

Knowledge and Attitude Towards Vasectomy Among Male Kuantan Community

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ABSTRACT

Background: Vasectomy is a contraceptive procedure that involves cutting and tying the pathway of sperm to the testes. This procedure, performed under local anaesthesia, carries a lower risk of complications compared to Bilateral Tubal Ligation, which is the female sterilisation method. Unfortunately, there is limited research on this topic in Malaysia. Thus, this study aimed to assess the knowledge and attitudes towards vasectomy among males in Kuantan.

Methods: A total of 219 responses were collected using convenience sampling. Researchers utilised email and social media to distribute Google Forms questionnaires to gather responses.

Results: The study found that 67.1% of participants reported high knowledge about vasectomy, while 32.9% reported moderate knowledge. Regarding attitudes, 11.9% of participants showed a high attitude, while 88.1% exhibited a moderate attitude. No significant associations were found between knowledge and attitude towards vasectomy and demographic factors such as age, religion, ethnicity, education level, occupation, income, marital status, or number of children.

Conclusion: The study revealed that the Kuantan community has both high and moderate levels of knowledge and attitude towards vasectomy. These findings underscore the importance of public health campaigns aimed at promoting contraceptive methods to enhance community understanding of vasectomy.

Keywords: Knowledge; Attitude; Vasectomy; Kuantan

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INTRODUCTION

Vasectomy is a permanent method of family planning or contraception that involves surgically altering the vas deferens to prevent the transport of sperm. Despite its effectiveness and safety, there is a general lack of awareness and knowledge about vasectomy among men and women in various settings (1). Studies have shown that limited awareness and misconceptions about vasectomy act as significant barriers to its acceptance and uptake (2). Furthermore, societal and cultural factors, such as the perception that family planning is solely a woman's responsibility, contribute to the reluctance of men to consider vasectomy as a viable option (3,4). This lack of awareness and knowledge about vasectomy is not limited to low-resource settings but is also evident in urban and rural areas (2,5–7). According to a study conducted regarding the prevalence of family planning in Malaysia, the utilisation of family planning by married couples only reached 55% and vasectomy prevalence only contributed 0.1% (8,9).

Efforts to improve knowledge and awareness of vasectomy have been explored through various interventions, such as video-assisted teaching programs and counselling modules. These initiatives have shown promising results in enhancing understanding and changing attitudes towards vasectomy among men (2,10). Additionally, the involvement of men in family planning decision-making and the provision of information and services tailored to men have been identified as crucial strategies to improve knowledge and acceptance of vasectomy (11,12). It is essential to address the misinformation and misconceptions surrounding vasectomy to ensure that men have accurate knowledge to make informed decisions about their reproductive health (13). Studies have highlighted the need for comprehensive educational programs and the development of information, education, and communication materials in local languages to dispel myths and increase awareness about vasectomy (10,11). Moreover, the involvement of healthcare providers, community health workers, and decision-makers is crucial in disseminating accurate information about vasectomy (14). In conclusion, the lack of knowledge and awareness about vasectomy among men is a significant barrier to its acceptance and uptake as a method of contraception. Addressing this issue requires

multifaceted approaches, including educational programs, targeted interventions, and the involvement of men in family planning discussions. By improving knowledge and dispelling misconceptions, it is possible to enhance the understanding and acceptance of vasectomy as a safe and effective form of contraception.

METHODS

This cross-sectional study took place in Kuantan from April 2023 to May 2023, involving 219 participants selected through convenient sampling methods at public places in Kuantan such as recreation areas, shopping malls, and restaurants. The participants of this study were male members of the Kuantan community, and the questionnaire distributed consisted of three parts: Part A for socio-demographic status, Part B for knowledge, and Part C for attitude towards vasectomy. The questionnaire was conducted using Yes/No questions to measure the level of knowledge while likert Scale (strongly agree, agree, neutral, disagree and strongly disagree) to measure the attitude of the participants towards vasectomy.

The inclusion criteria for the selected participants were as follows: 1) Residence in the Kuantan, Pahang community, and 2) Male 18 year-old and above. People who have undergone vasectomy and respondent with medical illness that can interfere with vasectomy procedure were excluded from this study.

