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# Characteristics and outcomes of no-scalpel vasectomy acceptors in a tertiary national maternity hospital: A retrospective single-cohort study

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## **Abstract:**

**INTRODUCTION:** No-scalpel vasectomy is an emerging family planning method that enables the male partner to get more involved. The procedure was first introduced in our institution in 2008 with an average of 7 clients per year (i.e., 86 patients from 2008 to 2019). There were no data when the pandemic started, but starting in March 2022, acceptance for the procedure started to increase. This coincides with the timeline of the study. At present, there are limited studies regarding no-scalpel vasectomy, especially local studies. A better understanding of the characteristics and outcomes of those who underwent no-scalpel vasectomy would aid our institution in formulating and implementing policies and family planning programs.

**OBJECTIVES:** The study determined the characteristics and outcomes of no-scalpel vasectomy acceptors at Dr. Jose Fabella Memorial Hospital from March 2022 to February 2023. Characteristics included the sociodemographic, medical, reproductive, and duration from inquiry until semen analysis. The outcomes included the absence or presence of complications after the procedure and result of semen analysis.

**METHODS:** The study utilized a retrospective, descriptive, single, cohort design. Total enumeration was done to get the 36 charts of clients who underwent no-scalpel vasectomy at the Comprehensive Family Planning Center of Dr. Jose Fabella Memorial Hospital from March 2022 to February 2023. Patient charts were retrieved, and data abstraction was done. Tables and figures were used to display the frequency distribution of data collected.

**RESULTS:** The study had a cohort of 36 individuals who underwent no-scalpel vasectomy, which accounted for 116% of the intended sample size. The characteristics of our clients were mostly urban residents, 30–39 years old, with partner, educated, middle class, employed, Roman Catholic, and having 1–2 children with the age of youngest below 3 years old. Different forms of family planning were used prior to the procedure. Teleconsultation effectively increases our clients for vasectomy. Clients were able to follow up after the procedure, but there was only a decrease in the number of clients who had their semen analysis done and were lost to follow-up.

**DISCUSSION:** There is an increasing awareness in no-scalpel vasectomy procedure as seen in the increase in acceptors. It is an effective, safe, cost-effective, and permanent male contraceptive procedure, with very minimal manageable complications. However, there is a need for better protocol regarding follow-up with semen analysis result.

**CONCLUSION:** By determining the characteristics and outcomes of no-scalpel vasectomy acceptors at Dr. Jose Fabella Memorial Hospital from March 2022 to February 2023, the findings of the study hope to aid the health-care providers gain a better insight about the characteristics and outcomes of our male clients who decided to undergo no-scalpel vasectomy as their family planning method of choice. There is a need study in further improving of the formulation and implementation of policies and family planning programs to further reach the male population.

### **Keywords:**

Acceptors, family planning, no-scalpel vasectomy

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# Introduction

Family planning encompasses the provision of various methods or services aimed at preventing unintended and unplanned pregnancies, hence facilitating the ability of couples to decide either to space or limit childbirths. A couple able to determine the spacing of their children can have a beneficial influence on their overall health and well-being. Family planning prevents unintended pregnancy which has a significant effect in reducing maternal and child mortality. According to the World Health Organization, family planning is key to slowing unsustainable population growth which has detrimental effects on the economy, environment, and national and regional development efforts.<sup>[1]</sup>

The Philippine Family Planning Program's goal is to provide universal access to family planning information and services whenever and wherever they are needed. [2] Couples and individuals are provided with information about the different family planning services and are free to choose which family planning method they think will best suit their needs. However, the present spectrum of available family planning methods offered supports the idea that family planning services are meant mainly for women. This leads to a lack of male engagement in participating in reproductive health services, with women predominantly shouldering the responsibility for contraceptive use. In the Philippines, a significant proportion of married individuals within the reproductive age group, specifically 52% of married men and 55% of married women (55%), express the desire to limit future births. Vasectomy is cost-effective and a safe permanent method for couples seeking to limit their family size.[3] To entice Filipino males to embrace this type of contraception, the Department of Health (DOH) in the Philippines has implemented a nationwide initiative which offers free vasectomy procedures throughout our country. Still, there are only a few acceptors of this family planning method because most males lack awareness and are still hesitant to undertake the procedure.[4]

