ORIGINAL ARTICLE

Knowledge, attitude and practice among healthcare staffs in the Emergency Department, Hospital Universiti Sains Malaysia towards Rape Victims In One Stop Crisis Centre (OSCC)

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SUMMARY

Introduction: Aimed at providing integrated multi-level crisis intervention to women experiencing violence such as rape, One Stop Crisis Centre (OSCC) in Malaysia is often located in the emergency department. Hence, it is imperative that emergency department healthcare providers possess adequate knowledge and acceptable attitudes and practices to ensure the smooth running of an efficient OSCC work process.

Method: To study the knowledge, attitude and practice of rape management in OSCC among four groups of healthcare providers in the emergency department [i.e., the emergency medicine doctors (EDs), the staff nurses (SNs), the medical assistants (MAs) and the hospital attendants (HAs)], a self-administered questionnaire in the form of Likert scale was conducted from January to October 2013. Correct or favourable responses were scored appropriately.

Results: Out of the 159 participants invited, 110 responded (69.2% response rate). As all data sets in the Knowledge, Attitude and Practice sections are non-parametric, Kruskal-Wallis test was performed. Homogeneity of variance was verified using non-parametric Levene test. In all three sections, there are statistically significant differences in scores obtained among the four groups of healthcare providers with $H(3) = 16.0$, $p<0.001$ for Knowledge, $H(3) = 27.1$, $p<0.001$ for Attitude and $H(3) = 15.8$, $p<0.001$ for Practice sections. Generally, the SNs obtained the highest mean rank score in the knowledge and practice sections but the EDs obtained the highest mean rank score in the attitude section. Some of the responses implied that our healthcare providers have the victim-blaming tendency that can negatively impact the victims.

Conclusion: Healthcare providers must not only have adequate knowledge but also the non-judgemental attitude towards victims in OSCC.

KEY WORDS:
One stop crisis centre, rape, rape myths, secondary victimization

INTRODUCTION

One Stop Crisis Centre (OSCC) is an integrated healthcare model that aims to provide comprehensive care to women experiencing physical, emotional and sexual violence.[1,2,3] The multi-level crisis interventions provided in OSCC include identification, diagnostic and therapeutic care, counselling and emotional support, legal support, medical reporting as well as provision of temporary shelter.[1,3] In Malaysia, the first OSCC was established in 1994 in the Emergency Department in General Hospital Kuala Lumpur, and by 1996, the Ministry of Health Malaysia had directed every state hospital to set up OSCC in their Emergency Departments.[1,2] And with this first initiation of OSCC as early as in 1994,[1] Malaysia has often been lauded as the nation at the forefront of the development of OSCC; and its model has been replicated by a number of other Asian countries.[1,2] Yet, as demonstrated in recent surveys, the sustainability of this model is dependent on a number of key factors.[1,3] For example, it has been shown that enthusiastic efforts by health providers to give their best care to victims in OSCC are often hampered by poor organizational, infrastructure, trained personnel as well as monetary support.[1] The view that OSCC cases are of lower priority as compared to other patients with multiple medical pathologies[1] as well as the lack of a strong leadership from the top are also among contributory negative factors that need to be addressed.[1] Besides, it has also been shown that without forging a continually strong partnership between the hospitals and the non-governmental organizations, holistic care to the victim via OSCC is untenable.[2]

Emergency department is the appropriate location for the OSCC set up because the emergency department is open 24 hours a day for 7 days a week. Therefore, as most OSCCs are located in the emergency departments, it is imperative that emergency department staffs possess adequate knowledge, compassionate attitude and good OSCC practices in order to provide a comprehensive care to a traumatised victim especially a rape victim, as rape is a common type of OSCC cases.[3] An organized and efficient management in OSCC could help to minimise the traumatic impact faced by rape and other sexual assault victims. Poor OSCC support, on the other hand, can adversely affect the victims medically, psychologically, socially and legally. For example, poor social

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support rendered by the OSCC team can lead to poor coping mechanism, depression and worst of all, suicide attempts by the victims.

MATERIALS AND METHODS

It is with these objectives in mind that a cross-sectional, self-reporting questionnaire study was conducted from January to October 2013 to assess the knowledge, attitudes and practice on the care of OSCC patients among the various groups of healthcare providers working in our emergency department, Hospital Universiti Sains Malaysia (HUSM). All healthcare providers in the emergency department who are directly involved in the caring of OSCC patients (from triaging, examining, managing as well as transporting these patients) are invited to participate except for emergency medicine lecturers or specialists. The emergency medicine lecturers or specialists were excluded from the study because they are the experts and resource persons in the management of OSCC cases in emergency departments. Non-clinical or clerical staffs working in the administrative office of emergency department were excluded from this study. Healthcare providers working in clinical settings other than the emergency department were also excluded. For the purpose of this study, these participants were divided into four groups – the emergency medicine doctors (ED), the staff nurses (SN), the medical assistants (MA) and the hospital attendants (HA). Ethical approval was obtained from our institutional research and ethics board.