The population of Kuantan, Pahang, was identified to calculate the sample size. Once permission was granted, a questionnaire in both Malay and English languages was distributed in public places in the Kuantan area. The questionnaires were completed by respondents after receiving the consent form and meeting the inclusion criteria. The researcher's contact details, including a contact number for inquiries, were provided in the form, and the purpose of the research study was explained before respondents began answering the questions. All information provided by respondents was kept confidential during the study process.

Approval for this research was obtained from the Kulliyah of Nursing Postgraduate Research Committee (KNPGRC), followed by

approval from the International Islamic University Malaysia Research Ethics Committee (IREC). All information provided by respondents was kept confidential. Once approval was obtained, the questionnaires were distributed to participants through Google Forms, with the aim of strictly using the data for academic purposes only. The descriptive statistical method (frequency and percentage) was used to analyse the data. Non-parametric test was used to find out the association between independent and dependent variables based on normality distribution. The Chi-square test was used to measure the association between sociodemographic data and the levels of knowledge and attitude.

RESULTS

Socio-Demographic Characteristics of Respondents

There were 219 participants selected for this study, with 78.5% aged 18-29 years old and 21.5% aged 30 years and above. Most participants were Muslim and Malay, comprising 96.3% and 95.4%, respectively. The percentage of participants with UPSR/PMR/SPM and Sijil Kemahiran/Diploma qualifications was equal, at 11.0%, while 78.1% held at least one college degree. Regarding occupation, 11.9% were medical workers, and 88.1% were non-medical workers. The average income of participants fell below RM1,000 for 64.8% of them, while 22.4% reported incomes between RM1,001 and RM4,000, and 12.8% reported incomes of RM4,001 or more. Most participants were single (79.0%), followed by married individuals (21.0%). In terms of children, 80.8% of participants had none, while 7.8% had 1-2 children, 9.6% had 3-4 children, and 1.8% had 5 or more children.

Table 1: Sociodemographic data among male in Kuantan

Characteristic	Variables	Frequency (n)	Percentage (%)
Age	18-29 years old	172	78.5
	30 years and above	47	21.5
Religion	Muslim	211	96.3
	Non-muslim	8	3.7
Ethnicity	Malay	209	95.4
	Non-malay	10	4.6
Academic attainment	UPSR/PMR/SPM	24	11.0
	Tech Cert. / Diploma	24	11.0
	Degree/Master/PHD	171	78.1
Occupation	Medical personnel	26	11.9
	Non-medical personnel	193	88.1
Average income per month	Below RM 1,000	142	64.8
	RM 1,001 - RM 4,000	49	22.4
	RM 4,000 and above	28	12.8
Marital status	Single	173	79.0
	Married	46	21.0
Number of children (if married)	None	177	80.8
	1-2 children	17	7.8
	3-4 children	21	9.6
	5 and above	4	1.8

Level of Knowledge on Vasectomy Among Male Kuantan Community

The **Table 2** presents the responses from 219 male participants in Kuantan City regarding their knowledge about vasectomy. Among the participants, 93.6% recognized vasectomy as a form of family planning method, while only 6.4% were unaware of this fact. Further analysis delves into the participants' understanding of the nature of vasectomy as a family planning method. A significant majority, comprising 90.0% of respondents, correctly identified vasectomy as a permanent contraceptive method, while only 10.0% were unaware of its irreversibility. Regarding the impact of vasectomy on sexual function, the majority of respondents held misconceptions. While vasectomy does not affect sexual desire or libido, 78.5% of participants erroneously

believed that a man loses his sexual urge and desire for sexual activity post-vasectomy.

Similarly, a substantial proportion (81.3%) mistakenly thought that a man becomes unable to impregnate his partner after undergoing a vasectomy procedure, highlighting a lack of accurate knowledge on this aspect of vasectomy. Moreover, there were misconceptions regarding sperm ejaculation post-vasectomy, with 74.4% of respondents erroneously believing that sperm is still ejaculated during sexual intercourse even 8 weeks after vasectomy. Lastly, concerns about the association between vasectomy and prostate cancer were evident among the respondents, with 66.7% incorrectly believing that the tendency for prostate cancer increases in men who have had a vasectomy.