No-scalpel vasectomy was pioneered in Sichuan Province, China, by Dr. Li Shunqiang as early as 1974. This technique involves the delivery of the vas deferens, ligating and then excising it without the use of a scalpel. This is a permanent form of family planning method for males with low complication rate, greater patient compliance, and low morbidity.<sup>[5]</sup>

The Comprehensive Family Planning Center of our institution is nationally recognized as a training and service provision facility. It provides a broad array of services, from supply methods such as condoms, oral contraceptive pills, injectables, implants, and

intrauterine devices, to permanent methods such as bilateral tubal ligation and no-scalpel vasectomy. In our clinic, no-scalpel vasectomy has a rising number of acceptors. The procedure was first introduced by our institution in the year 2008 with an average of 7 clients per year (i.e., 86 patients from 2008 to 2019). There were no patients when the pandemic started, but it began to gain acceptors last March 2022. The crude birth rate according to the Philippine Statistics Authority reported in 2022 was 13 births per thousand people, compared to 12 births per thousand people in 2021.[6] However, other methods were availed of, aside from the no-scalpel vasectomy. Our institution had an increase of 27 average deliveries per day in 2021–29 average deliveries per day in 2022. Accordingly, the overall number of clients who accepted family planning methods increased from 7101 in 2021 to 7344 in 2022, with no-scalpel vasectomy included.

This signifies that more clients are becoming more aware of option of male-friendly family planning services. It also shows more involvement of the male partner in the family planning decision-making. The Philippine General Hospital is another government institution that provides a fellowship in family planning. They do not currently have any data on those who underwent the procedure as they are still undergoing training in conducting no-scalpel vasectomy. Men are crucial halves in obtaining the reproductive goals, acceptance, and continuous use of any family planning method. Our goal is to provide a comprehensive range of family planning services that cater to the needs of both males and females.

# **Methods**

The study used a retrospective, descriptive, single-cohort design to describe the characteristics and outcomes of no-scalpel vasectomy acceptors at Dr. Jose Fabella Memorial Hospital from March 2022 to February 2023.

The initial computation of the sample size was determined based on the primary objective of the study using the formula for the computation of a single proportion. To obtain an estimation of 2% incidence of complications following the procedure, it was determined that a minimum of 31 participants were needed. This calculation was based on a desired confidence level of 95% confidence and an error term of 5%. [5] However, since there was a total of 36 no-scalpel vasectomy acceptors at the Comprehensive Family Planning Center of Dr. Jose Fabella Memorial Hospital from March 2022 to February 2023, a total enumeration was done.

The sampling unit consisted of charts of patients who underwent the procedure at our institution from March

2022 to February 2023. Excluded from the study were clients with any previous surgery (with or without complications postoperatively), infections in the genital area, or presence of comorbidities (e.g., uncontrolled hypertension). Data gathered from the charts encompassed certain aspects such as characteristics (e.g., sociodemographic, medical, reproductive, and duration from inquiry until semen analysis) and outcomes (e.g., absence or presence of complications after the procedure and result of semen analysis). Sociodemographic characteristics included the address, age, marital status, educational attainment, occupation of the client and partner, income cluster, and religion. A local study done classified the income cluster based on the range of monthly income for a family of five.[7] Medical characteristics included the absence or presence of any medical condition, previous complications, operations, or infections in the genital area. Reproductive characteristics included the desire to have more children, number of children, age of last child, and contraceptive method used prior to the procedure. The duration started from the date of first inquiry of the client via the clinic's teleconsult hotline and then response received, followed by counseling. Afterward, the client was provided with the schedule for the actual date of procedure. Follow-up was advised within 7 days after the procedure and a semen analysis at 3 months postsurgery. After the charts were retrieved, data abstraction was carried out.

Ethics approval was granted by the Dr. Jose Fabella Memorial Hospital Research Ethics Committee on October 25, 2023, for the conduct of this study prior to data collection. Waiver of informed consent was used since this was a retrospective study.

All information of the clients were kept in confidence. The data gathered were manually entered by the primary investigator into a secured electronic data file. Data collected were encoded and analyzed through descriptive statistics such as frequency distribution.

Study outcome included the frequency distribution according to characteristics (e.g., sociodemographic, medical, reproductive, and duration from inquiry until semen analysis) and outcomes (e.g., absence or presence of complications after the procedure and result of semen analysis).

#### Results

The study had a cohort of 36 individuals who underwent no-scalpel vasectomy, which accounted for 116% of the intended sample size.