HUSM, a 723-bedded hospital, is one of the two referral centres for OSCC cases in the northern state of Kelantan in Peninsular Malaysia. The OSCC in HUSM is located within the emergency department. A doctor and staff nurse from the emergency department of HUSM is usually assigned to handle cases in OSCC at all time.

As there was no prior set of validated questionnaire to evaluate the knowledge, attitude and practice of rape management in Malaysian emergency department, a set of questionnaire was first drafted based on review of journal articles, standard emergency medicine textbooks, policy statements as well as Malaysian legal documents. To ensure adequate comprehension by the staff nurses, medical assistants and hospital attendants who may not be fluent in English language, this initial set of questionnaire was originally drafted in the Malay language. Translation into English language was done. This initial set of questionnaire was then handed to a panel of 4 experts consisting of emergency medicine specialists for non-statistical face and content validation. Specifically for content validity, the emergency medicine specialists were asked whether the questions in the questionnaire are representative and relevant in relation the intent of the questions, i.e., to evaluate the knowledge, attitude and practice of management of rape cases in emergency department. For face validity, the emergency medicine specialists were specifically asked whether the appearance of the questions are well-constructed, including the syntax, grammar, spelling and the comprehensibility of the sentences. Once feedback from these emergency medicine specialists were received, amendments were made where appropriate and the final set of the questionnaire was produced. The edited questionnaire was then sent to 15 senior medical officers for a pilot study to determine the internal consistency of the various sections. The Cronbach's alpha for each section was determined: 0.67 (for Knowledge section), 0.73 (for Attitude section) and 0.87 (for Practice section). Two items from the Knowledge section were dropped from the questionnaire due to poor corrected item-total correlation and as well as the improvement of Cronbach alpha value by removing these items. No items were dropped from the Attitude and Practice sections.

In the final version of the questionnaire, the Knowledge section consists of 11 items (Table II lists the item questions asked and their correct answers). Each item has three options, viz., "Don't Know", "False" and "True". Each item answered correctly is given a score of 1 point. Each incorrect answer is not given any score. Additionally, in the event that the participant did not answer the item (leave blank), no mark is awarded as well.

The Attitude section consists of 14 items. For items 1 and 2, a favourable response is defined as an 'Agree' response whereas a 'Disagree' or 'Not sure' response is defined as an unfavourable attitude. For all other items (except items 1 and 2), a favourable response is defined as 'Disagree', whereas an 'Agree' or 'Not sure' response is defined as an unfavourable attitude. A favourable response is given a score of 1 point. An unfavourable response is not given any score.

The Practice section consists of 18 questions. Each item has three options, viz., 'Never', 'Sometimes' and 'Always'. A favourable response is defined as a 'Sometimes' or 'Always' response to an acceptable practice or a 'Never' response to an unacceptable practice. On the contrary, an unfavourable response is defined as a 'Sometimes' or 'Always' response to an unacceptable practice or a 'Never' answer to an acceptable practice. A favourable response is given a score of 1 point. An unfavourable response is not given any score.

One of the authors handed out the self-administered questionnaire to participants who consented to the study. The responses were collected back by this author within the same working shift. Participants were told that this is an anonymous survey and they were not to reveal their names or staff identification number. They were also told that they could opt out of the study if they wished to. Data analyses were conducted using the Statistical Package for the Social Sciences (SPSS) software version 20.

RESULTS

A total of 159 healthcare providers in emergency department were invited to participate and out of these 159 providers, 110 responded (69.2% response rate). Half of them were males and another half, female participants. None of the participants who had initially consented to participate dropped out. Majority of our participants (50 out of 110 or 45.4%) are SNs, 32 or 29.1% are EDs, 10 or 9.1% are MAs and 18 or 16.4% of them are HAs. Most of the participants in all categories of positions in emergency department have more than two years of experience working in the emergency department of HUSM. However, except for the category of