Table 2: The knowledge towards Vasectomy among male in Kuantan (n = 219)

		Frequency (n)	Percentage (%)
Is vasectomy a form of family planning method?	Yes	205	6.4
	No	14	93.6
What type of family planning method is vasectomy?	Yes	197	90.0
	No	22	10.0
After vasectomy procedure a man loses his sexual urge and desire for sexual activity?	Yes	172	78.5
	No	47	21.5
After vasectomy a man is able to impregnate his partner?	Yes	178	18.7
	No	41	81.3
Sperm is ejaculated during sexual intercourse even 8 weeks after vasectomy?	Yes	163	74.4
	No	56	25.6
The tendency for prostate cancer increases in men who have had vasectomy?	Yes	73	33.3
	No	146	66.7

Table 3 provides insight into the level of knowledge about vasectomy among males in Kuantan City, categorizing respondents based on their level of knowledge into three groups: Good, Moderate, and Low. Among the 219 participants surveyed, the majority, constituting 67.1%, demonstrated a good level

of knowledge about vasectomy, as they correctly answered between 5 to 7 questions out of a total of 7. This indicates a substantial proportion of respondents who possess a comprehensive understanding of vasectomy as a family planning method. In contrast, 32.9% of participants exhibited a moderate level of

knowledge, as they answered between 3 to 4 questions correctly. While these individuals may have some understanding of vasectomy,

their knowledge is not as comprehensive as those in the Good category.

Table 3: Level of knowledge about Vasectomy among male in Kuantan (n=219)

Level of knowledge	Frequency (n)	Percentage (%)
Good (5-7)	147	67.1
Moderate (3-4)	72	32.9
Low (1-2)	0	0

The Attitude Towards Vasectomy Among Male in Kuantan

Table 4 provides an overview of the attitudes toward vasectomy among males in Kuantan City, shedding light on their perceptions and beliefs regarding this family planning method. The responses are categorized into several statements, each reflecting a different aspect of attitude towards vasectomy. Firstly, regarding the perception of vasectomy as castration, 38.4% of respondents either strongly agree or agree with this notion, while a larger proportion, 61.6%, disagree or strongly disagree. Secondly, opinions vary regarding the preference for permanent sterilization, with 65.7% disagreeing or strongly disagreeing that it should be exclusively for females.

Furthermore, a substantial majority, ranging from 76.4% to 81.5%, agree or strongly agree that vasectomy is an effective form of family planning method and that men should take part in family planning decisions. However, cultural and religious beliefs play a role in shaping attitudes towards vasectomy, with around 40% of respondents expressing agreement or strong agreement that it goes against their cultural or religious beliefs.

Table 5 illustrates the level of attitude regarding vasectomy among males in Kuantan. Among the respondents, 26 individuals exhibited a "High" level of attitude, while a larger proportion, 193 respondents, demonstrated a "Moderate" level of attitude. This breakdown suggests that the majority of males surveyed in Kuantan possess a moderate attitude towards vasectomy, with 88.1% falling into this category. Conversely, a smaller percentage, 11.9%, displayed a high level of

attitude, indicating a more positive or accepting perspective on vasectomy.

The Association Between Sociodemographic Data and Level of Knowledge on Vasectomy Among Male Kuantan Community

Table 6 depicted the level of attitude regarding vasectomy among males in Kuantan. The chi square test revealed that there is no significant difference between the level of knowledge and the sociodemographic data. Regarding age, there was no significant difference in knowledge levels between age groups ($p=0.862$). Similarly, the p value of each sociodemographic data stated that religion ($p=0.118$), ethnicity ($p=0.303$), academic attainment ($p=0.658$), occupation ($p=0.126$), average income per month ($p=0.076$), marital status ($p=0.860$) and number of children ($p=0.573$) did not show statistically significant associations with knowledge levels about vasectomy.

The Association Between Sociodemographic Data and Level of Attitude Towards Vasectomy Among Male in Kuantan

Table 7 presents the p value between the socio-demographic characteristics and the level of attitude about vasectomy among males in the Kuantan community. The socio-demographic variables examined include age, religion, ethnicity, academic attainment, occupation, income, marital status, and the number of children. The Chi Square test is used to determine the association between independent variables and dependent variables. The p value for age was 0.082, followed by religion ($p=0.243$), ethnicity ($p=0.337$), academic attainment ($p=0.298$), occupation ($p=0.328$), average income

($p=0.605$), marital status ($p=0.077$) and number of children ($p=0.134$). There were no significant differences between each of the

sociodemographic data and the level of attitude towards vasectomy among the participants.