The sociodemographic, medical, and reproductive characteristics of no scalpel vasectomy acceptors were shown in Figure 1. Among the study population, 19 individuals, constituting 53% of the total, were residents within National Capital Region (NCR), whereas 17 individuals, accounting for 47%, lives outside NCR. Most of the clients, specifically 25 (69%), were within the ages of 30 to 39 years, followed by 7 (19%) belonging to the age group of 18 to 29 years, while only 4 (11%) were above the age of 40. Most of the clients 29 (81%) were married while only 7 (19%) were living with partner.

Among the study population, 28 (77%) completed college while only 8 (22%) possessed either a high school diploma or vocational training. Most of the study population, 25 (69%), were employed, followed by 8 (22%) self-employed then 3 (8%) househusbands. The partners of the study population were mostly housewives 22 (61%), followed by 11 (31%) employed and 3 (8%) self-employed.

Majority of the study population consisted of individuals from the middle-income class. Specifically, 15 (42%) belonged to the middle middle-income class, followed by 8 (22%) from the lower middle-income class and then 5 (14%) from the upper middle-income class, while there were 4 (11%) from the low-income class, then 3 (8%) from the poor class, and 1 (3%) from the upper-income class. Majority of the respondents were Roman Catholic, accounting for 24 (67%), followed by Christian 8 (22%), and there were 3 (8%) from other religious affiliations such as Mormons Baptist and Adventist and 1 (3%) identifying as Iglesia ni Cristo (INC). None of the participants had a history of previous genital infections or comorbidity. There were 4 (11%) patients with short vas deferens. In the study population, 16 (44%) have 1-2 children, while 14 (39%) have 3-4 children and 6 (17%) have 5 and more children. As for the age of the youngest child of the study population, 19 (53%) were 3 years old and below, while the remaining 17 (47%) were 3 years old or older. The predominant forms of family planning method used prior to surgery were pills 10 (28%), condoms 5 (14%), injectables 4 (11%), intrauterine devices 3 (8%), and implants 2 (5.56%).

Most queries regarding the procedure were received during the third quarter, July to September, with 14 (39%), followed by the fourth quarter, October to December, with 12 (33%) [Figure 2]. The first (January to March) and second (April to June) quarters received an equal number of inquiries, with 5 clients each, making up 14% of the total inquiries for each quarter. In the study population, 25 (69%) clients received a response within the day, while 9 (25%) individuals received a response within 1–2 days, followed by 1 (3%) individual after 4 days and another client (3%) after 5 days. Counseling was conducted immediately in less than a

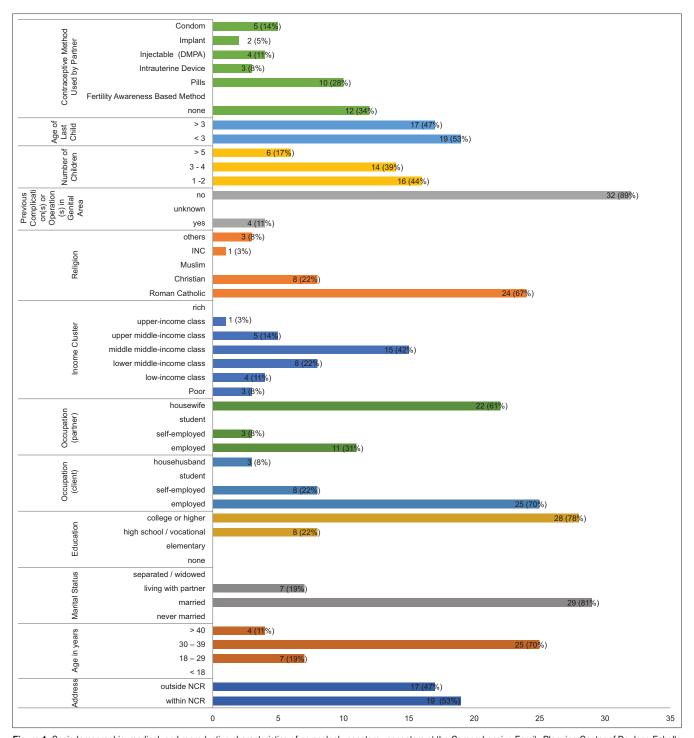


Figure 1: Sociodemographic, medical, and reproductive characteristics of no-scalpel vasectomy acceptors at the Comprehensive Family Planning Center of Dr. Jose Fabella Memorial Hospital from March 2022 to February 2023