Table I: Socio-demographics characteristic of participants

	Position in Emergency Department			
	EDs	MAs	SNs	HAs
Mean age in years (Standard Deviation, S.D.)	31.84 (S.D. 2.08)	34.80 (S.D. 5.67)	34.12 (S.D. 9.47)	39.00 (S.D. 9.65)
Gender				
Male	17 (53.1%)	10 (100%)	9 (18.0%)	13 (72.2%)
Female	15 (46.9%)	0	41 (82.0%)	5 (27.8%)
Ethnic groups				
Malay	28 (87.5%)	8 (80.0%)	42 (84.0%)	15 (83.3%)
Chinese	4 (12.5%)	2 (20.0%)	8 (16.0%)	3 (16.7%)
Years in service in emergency department				
2 years or less	8 (25.0%)	2 (20.0%)	14 (28.0%)	4 (22.2%)
More than 2 years	24 (75.0%)	8 (80.0%)	36 (72.0%)	14 (77.8%)
Number of courses/seminars/training sessions in OSCC management attended				
Never	16 (50.0%)	9 (90.0%)	20 (40.0%)	17 (94.4%)
Once	14 (43.8%)	0	14 (28.0%)	1 (5.6%)
More than once	2 (3.2%)	1 (10.0%)	16 (32.0%)	0

Note: EDs refers to Emergency Doctors; MAs refers to Medical Assistances, SNs refers to Staff Nurses, HAs refers to Hospital Attendants.

Table II: Responses To Questions on Knowledge of Rape management in OSCC

KNOWLEDGE	Response	Position in Emergency Department			
		EDs n=32 (%)	MAs n=10 (%)	SNs n=50 (%)	HAs n=18 (%)
1. OSCC offers service to all rape victims including both adult and children victims. (Correct answer: True)	Incorrect	1 (3.1%)	1 (10.0%)	2 (4.0%)	1 (5.6%)
	Correct	31 (96.9%)	9 (90.0%)	48 (96.0%)	17 (94.4%)
2. OSCC also offers service for other form of domestic violence or abuse involving adult and children victims. (Correct answer: True)	Incorrect	1 (3.1%)	2 (20.0%)	2 (4.0%)	1 (5.6%)
	Correct	31 (96.9%)	8 (80.0%)	48 (96.0%)	17 (94.4%)
3. OSCC does not offer service to sodomy victims including both adult and children victims. (Correct answer: False)	Incorrect	1 (3.1%)	2 (20.0%)	11 (22.0%)	12 (66.7%)
	Correct	31 (96.9%)	8 (80.0%)	39 (78.0%)	6 (33.3%)
4. OSCC opens only during office hours (8 am to 5 pm). (Correct answer: False)	Incorrect	1 (3.1%)	1 (10.0%)	4 (8.0%)	6 (33.3%)
	Correct	31 (96.9%)	9 (90.0%)	46 (92.0%)	12 (66.7%)
5. OSCC should be located far and hidden away from other waiting patients in emergency department. (Correct answer: True)	Incorrect	1 (3.1%)	2 (20.0%)	2 (4.0%)	2 (11.1%)
	Correct	31 (96.9%)	8 (80.0%)	48 (96.0%)	16 (88.9%)
6. OSCC does not need to be equipped with examination bed or toilet. (Correct answer: False)	Incorrect	3 (9.4%)	2 (20.0%)	2 (4.0%)	7 (38.9%)
	Correct	29 (90.6%)	8 (80.0%)	48 (96.0%)	11 (61.1%)
7. Protocol or guideline regarding the management of rape survivor is available at OSCC. (Correct answer: True)	Incorrect	4 (12.5%)	1 (10.0%)	1 (2.0%)	1 (5.6%)
	Correct	28 (87.5%)	9 (90.0%)	49 (98.0%)	17 (94.4%)
8. Consent form for forensic clinical examination is not available in the OSCC room as the form is provided by the police department (Correct answer: False)	Incorrect	9 (28.1%)	4 (40.0%)	28 (56.0%)	10 (55.6%)
	Correct	23 (71.9%)	6 (60.0%)	22 (44.0%)	8 (44.4%)
9. Checklist for forensic specimen collection is available OSCC in room. (Correct answer: True)	Incorrect	2 (6.3%)	3 (30.0%)	16 (32.0%)	4 (22.2%)
	Correct	30 (93.8%)	7 (70.0%)	34 (68.0%)	14 (77.8%)
10. A record book or file to document rape victim's details is available in the OSCC room. (Correct answer: True)	Incorrect	4 (12.5%)	3 (30.0%)	2 (4.0%)	5 (27.8%)
	Correct	28 (87.5%)	7 (70.0%)	48 (96.0%)	13 (72.2%)
11. A record book or file to record all forensic specimen collections is available in the OSCC room. (Correct answer: True)	Incorrect	6 (18.8%)	4 (40.0%)	2 (4.0%)	5 (27.8%)
	Correct	26 (81.3%)	6 (60.0%)	48 (96.0%)	13 (72.2%)

Note: EDs refers to Emergency Doctors; MAs refers to Medical Assistances, SNs refers to Staff Nurses, HAs refers to Hospital Attendants.