Table 4: The attitude towards Vasectomy among male in Kuantan (n = 219)

Attitude Items		Frequency (n)	Percentage (%)
Vasectomy is a castration and should not be done	Strongly agree	35	16.0
	Agree	49	22.4
	Disagree	112	51.1
	Strongly disagree	23	10.5
It's preferable that permanent sterilization should be only for female	Strongly agree	9	4.1
	Agree	52	23.7
	Disagree	93	42.5
	Strongly disagree	65	29.7
Vasectomy makes men more promiscuous	Strongly agree	12	5.5
	Agree	77	35.2
	Disagree	105	47.9
	Strongly disagree	25	11.4
Do I approve of the use of vasectomy as a method of family planning	Strongly agree	33	15.1
	Agree	104	47.5
	Disagree	64	29.2
	Strongly disagree	18	8.2
Should men be primarily responsible for decision making on family planning methods	Strongly agree	47	21.5
	Agree	98	44.7
	Disagree	57	26.0
	Strongly disagree	17	7.8
Vasectomy is an effective form of family planning method	Strongly agree	76	34.7
	Agree	105	47.9
	Disagree	31	14.2
	Strongly disagree	7	3.2
Should men take part in family planning	Strongly agree	123	56.2
	Agree	76	34.7
	Disagree	18	8.2
	Strongly disagree	2	0.9
It's against cultural belief for a man to practice vasectomy	Strongly agree	32	14.6
	Agree	56	25.6
	Disagree	105	47.9
	Strongly disagree	26	11.9
It's against my religious belief for a man to practice vasectomy	Strongly agree	28	12.8
	Agree	59	26.9
	Disagree	102	46.6
	Strongly disagree	30	13.7

Table 5: Level of Attitude about Vasectomy among male in Kuantan (n=219)

Level of Attitude	Frequency (n)	Percentage (%)
High	26	11.9
Moderate	193	88.1

Table 6: Association between socio-demographic characteristics and level of knowledge about vasectomy among male Kuantan community (n=219)

Characteristic	Variables	Level of knowledge		n(%)	X ² (df)	P value
		5-7 Marks (good)	3-4 Marks (moderate)			
Age (years)	18-29	116 (67.4)	56 (32.6)	76	0.035 (1)	0.862 *
	≥30	31 (66.0)	16 (34.0)	24		
Religion	Muslim	144 (68.2)	67 (31.8)	96	3.302 (1)	0.118 **
	Non-muslim	3 (37.5)	5 (62.5)	4		
Ethnicity	Malay	142 (67.9)	67 (32.1)	95	1.392 (1)	0.303 **
	Non-Malay	5 (50.0)	5 (50.0)	5		
Academic attainment	UPSR/PMR/SPM	14 (58.3)	10 (41.7)	11	0.973 (2)	0.658 *
	Tech. Cert./	16 (66.7)	8 (33.3)	11		
	Diploma	117 (68.4)	54 (31.6)	78		
	Degree/Master/PHD					
Occupation	Medical personnel	21 (80.8)	5 (19.2)	12	2.489 (1)	0.126 *
	Non-medical personnel	126 (65.3)	67 (34.7)	88		
Income	Below RM 1,000	92 (64.8)	50 (35.2)	65	5.067 (2)	0.076 *
	RM 1,001-RM 4,000	31 (63.3)	18 (36.7)	23		
	≥ RM 4,001	24 (85.7)	4 (14.3)	12		
Marital status	Single	117 (67.6)	56 (32.4)	79	0.096 (1)	0.860 *
	Married	30 (65.2)	16 (34.8)	21		
Number of children (if married)	None	119 (67.2)	58 (32.8)	81	1.845 (3)	0.573 *
	1-2 Children	10 (58.8)	7 (41.2)	8		
	3-4 Children	16 (76.2)	5 (23.8)	10		
	≥ 5 Children	2 (50.0)	2 (50.0)	1		

*Pearson Chi-square, ** Fisher Exact Test

Table 7: Association between socio-demographic characteristics and level of attitude about vasectomy among male Kuantan community (n=219)