day for 30 (83%) clients, while 3 (8%) received counseling between 1 and 2 days after initial inquiry and 3 (8%) clients after more than 5 days. The schedule of operation was as follows: 28 (78%) received their schedule within a day, 7 (19%) received their schedule after 1–2 days, and 1 (3%) after more than 5 days. As for the timing of the procedure, 17 (47%) occurred during the third quarter, followed by the first quarter with 11 (31%), the fourth

quarter with 6 (17%), and the second quarter with 2 (5%). Among the study population, 33 (92%) successfully completed the follow-up process within 7 days from the procedure, 2 (5%) participants were able to follow up between 8 and 14 days, while 1 (3%) individual followed up after 17 days postoperation. As to postoperative complications, 34 (94%) had no complications and only 2 (6%) individuals had hematoma postoperation.

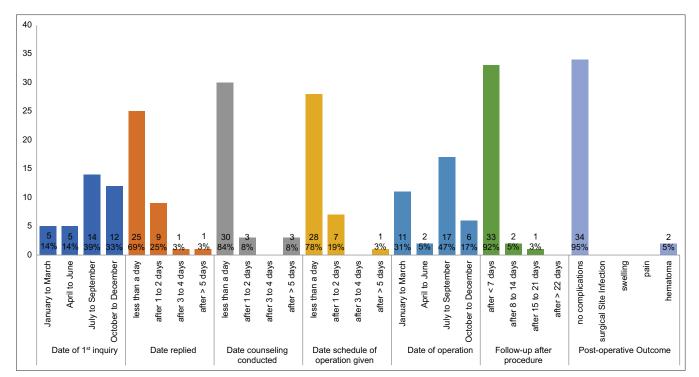


Figure 2: Characteristic duration and postoperative outcome of no-scalpel vasectomy acceptors at the Comprehensive Family Planning Center of Dr. Jose Fabella Memorial Hospital from March 2022 to February 2023

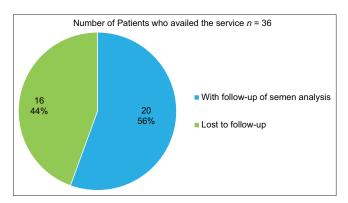


Figure 3: Semen analysis of no-scalpel vasectomy acceptors at the Comprehensive Family Planning Center of Dr. Jose Fabella Memorial Hospital from March 2022 to February 2023

Both patients have received outpatient treatment and underwent medical management.

Out of the total study population, there were 20 (56%) who underwent semen analysis, while the remaining 16 (44%) were excluded from the analysis due to loss to follow-up as shown in Figure 3. Consequently, Figure 4 showed the duration and outcome of the semen analysis post operation on pertain to the 20 individuals who had their semen analysis done. As to the timing of the semen analysis, 8 (40%) had their semen analysis in the advised duration of 3–4 months, 6 (30%) clients underwent semen analysis after 5–6 months, 4 (20%) clients had done their semen analysis earlier in 1–2 months after operation, and only 2 (10%) had their semen analysis

done after 7 months and above. Sixteen (80%) semen analyses have no sperm seen, with 4 (20%) with sperm seen.

# Discussion

Based on the data gathered and presented in Table 1, the distribution of the study population is about equal between those residing within NCR 19 (53%) and those residing outside NCR 17 (47%), indicating a willingness among clients to travel considerable distances to access the procedure. Another premise would be since the study is conducted in an urban area, it is expected for the population to be mostly coming from this urban area.<sup>[8]</sup>

It was noted that among no-scalpel vasectomy acceptors, 25 (69%) belonged to the age group of 30–39 years denoting that they are at their prime age when they are most capable of becoming a father. In the Philippines, a study done at Tamontaka Mother Barangay, Cotabato City, evaluated the relationship of demographic profile of the respondents in their awareness and acceptance on vasectomy. The study concluded moderate awareness and acceptance of no-scalpel vasectomy mostly among men 31–36 years old.<sup>[4]</sup> It is also significant to note that the age group that followed, 7 (19%), belonged to 18–29 years, indicating an increase in motivation to undergo no-scalpel vasectomy for the younger population.<sup>[8]</sup> There were also 4 (11%) clients above the age of 40 years.