Table III: Responses To Questions On Attitude Towards Rape Victims

ATTITUDE	Response	Position in Emergency Department			
		EDs n=32 (%)	MAs n=10 (%)	SNs n=50 (%)	HAs n=18 (%)
1. A rape case is a serious case and is in need of urgent care.	Favourable	31 (96.9%)	9 (90.%)	44 (88.0%)	12 (66.7%)
	Unfavourable	1 (3.1%)	1 (10.0%)	6 (12.0%)	6 (33.3%)
2. A case of a sexually abused child is a serious case and is in need of urgent care.	Favourable	32 (100.0%)	10 (100.0%)	50 (100%)	13 (72.2%)
	Unfavourable	0	0	0	5 (27.8%)
3. A rape victim should be triaged green and wait for their turn to be seen by doctors just like any other patients in ED.	Favourable	29 (90.6%)	7 (70.0%)	44 (88.0%)	14 (77.8%)
	Unfavourable	3 (9.4%)	3 (30.0%)	6 (12.0%)	4 (22.2%)
4. A non-virgin rape victim sustains a lesser traumatic impact as compared to a virgin rape victim.	Favourable	32 (87.5%)	4 (40.0%)	35 (70.0%)	7 (38.9%)
	Unfavourable	4 (12.5%)	6 (60.0%)	15 (30.0%)	11 (61.1%)
5. A woman should be solely responsible for preventing rape from happening to her	Favourable	15 (46.9%)	1 (10.0%)	7 (14.0%)	3 (16.7%)
	Unfavourable	17 (53.1%)	9 (90.0%)	43 (86.0%)	15 (83.3%)
6. A woman who walks alone at night, especially in unsafe places, is inviting rape attack.	Favourable	6 (18.8%)	0	0	0
	Unfavourable	26 (81.3%)	10 (100.0%)	50 (100.0%)	18 (100.0%)
7. A woman with provocative dress and gestures means she is provoking rape	Favourable	20 (62.5%)	2 (20.0%)	22 (44.0%)	6 (33.3%)
	Unfavourable	12 (37.5%)	8 (80.0%)	28 (56.0%)	12 (66.7%)
8. A woman who is drunk and raped, does not deserve to be treated at the OSCC	Favourable	25 (78.1%)	6 (60.0%)	35 (70.0%)	8 (44.4%)
	Unfavourable	7 (21.9%)	4 (40.0%)	15 (30.0%)	10 (55.6%)
9. As most rape cases involve violence and physical assault, the rape victims should either have wounds, bruises or swelling on their bodies.	Favourable	21 (65.6%)	1 (10%)	22 (44.0%)	5 (27.8%)
	Unfavourable	11 (34.4%)	9 (90.0%)	28 (56.0%)	13 (72.2%)
10. During rape, a woman should do everything she can to resist. Those who do not resist imply that they secretly desire to have sexual intercourse with the perpetrators.	Favourable	26 (81.3%)	3 (30.0%)	18 (36.0%)	7 (38.9%)
	Unfavourable	6 (18.8%)	7 (70.0%)	32 (64.0%)	11 (61.1%)
11. All rape victims appear hysterical, shaky and distraught.	Favourable	18 (56.3%)	0	9 (18.0%)	6 (33.3%)
	Unfavourable	14 (43.8%)	10 (100.0%)	41 (82.0%)	12 (66.7%)
12. A woman who comes to the OSCC could possibly be lying in order to trap the man accused of raping her.	Favourable	10 (31.3%)	1 (10.0%)	4 (28.0%)	7 (38.9%)
	Unfavourable	22 (68.8%)	9 (90.0%)	36 (72.0%)	11 (61.1%)
13. A rape victim should feel guilty, shameful and blame herself for not preventing the act from happening.	Favourable	24 (75.0%)	6 (60.0%)	34 (68.0%)	10 (56.6%)
	Unfavourable	8 (25.0%)	4 (40.0%)	16 (32.0%)	8 (44.4%)
14. A rape victim would only bring shame to her family should she report the incident to the police	Favourable	29 (90.6%)	8 (80.0%)	42 (84.0%)	10 (55.6%)
	Unfavourable	3 (9.4%)	2 (20.0%)	8 (16.0%)	8 (44.4%)

Note: EDs refers to Emergency Doctors; MAs refers to Medical Assistances, SNs refers to Staff Nurses, HAs refers to Hospital Attendants. For items 1 and 2, a favourable response is defined as an 'Agree' response whereas a 'Disagree' or 'Not sure' response is defined as an unfavourable attitude. For all other items (except items 1 and 2), a favourable response is defined as 'Disagree', whereas an 'Agree' or 'Not sure' response is defined as an unfavourable attitude.

