socio-demographic Data

Socio-demography	Practice Status	
	Good n (%)	Poor n (%)
Age		
18 - 20	1(4.2)	0
21 - 30	18 (75.0)	9 (75.0)
31 - 40	3 (12.5)	1 (8.3)
41 - 50	2 (8.3)	2 (16.7)
Marital Status		
Single	10 (41.7)	6 (50.0)
Married	13 (54.2)	6 (50.0)
Divorcee /Widow	1 (4.2)	0
Occupation		
Unemployed	4 (16.7)	3 (25.0)
Government Sector	5 (20.8)	1 (8.3)
Private Sector	10 (41.7)	5 (41.7)
Pensioner	0	1 (8.3)
Self-employed	5 (20.8)	2 (16.7)
Education		
None	1(4.2)	0
Primary	0	0
Secondary	12 (50.0)	4 (33.3)
Tertiary	11 (45.8)	8 (66.7)
Total	24(100)	12(100)

Table 6 shows respondents aged between 21 to 30 years old have the highest prevalence of TSE practice (75.0%), followed by respondents who are 31-40 years old (12.5%). Married men and respondents who were working in private sector also have higher prevalence (54.2%, 41.7%, respectively). Among those who practice TSE, 50 % of them have secondary education.

Table 7: Association between Knowledge and Practice Status of TSE among male respondents aged 18-50 years

Knowledge Status	Practices Status		Total n (%)	P-value (Fisher test)
	Yes n (%)	No n (%)		
Good	9 (75)	3 (25)	12 (100)	0.505
Poor	1 (50)	1 (50)	2 (100)	

Seventy five percent of respondents with good knowledge status aged between 18-50 years old reported that they perform TSE as shown in Table 7. However, statistically there was no significant ($p>0.05$) in association between knowledge status and practice status of TSE among male respondents in Kg Salak Tinggi.

DISCUSSION

The data in this study suggested that most of the respondents have never heard of testicular self-examination (TSE). Similar low level of awareness has been separately reported in several studies conducted in developed countries with highly literate populations. [2,8,9] It also shows a knowledge deficit, as those who have heard of TSE did not equate to good knowledge, practice or even good attitude regarding TSE. Of the few who claimed to have heard of TSE, most have good knowledge and good attitude regarding it. The unawareness about the importance of the disease and lack of knowledge among young men about the fact that early diagnosis significantly decreases mortality risk and the need for invasive treatment are common problems. [10] The poor knowledge observed in this study might also be explained by cultural factors, as it is not in our culture to discuss freely issues involving the genitals in the public, as pointed out by Onyiriuka and Imoebé. [11]

The study also showed higher amount of good knowledge and attitude regarding TSE were found among female compared to poor knowledge and attitude. This is a good sign as female partners are encouraged to take a role as motivators of health-seeking behavior in their partners. [12]

Good TSE practices were shown to be higher among those with a higher knowledge regarding TSE. This shows that education may improve self-examination

rates, as suggested by McCullagh.^[13] Kennett and friends support this by indicating that nearly 60% of their sample reported that they did not perform TSE because they did not know what to look for.^[14] Due to limited knowledge of what they are actually searching for when examining their testicles, males may be dissuaded from performing the behaviour despite the known benefits. This indicates that teaching proper technique is paramount in promotional campaigns. Thus, efforts should be made to develop educational programmes that can increase knowledge related to testicular self-examination, its practices and its benefits.^[15]

Similarly, good TSE practices were shown to be higher among those with good attitude regarding TSE. This indicates that men's poor attitude towards TSE serves as a barrier to performing it. This statement is supported by Muliira and friends who indicate that those who perceived TSE as unimportant, time consuming, embarrassing, or painful were more likely to refrain from performing it.^[16] Ugboma & Aburoma also suggest that fear of detecting a lump and anxiety from false-positive results played a key role in the participants' refusal to perform TSE.^[3]

In Malaysia, reproductive organs are not so openly talked about in the public due to cultural and religious reasons. These limitations could have affected the respondents' answers.

CONCLUSION

The TSE awareness among the community in Kg Salak Tinggi is inadequate. Besides that, not everyone who is aware of TSE has good knowledge, attitude, and practice regarding this self-examination. This show of knowledge deficit is alarming in developing countries, such as ourselves. Therefore, interventions should be held to enhance the population's knowledge on TSE. This will indirectly increase the practice and attitude towards TSE.

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