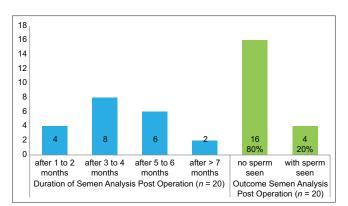


Figure 4: Duration and outcome of semen analysis postoperation of no-scalpel vasectomy acceptors at the Comprehensive Family Planning Center of Dr. Jose Fabella Memorial Hospital from March 2022 to February 2023

All of our clients have partners. Twenty-nine (81%) were married and 7 (19%) were living with a partner. This denotes that having a partner is an important aspect when deciding to undergo a permanent sterilization procedure.

Awareness regarding no-scalpel vasectomy was significantly associated with educational background as they would have more access to knowledge about the procedure. <sup>[9]</sup> Our study showed that all our clients were educated: 28 (77%) completed college and 8 (22%) had a high school diploma or vocational training.

Among the study population, 25 (69%) were employed, 8 (22%) were self-employed, and 3 (8%) were househusbands. Most of our clients who were employed worked in the information technology sector, such as information technicians, call center agents, and business process outsourcing agents. This indicates that having access to information online is a very useful tool for educating our clients about no-scalpel vasectomy. The self-employed clients managed their own businesses. For their partners, 22 (61%) were housewives, 11 (31%) were employed, and 3 (8%) were self-employed. The particpants' income cluster showed that 15 (42%) belonged to the middle middle-income class, followed by 8 (22%) from the lower middle-income class, then 5 (14 %) from the upper middle-income class, while there were 4 (11%) from the low-income class, then 3 (8%) from the poor class, and 1 (3%) from the upper-income class. Most of our clients were noted to be part of the working class<sup>[8]</sup> with their partners mostly dependent on them.

The majority of participants, according to the data, were Roman Catholics (n = 24; 67%), and Christians (n = 8; 22%). The study showed that Catholics still chose to get no-scalpel vasectomy despite the Catholic Church's opposition to artificial family planning methods like this.

The majority of the study participants have no comorbidities, history of genital infections, or any prior

Table 1: No-scalpel vasectomy acceptors at the comprehensive family planning center of Dr. Jose Fabella Memorial Hospital from March 2022 to February 2023

	Clients (n=36), frequency (%)
Address	
Within NCR	19 (53)
Outside NCR	17 (47)
Age (years)	
<18	
18–29	7 (19)
30–39	25 (70)
>40	4 (11)
Marital status	
Never married	
Married	29 (81)
Living with partner	7 (19)
Separated/widowed	
Education	
None	
Elementary	
High school/vocational	8 (22)
College or higher	28 (78)
Occupation (client)	
Employed	25 (70)
Self-employed	8 (22)
Student	
Househusband	3 (8)
Occupation (partner)	
Employed	11 (31)
Self-employed	3 (8)
Student	
Housewife	22 (61)
Income cluster	
Poor	3 (8)
Low-income class	4 (11)
Lower middle-income class	8 (22)
Middle middle-income class	15 (42)
Upper middle-income class	5 (14)
Upper-income class	1 (3)
Rich	
Religion	
Roman Catholic	24 (67)
Christian	8 (22)
Muslim	
INC	1 (3)
Others	3 (8)
Presence of medical condition	
None	36 (100)
Cardiac condition	
Diabetes	
Hypercholesterolemia	
Hypertension	
Psychiatric condition	
Thyroid disorder	
Others	

Contd...

Table 1: Contd...

Table 1: Contd	
	Clients (n=36), frequency (%)
Previous complication(s) or operation(s) in genital area	
Yes	4 (11)
Unknown	
No	32 (89)
Previous infection(s) in genital area	, ,
Yes	
Unknown	
No	36 (100)
Desire to have more children	, ,
Yes	
Undecided	
No	36 (100)
Number of children	( ) ( )
1–2	16 (44)
3–4	14 (39)
>5	6 (17)
Age of last child	0(17)
<3	19 (53)
>3	17 (47)
Contraceptive method used by partner	17 (47)
None	12 (34)
Fertility awareness-based method	12 (04)
Pills	10 (28)
Intrauterine device	3 (8)
Injectable (DMPA)	4 (11)
Implant	2 (5)
Condom	5 (14)
Date of 1st inquiry	0 (11)
January–March	5 (14)
April–June	5 (14)
July-September	14 (39)
October-December	12 (33)
Date replied (days)	12 (00)
Less than a day	25 (69)
After 1–2	9 (25)
After 3–4	1 (3)
After ≥5	1 (3)
Date counseling conducted (days)	1 (0)
Less than a day	30 (84)
After 1–2	3 (8)
After 3–4	0 (0)
After ≥5	3 (8)
Date schedule of operation given (days)	3 (0)
	20 (70)
Less than a day  After 1–2	28 (78) 7 (19)
After 3–4	7 (19)
After ≥5	1 (2)
	1 (3)
Date of operation	11 /01\
January–March	11 (31)
April-June	2 (5)
July-September	17 (47)
October–December Follow-up after procedure (days)	6 (17)
i onow up aitor procedure (days)	

Table 1: Contd...