SNs, more than half of the participants have never attended any courses or seminars or training sessions in OSCC management throughout their years of working in the emergency department of HUSM. The social-demographic characteristics of our participants are shown in Table I. The detailed responses to all questions in the three sections are given Tables II – IV.

In all three sections (Knowledge, Attitude and Practice), there is at least one group of participants with skewed and kurtotic distributions (z-values beyond +/- 1.96) and their Shapiro-Wilk p-values <0.05. Homogeneity of variance is verified with the non-parametric Levene tests of 0.27, 0.87 and 0.11 for the Knowledge, Attitude and Practice sections respectively. In view of the non-parametric distribution of the data, Kruskal-Willis test were performed for all three sections.

In the Knowledge section, the Kruskal-Wallis test (corrected for tied ranks) conducted to evaluate the differences of scores among the four groups of participants (SNs, EDs, MAs and HAs) shows that there is a statistically significant difference of scores with $H(3) = 16.0$, $n = 110$, $p<0.001$. Specifically, post-hoc analysis using a series of Kruskal-Wallis tests to evaluate pairwise differences among the groups show that there is a statistically significant difference of scores (adjusted p-value <0.001) between the SNs and HAs with their mean rank of 65.8 and 35.1 respectively. The mean ranks of EDs and MAs are 55.3 and 41.2 respectively. No other statistically significant differences in other pairwise comparisons.

In the Attitude section, the Kruskal-Wallis test (corrected for tied ranks) conducted to evaluate the differences of scores among the four groups of participants (SNs, EDs, MAs and HAs) shows that there is a statistically significant difference of scores with $H(3) = 27.1$, $n = 110$, $p<0.001$. Specifically, post-hoc analysis using a series of Kruskal-Wallis tests to evaluate pairwise differences among the groups show that there is a statistically significant difference of scores in three pairwise comparisons. In the comparison between EDs and MAs, there is a statistically difference of score, (adjusted p-value <0.001) with their mean ranks of 77.5 (median) and 34.0 (median) respectively. In the comparison between EDs and HAs, there