Characteristic	Variables	Level of attitude		n (%)	X ² (df)	P value
		13-18 Marks (High)	7-12 Marks (Moderate)			
Age (years)	18-29	155 (90.1)	17 (9.9)	78.5	3.029 (1)	0.082*
	≥30	38 (80.9)	9 (19.1)	21.5		
Religion	Muslim	187 (88.6)	24 (11.4)	96	1.368 (1)	0.243**
	Non-muslim	6 (75.0)	2 (25.0)	4		
Ethnicity	Malay	185 (88.5)	24 (11.5)	95	0.663 (1)	0.337**
	Non-Malay	8 (80.0)	2 (20.0)	5		
Academic attainment	UPSR/PMR/S	21 (87.5)	3 (12.5)	11	2.147 (2)	0.298**
	PM	19 (79.2)	5 (20.8)	11		
	Tech.Cert./Diploma	153 (89.5)	18 (10.5)	78		
	Degree/Master/PhD					
Occupation	Medical personnel	25 (96.2)	1 (3.8)	12	1.816 (1)	0.328**
	Non-medical personnel	168 (87.0)	25 (13.0)	88		
Income	Below RM 1,000	127 (89.4)	15 (10.6)	65	0.930 (2)	0.605**
	RM 1,001-RM 4,000	42 (85.7)	7 (14.3)	22		
	RM 1,001-RM 4,000	24 (85.7)	4 (11.9)	13		
	≥ RM 4,001					
Marital status	Single	156 (90.2)	17 (9.8)	79	3.294 (1)	0.077*
	Married	37 (80.4)	9 (19.6)	21		
Number of children (if married)	None	158 (89.3)	19 (10.7)	80	5.020 (3)	0.134**
	1-2 Children	15 (88.2)	2 (11.8)	8		
	3-4 Children	18 (85.7)	3 (14.3)	10		
	≥ 5 Children	2 (50.0)	2 (50.0)	2		

*Pearson Chi-square, ** Fisher Exact Test

DISCUSSION

This study explored the knowledge and attitude about vasectomy among male in Kuantan, Pahang. Various studies corroborate the acknowledgment of vasectomy as a form of family planning among male participants in Kuantan City, despite prevalent misconceptions. A study in Southern Ghana

revealed that vasectomy was perceived as an act against God, leading to negative attitudes and misconceptions about the procedure (15). Similarly, a study in the Kingdom of Eswatini found that participants struggled to grasp the concept of vasectomy as a permanent family planning method (16). These findings align with the prevalent misconceptions observed among the male participants in Kuantan City.

Contradictory findings were observed in Nepal, where a study reported a majority of participants showing positive attitudes and support for vasectomy (17). Additionally, a study in Rwanda indicated high agreement among participants that men should take part in family planning, including the use of vasectomy as a method (18). These findings contrast the prevalent misconceptions observed in Kuantan and suggest varying attitudes towards vasectomy in different cultural contexts.

Furthermore, studies in Ethiopia and India highlighted factors influencing the intention to use vasectomy, such as concerns about its impact on sexual health and marriage (19,20). These concerns align with the misconceptions observed in Kuantan regarding sexual function and fertility issues post-vasectomy. Additionally, a study in Nigeria revealed a strong awareness of vasectomy among men (21), indicating varying levels of knowledge and understanding across different populations. Overall, the findings from these studies support the statement by demonstrating the prevalence of misconceptions regarding vasectomy among male participants in different cultural and geographical contexts. The varying attitudes and levels of knowledge observed in these studies emphasize the importance of addressing misconceptions and providing accurate information about vasectomy as a family planning method.

The attitudes toward vasectomy among males in Kuantan reflect a complex interplay of perceptions and beliefs, as evidenced by various studies. The majority of participants in Kuantan disagreed with the misconception of vasectomy being perceived as castration and preferred it not exclusive to females, aligning with findings from a study in the Kingdom of Eswatini, which highlighted prevalent misconceptions about vasectomy causing impotence and ejaculatory problems (16). This suggests a common misunderstanding of vasectomy across different cultural contexts. Additionally, a study in Ghana reported negative attitudes and misconceptions about vasectomy, indicating the influence of cultural and religious beliefs on attitudes toward the procedure (22).

Furthermore, the importance of men in family planning decisions was acknowledged by most participants in Kuantan, consistent with findings from Rwanda, where many

participants agreed that men should take part in family planning, including the use of vasectomy as a method (18). However, around 40% of respondents in Kuantan expressed disagreement with vasectomy due to cultural or religious reasons, highlighting the impact of cultural and religious beliefs on attitudes toward vasectomy, as also observed in rural Tanzania (23). The prevalence of moderate attitudes among the respondents in Kuantan is supported by studies in Ethiopia and Nigeria, which assessed the intention to use vasectomy and found varying levels of acceptance and attitudes toward the procedure (11,24). These findings indicate the need to address misconceptions and cultural influences to promote a more positive attitude toward vasectomy.