	Clients (n=36), frequency (%)
After ≤7	33 (92)
After 8–14	2 (5)
After 15–21	1 (3)
After ≥22	
Postoperative outcome	
No complications	34 (95)
Surgical site infection	
Swelling	
Pain	
Hematoma	2 (5)
Semen analysis after procedure (months)	<i>n</i> =20
After 1–2	4 (20)
After 3–4	8 (40)
After 5–6	6 (30)
After ≥7	2 (10)
Semen analysis result	<i>n</i> =20
No sperm seen	16 (80)
With sperm seen	4 (20)

NCR: National Capital Region, INC: Iglesia ni Cristo, DMPA: Depot Medroxyprogesterone Acetate

complications in the genital area. Only 4 (11%) patients were noted to have short vas deferens at the time of examination and they were referred to a urosurgeon for further evaluation.

The norm of two-child family size<sup>[8]</sup> was noted in 16 (44%) of our clients. However, there was also an increasing trend with clients having 3 or more children, [8] 14 (39%) clients with 3-4 children, and 6 (17%) clients with 5 and above children. A cross-sectional study from May 2, 2021, to June 2, 2021, done at Arba Minch Town about the knowledge, attitude, and associated factors on vasectomy among married men in their community found that clients with last child with age <3 years have a more positive attitude toward no-scalpel vasectomy. It was consistent with our findings that 19 (53%) have children <3 years old and 17 (47%) with 3 years old or older. The findings showed that men with children under three years old have a postive outlook in regards with family planning especially male sterilzation.[9]

Different methods of family planning were already being used by the client and partner prior to operation such as pills 10 (28%), condoms 5 (14%), injectables 4 (11%), intrauterine devices 3 (8%), and implants 2 (5.56%). Majority availed of short-acting reversal contraception prior to procedure.

To be able to reach out to more acceptors in the advent of the COVID-19 pandemic, teleconsult hotline was utilized<sup>[10]</sup> for inquiry and counseling of the client prior to procedure. Most queries were received during the third quarter, July to September, with 14 (39%) clients.

This was the period when people were already adjusted to the new normal. The fourth quarter, from October to December, had 12 (33%) clients, which meant clients did not prefer to undergo the procedure on the holidays. The lowest inquiries were on the first (January to March) and second (April to June) quarters, with 5 (14%) clients each. This was the period that most clients were still apprehensive to go to the hospital due to the pandemic. As a measure of efficacy, there was a quick turnaround time of response within the day in 25 (69%) clients, within 1-2 days in 9 (25%) clients, after 4 days in 1 (3%) client, and after 5 days in another client (3%). After responding to the client, counseling was done in less than a day for 30 (83%) clients, followed by 3 (8%) clients who received counseling between 1 and 2 days after initial inquiry and then 3 (8%) clients after more than 5 days. Once counseled and eligible to undergo procedure, they were immediately given the schedule of operation for 28 (78%) clients within a day, followed by 7 (19%) clients who received their schedule after 1-2 days and only 1 (3%) client who got his schedule after more than 5 days. Seventeen or 47%, underwent no-scalpel vasectomy during the third quarter which was also consistent with the time of inquiry. The study showed that majority, 11 (31%) clients, were during the first quarter followed by during the fourth quarter with 6 (17%) clients.

Thirty-three clients (92%) successfully completed the follow-up process within 7 days from the procedure, 2 (5%) participants were able to follow up between 8 and 14 days, while only 1 (3%) individual followed up after 17 days postoperation.