Table IV: Responses To Questions On Practice of Rape Management in OSCC

PRACTICE	Response	Position in Emergency Department			
		EDs n=32 (%)	MAs n=10 (%)	SNs n=50 (%)	HAs n=18 (%)
1. Have you ever divulged confidential information about any of the rape cases you saw in the OSCC to your colleague or family?	Favourable	12 (37.5%)	8 (80.0%)	29 (58.0%)	14 (77.8%)
	Unfavourable	20 (62.5%)	2 (20.0%)	21 (42.0%)	4 (22.2%)
2. Have you ever triaged away any rape victims who come to OSCC without police report and told them to lodge police report themselves before coming to the OSCC?	Favourable	25 (78.1%)	10 (100.0%)	44 (88.0%)	15 (83.3%)
	Unfavourable	7 (21.9%)	0	6 (12.0%)	3 (16.7%)
3. Have you ever let any rape victims waited at the waiting area together with other stable patients in the A&E?	Favourable	29 (90.6%)	10 (100.0%)	49 (98.0%)	17 (94.4%)
	Unfavourable	3 (9.4%)	0	1 (2.0%)	1 (5.6%)
4. Do you ensure that all rape victims who are hemodynamically stable to be directed straight to the OSCC room?	Favourable	29 (90.6%)	8 (80.0%)	46 (92.0%)	15 (83.3%)
	Unfavourable	3 (9.4%)	2 (20.0%)	4 (8.0%)	3 (16.7%)
5. Do you brief the rape victims regarding the procedures of rape management in OSCC?	Favourable	18 (56.3%)	2 (20.0%)	37 (74.0%)	10 (55.6%)
	Unfavourable	14 (43.7%)	8 (80.0%)	13 (26.0%)	8 (44.4%)
6. Do you spend time to console or calm a rape victim who is hysterical or crying in the OSCC?	Favourable	17 (53.1%)	1 (10.0%)	31 (62.0%)	8 (44.4%)
	Unfavourable	15 (46.9%)	9 (90.0%)	19 (38.0%)	10 (55.6%)
7. Have you ever raised your voice or scolded any rape victim who refused to cooperate in your management at OSCC?	Favourable	20 (62.5%)	10 (100.0%)	36 (72.0%)	14 (77.8%)
	Unfavourable	12 (37.5%)	0	14 (28.0%)	4 (22.2%)
8. Have you ever managed a rape case (i.e., performing forensic clinical examination and taking forensic specimen collection) without the presence of a police officer in OSCC?	Favourable	32 (100.0%)	10 (100.0%)	48 (96.0%)	17 (94.4%)
	Unfavourable	0	0	2 (4.0%)	1 (5.6%)
9. Have you ever managed a rape case (i.e., performing forensic clinical examination and taking forensic specimen collection) without a valid consent form?	Favourable	31 (96.9%)	10 (100.0%)	48 (96.0%)	17 (94.4%)
	Unfavourable	1 (3.1%)	0	2 (4.0%)	1 (5.6%)
10. Do you make sure that patient's details are documented in a special record book or file in OSCC room?	Favourable	23 (71.9%)	2 (20.0%)	38 (76.0%)	7 (38.9%)
	Unfavourable	9 (28.1%)	8 (80.0%)	12 (24.0%)	11 (61.1%)
11. Have you ever made mistake in labelling forensic specimens?	Favourable	29 (90.6%)	10 (100.0%)	50 (100.0%)	18 (100.0%)
	Unfavourable	3 (9.4%)	0	0	0
12. Do you ensure that all forensic specimen collections are documented and signed in a special record book or file in OSCC?	Favourable	26 (81.3%)	2 (20.0%)	39 (78.0%)	12 (66.7%)
	Unfavourable	6 (18.8%)	8 (80.0%)	11 (22.0%)	6 (33.3%)
13. Do you ensure that each forensic specimens collected are being labelled, properly sealed and handed over to the police officer as per protocol?	Favourable	25 (78.1%)	2 (20.0%)	39 (78.0%)	12 (66.7%)
	Unfavourable	7 (21.9%)	8 (80.0%)	11 (22.0%)	6 (33.3%)
14. Do you inform all rape victims about the risk of contracting Sexually Transmitted Disease (STDs) after rape?	Favourable	18 (56.3%)	1 (10.0%)	28 (56.0%)	6 (33.3%)
	Unfavourable	14 (43.8%)	9 (90.0%)	22 (44.0%)	12 (66.7%)
15. Do you give prophylactic antibiotics to all rape victims?	Favourable	4 (12.5%)	0	18 (36.0%)	1 (5.6%)
	Unfavourable	28 (87.5%)	10 (100.0%)	32 (64.0%)	17 (94.4%)
16. Do you do pregnancy test for all rape victims?	Favourable	17 (53.1%)	1 (10.0%)	33 (66.0%)	6 (33.3%)
	Unfavourable	15 (46.9%)	9 (90.0%)	17 (34.0%)	12 (66.7%)
17. Have you ever forgotten to provide oral contraceptive pills to all rape victims?	Favourable	20 (62.5%)	10 (100.0%)	47 (94.0%)	16 (88.9%)
	Unfavourable	12 (37.5%)	0	3 (6.0%)	2 (11.1%)
18. Have you ever asked rape victims to get their own follow-up clinic appointment if they are allowed to go home?	Favourable	27 (84.4%)	10 (100.0%)	47 (94.0%)	18 (100.0%)
	Unfavourable	5 (15.6%)	0	3 (6.0%)	0

Note: EDs refers to Emergency Doctors; MAs refers to Medical Assistances, SNs refers to Staff Nurses, HAs refers to Hospital Attendants. Items 1,2,3,7,8,9,11,17,18 are unacceptable practices; items 4,5,610,12,13,14,15,16 are acceptable practices. A favourable response is defined as a 'Sometimes' or 'Always' response to an acceptable practice or a 'Never' response to an unacceptable practice. An unfavourable response is defined as a 'Sometimes' or 'Always' response to an unacceptable practice or a 'Never' answer to an acceptable practice.

is a statistically difference of score (adjusted p-value <0.001) with their mean ranks of 77.5 and 36.2 respectively. Even in the comparison between EDs and SNs, there is a statistically difference of score (adjusted p-value = 0.003) with their mean ranks of 77.5 and 52.65 respectively. No significant difference of scores in the comparisons of MAs and SNs, MAs and HAs and SNs and HAs.