In contrast, a study in the Southern United States reported men's positive attitudes and knowledge-seeking behaviours regarding vasectomy, suggesting cultural variations in attitudes toward vasectomy (22). Additionally, a study in Ghana emphasized the urgency of behaviour change strategies to address negative attitudes and misbeliefs about vasectomy (17). In conclusion, the attitudes toward vasectomy among males in Kuantan City reflect a mixture of positive attitudes, prevalent misconceptions, and cultural influences. The findings from various studies underscore the need for targeted educational interventions to dispel misconceptions and address cultural and religious influences on attitudes toward vasectomy.

The sociodemographic factors such as age, religion, ethnicity, education, occupation, income, marital status, and number of children showed no statistically significant associations with knowledge levels about vasectomy and attitudes towards vasectomy among male participants in Kuantan is supported by various studies. A study in the United States found that sociodemographic factors such as age, education level, income, and number of biological children were significantly associated with vasectomy use (25). However, this finding contradicts the statement, suggesting differences in the influence of sociodemographic factors on vasectomy knowledge and attitudes between the United States and Kuantan. Similarly, a study in the Southern United States reported that sociodemographic factors influenced men's knowledge and attitudes toward vasectomy, indicating differences in the impact of these factors across different geographical locations

(22). These findings contradict the statement by highlighting the influence of sociodemographic factors on vasectomy knowledge and attitudes, unlike the results observed in Kuantan.

Furthermore, a study on vasectomy and risk of aggressive prostate cancer found no significant association between vasectomy and prostate cancer risk, suggesting that sociodemographic factors may not influence the risk of prostate cancer in men who have undergone vasectomy (26). This finding aligns with the statement by indicating that sociodemographic factors do not significantly impact attitudes toward vasectomy. In contrast, a study in the United States highlighted the influence of sociodemographic factors on fertility intentions and contraceptive involvement among low-income men, suggesting that these factors may play a role in reproductive decision-making and attitudes toward contraception, including vasectomy (27).

This contradicts the statement by indicating that sociodemographic factors can influence attitudes toward vasectomy, unlike the findings in Kuantan. Moreover, a study on male infertility and the military found that sociodemographic factors may influence the delivery of healthcare for male factor infertility, indicating the potential impact of these factors on reproductive health decisions and attitudes toward fertility control methods such as vasectomy (28). This contradicts the statement by suggesting that sociodemographic factors can influence knowledge and attitudes related to vasectomy.

Our study had certain limitations. It was carried out in public areas of Kuantan, and participants were randomly selected, although the ratio of ethnicity and religion was not evenly distributed. Consequently, the findings may not be fully representative of the entire Kuantan population in terms of socio-demographic characteristics. Additionally, the inclusion criteria for the study required male participants, which could have posed challenges, as some males may have been hesitant to respond to surveys related to reproductive issues. Given the sensitive nature of the questionnaire content, researchers took precautionary measures during data collection, such as conducting surveys in group settings and public venues, to minimize potential issues. Overall, the findings from these studies demonstrate varying influences of sociodemographic factors on vasectomy knowledge and attitudes, indicating

differences in the impact of these factors across different populations and geographical locations.

CONCLUSION

Knowledge and attitude of men in Kuantan regarding vasectomy highlights a prevalent misconception surrounding the procedure, influenced by cultural and religious beliefs. While findings from various studies globally reveal a mixture of positive attitudes and prevalent misconceptions, the attitudes in Kuantan reflect a complex interplay of perceptions and beliefs. Sociodemographic factors such as age, religion, ethnicity, education, occupation, income, marital status, and number of children do not show statistically significant associations with knowledge levels and attitudes toward vasectomy among male participants. However, contrasting findings from other studies suggest that sociodemographic factors may indeed influence attitudes toward vasectomy in different populations. Despite this, the overarching conclusion emphasizes the need for targeted educational interventions to dispel misconceptions and address cultural influences, ultimately promoting a more positive attitude toward vasectomy in Kuantan and potentially other similar contexts.

CONFLICT OF INTEREST

The authors declare there is no conflict of interest.

AUTHOR CONTRIBUTION

NAN: writing the manuscript, data collection and data analysis.

SAH: involved in drafting the manuscript, data collection, support with literature content and finalizing and editing the manuscript.

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