There is a high rate of follow-up within 7 days from the procedure in 33 (92%) clients, and a minority had their follow-up between 8 and 14 days in 2 (5%) clients and 17 days postoperation in 1 (3%) client. A low compliance of follow-up visits could result in problematic retrospective reports of failures.[11] Upon follow-up, 34 (94%) clients had no reported complications; two (6%) clients had hematoma postoperation. They were both managed conservatively and as outpatient. A study done in a government hospital in India analyzed the effectiveness of no-scalpel vasectomy. Complications of no-scalpel vasectomy included bleeding (2%), hematoma (1.4%), wound infection (2%), and scrotal pain (2.8%) which were managed all conservatively. The study concluded that no-scalpel vasectomy procedure is an effective, safe, cost-effective, and permanent male contraceptive procedure, with very minimal manageable complications.[5]

There were only 20 (56%) out of the 36 individuals who had their semen analysis done. Sixteen (44%) clients were excluded from the analysis of semen result and duration of semen analysis due to loss to follow-up. Most patients

had their semen analysis done 3 months or longer, which indicated that they were compliant with DOH guidelines that semen analysis should be done 3 months after the procedure and should show the absence of spermatozoa.<sup>[2]</sup> In the semen analysis, 16 (80%) had no sperm seen. There were only 4 (20%) with sperm seen and their semen analyses were done. The semen analyses were done after 4 months (1 client), 5 months (2 clients), and 10 months (1 client). A case report from the Journal of Medical Case Reports presented a healthy 37-year-old male who underwent no-scalpel vasectomy, semen analysis detected no sperm, and histopathology confirmed the specimen to be the left and right vas deferens.<sup>[12]</sup> After 7 years, he got his wife pregnant and a repeat semen analysis confirmed the presence of semen. Studies concluded a possibility of early recanalization (positive semen analysis as early as 2-6 weeks postprocedure) and late recanalization. Recanalization can occur when the epithelial microtubules proliferate from the granulomatous tissue of the ligated ends of the vas deferens creating a fistula where the sperm can pass through.[13]

The study concluded that no-scalpel vasectomy procedure is an effective, safe, cost-effective, and permanent male contraceptive procedure, with very minimal manageable complications.<sup>[5]</sup>

### Limitations of the study

This research study concentrated on describing the characteristics and outcomes of no-scalpel vasectomy acceptors at Dr. Jose Fabella Memorial Hospital from March 2022 to February 2023. The study had several limitations. One limitation was that the data gathered came from only one medical institution, the Comprehensive Family Planning Center of Dr. Jose Fabella Memorial Hospital which caters mostly to the public demographics. Furthermore, no further investigation was conducted for certain participants who presented with short vas, as the study is retrospective in nature and the data was gathered through chart reviews. Another limitation was that the study only covered 1 year from March 2022 to February 2023. Finally, the semen analyses came from different laboratories since most of the clients opted to have their semen analyses done at their respective locale.

#### Conclusion

The majority of participants who underwent no scalpel vasectomy at our institution were urban residents, between 30 to 39 years old, married, employed, educated, belonged to the working class, Roman Catholics, and already had one or two children, the youngest of whom was under three. They were all using a family planning method prior to the procedure. As seen by the increase

in acceptors, teleconsultation is effective in promoting vasectomy. Clients were able to follow up after the procedure, where there was minimal complication with only 2 (5%) clients developing hematoma.

There is a need for a strict protocol in postvasectomy follow-up with semen analysis to be able to check the effectiveness of the procedure.

By determining the characteristics and outcomes of no-scalpel vasectomy acceptors at Dr. Jose Fabella Memorial Hospital from March 2022 to February 2023, the findings of the study hope to aid the health-care providers in our institution gain a better insight about the characteristics and outcomes of our male clients who decide to undergo no-scalpel vasectomy as their family planning method of choice. There is a need to study further improving of the formulation and implementation of policies and family planning programs to further reach the male population.

### Recommendations

Future directions for this research may include conducting a follow-up study on the participants who failed to have their semen analyses done and participants who had a delay in doing their semen analyses. It is also recommended for the semen analysis to be quantitative instead of qualitative. Another approach may also include reproducing this study in other institutions who also offer no-scalpel vasectomy for better representation of the study population.

Results of these and related studies could be used to design a counseling tool exclusively for men, which can help our health-care providers to provide a more patient-centered approach while counseling for men with regard to family planning – which can increase awareness, involvement, and acceptance of the no-scalpel vasectomy.

# **Authorship contributions**

Lovely S. Sanedrin - Involved in the conceptualization, methodology, software, data curation, fomal analysis, writing of the original draft, review and editing, and visualization.

Madelynne I. Panay-Olalia - Involved in conceptualization, methodology, review and editing of the draft and supervision.

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### **Conflicts of interest**

There are no conflicts of interest.

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