In the Practice section, the Kruskal-Wallis test (corrected for tied ranks) conducted to evaluate the differences of scores among the four groups of participants (SNs, EDs, MAs and HAs) again shows that there is a statistically significant difference of scores with $H(3) = 15.8$, $n = 110$, $p<0.001$. Post-hoc analysis using a series of Kruskal-Wallis tests to evaluate pairwise differences among the groups show that there is a statistically significant difference of scores (adjusted p-value =0.003) between the SNs and MAs with their mean rank of 67.0 and 28.5 respectively. The mean ranks of EDs and HAs are 50.2 and 47.9 respectively. No other statistically significant differences in other pairwise comparisons.

Specifically, when asked regarding their attitude on item no. 5 "A woman should be solely responsible for preventing rape from happening to her", across all groups including the EDs, majority of the participants agreed to this unfavourable attitude. The MAs recorded the highest number of unfavourable responses (90%). Similarly, when asked on item no. 6 "A woman who walks alone at night, especially in unsafe places, is inviting rape attack", majority of the participants, across all professional groups, agreed to this unfavourable attitude. In fact, all participants (100%) from these three groups, viz., MAs, SNs and the HAs agreed to this negative attitude. The third item where the majority of the participants from all groups showed unfavourable responses is in item no 12. "A woman who comes to the OSCC could possibly be lying in order to trap the man accused of raping her".

In the Practice section, majority of the participants from all groups except the MAs group gave favourable responses to the following questions that reflect common important practices: "Item no 5: Do you brief the rape victims regarding the procedures of rape management in OSCC?", "Item no 6: Do you spend time to console or calm a rape victim who is hysterical or crying in the OSCC?", "Item no 12: Do you ensure that all forensic specimen collections are documented and signed in a special record book or file in OSCC?" and "Item no 13: Do you ensure that each forensic specimens collected are being labelled, properly sealed and handed over to the police officer as per protocol?".

DISCUSSION

Generally, this study shows that most of our emergency healthcare providers have adequate knowledge on rape management in OSCC, possess positive attitudes towards rape victims as well as adhere to acceptable practices in management of rape victims in OSCC. But this study also shows some differences among the various groups of healthcare providers. In particular, despite the finding that the SNs group demonstrated better knowledge in OSCC care and are more stringent in their adherence to acceptable OSCC practices as compared to other groups, this does not seem to translate into a relatively better attitude as compared to the EDs.

This could be partly due to the organization system of OSCC particularly, and the Malaysian healthcare system as a whole; as well as the rigid roles assigned to these various health care providers in the emergency department. In the context of OSCC care, the MAs are expected to triage and identify the OSCC cases only; SNs are the ones responsible in preparing the OSCC room and assisting the doctors, the EDs are usually expected to attend to the victim (to interview and examine the victim) and the HAs are called for only transporting the victim. As such, there is a tendency that one group might not know the roles and functions of the other groups and thus, does not knowing the entire workflow in managing OSCC. More training sessions and roundtable discussions should be held among these emergency healthcare providers to enhance the understanding of the roles played out by their various team members in the work process of a rape victim. Furthermore, the paternalistic or 'top-down' work culture in Malaysia also denotes that SNs and MAs usually adopt a 'follow-the-leader' attitude in their daily clinical practice.[4] Therefore, in order to comply with their work requirement, the SNs are usually required to get acquainted with the work process of the OSCC care and to be vigilant in following the standard operating procedures in their practices, even to the extent of being mechanical and mundane in their work ethics. On the other hand, a doctor is expected to show an empathic and compassionate attitude towards their patients. This might explain why in our study, the SN group scored higher in the domain of knowledge and practice as compared to the ED group but vice versa in the domain of attitude.

A more pressing issue, however, is the finding from this study that majority of the participants across all groups agreed with some of these unfavourable statements: 1) "A woman should be solely responsible for preventing rape from happening to her", 2) "A woman who walks alone at night, especially in unsafe places, is inviting rape attack", and 3) "A woman who comes to the OSCC could possibly be lying in order to trap the man accused of raping her".

While it is true that anyone, regardless of man or woman, needs to be careful and vigilant about his or her own safety, but holding on to such unacceptable attitudes among healthcare staffs is akin to shifting the blame of the trauma unto the rape victims themselves. This trend is also similarly found to be prevalent in another study done in Hong Kong.[5] Such unhealthy victim-blaming attitude is a common form of rape myths.[7,8] The term 'rape myths', first coined by Burt (1980),[7] refers to a set of stereotypical and fallacious beliefs about rape, rape victims and the rapist. Some of the common rape myths include the belief that women put themselves in vulnerable situations by dressing and acting inappropriately, by being in the wrong place at the wrong time and by being under alcohol or drug influence.[8] A rape myth inappropriately held by the community can result in secondary victimization and is a main cause why a huge number of rape cases remain unreported.[9] Secondary victimisation is defined as the victim-blaming attitudes,

behaviours, and practices by community and even healthcare providers, which result in additional trauma for the already traumatized rape victims. Other terms previously used include the more graphical 'the second rape' and 'the second assault'.[10] Campbell and Raja (1999)[9] found that 58% of rape victims reported that they were distressed by the medical personnel's questions about their sexual histories, behaviour before the assault as well as the manner they were being treated during the physical examination process. Such uneasiness results in many of them feeling depressed, violated and even reluctant to seek further help. Worst of all is the finding by Campbell and Raja (1999) that some healthcare service providers were not even aware of how their attitudes and behaviours adversely affected the rape victims.[9]

This is especially important, as rape cases are often the most common type of OSCC cases reported to the emergency departments.[3] In a survey done on the cases reported to the OSCC in our emergency department in Hospital Universiti Sains Malaysia, it is found that rape cases constitutes the largest category (70% of the 439 cases) of these sexual offences.[3] In fact, it is predicted that the actual number of cases was higher than this reported figure as many rape victims did not report their incidents.

Our study has a number of limitations. First, this study was only confined to healthcare providers in a single emergency department in Malaysia. Although the guidelines are fairly standard for every OSCC in Malaysia, the degree of involvement and the respective roles of the various healthcare providers may differ from centre to centre. For example, some of the OSCC at other government hospitals may utilize MAs for triaging and for forensic specimen collections. Thus their level of knowledge and adherence to acceptable practices could differ from those in other centres. Second, the rather long recruitment period from January to October 2013 due to technical difficulty in recruiting participants could have introduced errors to the results as exposure or experience could have gained by some of the participants during the study period and this might have influenced how some participants answered the questions. Furthermore, this study was based on a self-administered questionnaire. As such, there is always the potential of reporting bias as well as the possibility that the participants may not understand the questions properly.

CONCLUSION

In conclusion, there are differences in terms of the level of knowledge, attitude and practice among the various groups the healthcare providers in the management of OSCC care in our emergency department. In particular, all healthcare providers should rid themselves of unacceptable and judgemental attitudes that imply putting the blame of the rape and sexual assault on the victim. Doing so is akin to rubbing salt to the wounds, irking the victims and discouraging them from opening up and reporting their trauma. After all, the whole purpose of OSCC is to provide an environment where the victims feel safe to open themselves up for reporting; and this calls for a compassionate and non-judgmental attitude among all healthcare providers involved.

REFERENCES

1. Colombini M, Mayhew SH, Ali SH, Shuib R, Watts C. An integrated health sector response to violence against women in Malaysia: lessons for supporting scale up. BMC public health. 2012; 12: 548.
2. Colombini M, Ali SH, Watts C, Mayhew SH. One stop crisis centres: A policy analysis of the Malaysian response to intimate partner violence. Health Res Policy Syst 2011; 9: 25.
3. Islam MN, See KL, Ting LC, Khan J. Pattern of Sexual Offences Attended at Accident and Emergency Department of HUSM from Year 2000 to 2003: A Retrospective Study. Malays J Med Sci. 2006; 13(1): 30-6.
4. Hanson K, Cleary S, Schneider H, Tantivess S, Gilson L. Scaling up health policies and services in low- and middle-income settings. BMC Health Serv Res. 2010; 10 Suppl 1: I1.
5. Sheng CK, Lim CK, Rashidi A. A multi-centre study on the attitudes of Malaysian emergency health care staff towards allowing family presence during resuscitation of adult patients. Int J Emerg Med. 2010; 3(4): 287-91.
6. Wong AY, Wong TW, Lau PF, Lau CC. Attitude towards rape among doctors working in the emergency department. Eur J Emerg Med. 2002; 9(2): 123-6.
7. Burt MR. Cultural myths and supports for rape. J Pers Soc Psychol. 1980; 38(2): 217-30.
8. McMahon S. Rape myth beliefs and bystander attitudes among incoming college students. J Am Coll Health. 2010; 59(1): 3-11.
9. Campbell R, Raja S. Secondary victimization of rape victims: insights from mental health professionals who treat survivors of violence. Violence Vict. 1999; 14: 261-75.3
10. Martin PY, Powell RM. Accounting for the second assault: Legal organisations framing of rape victims. Law and Social Inquiry. 1994; 19(853-90).