#### Health Beliefs of Fathers on Vasectomy as Influenced by Social Media

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#### Abstract

The study generally aimed to determine the health beliefs of fathers on vasectomy as influenced by social media. A survey questionnaire was disseminated to 230 fathers aged 25-45. Pearson Chi-square test was used for the relationship between the respondents' sociodemographic profile versus health beliefs, and psychological factors versus health beliefs of fathers on vasectomy. Findings revealed that most of the fathers are middle-aged, have three to six children, are married, attained higher educational levels, are poor, and are Roman Catholics. The fathers are average users of social media; Facebook is the most often used platform among fathers, and they acquired vasectomy information from social media such as vasectomy as a family planning method, benefits, stigma, and risks. Fathers strongly agreed to all the susceptibility statements; strongly agreed to all the severity statements; disagreed to all the perceived benefits statements; and strongly agreed to all the statements under perceived barriers. A significant relationship was seen between the respondents' monthly income, number of children, civil status, educational attainment with their health beliefs. A significant relationship was also seen between the fathers' frequency of social media utilization and acquired information with their health beliefs. Thus, it is recommended that the locality and health experts increase information dissemination and create and implement strategic communication and advocacies through various communication platforms to improve fathers' knowledge and perceptions about vasectomy as a family planning method.

Keywords: Family Planning, Vasectomy, Health Beliefs, Social Media

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## Introduction

Family planning allows people to have the number of children they want and better control over the period between pregnancies. It is accomplished through the use of various methods of contraception, as well as medical therapy for infertility (World Health Organization, 2019). Contraception, any method capable of preventing pregnancy and treating involuntary infertility, is used to accomplish family planning. The contraceptive effect might be acquired temporarily or permanently (World Health Organization, 2020).

Despite the advances in family planning, the practice remains a global concern, particularly in developing countries (Payne & Erbenius, 2018). The global population is growing at about 1.05 percent per year and the current annual population growth rate is estimated to reach at least 81 million people (Roser et al., 2019). On the other hand, as of 2022 data from the Philippine Statistics Authority (2022), the Philippine population is close to 113 million. It is one of the consequences of the COVID-19 pandemic, such as service interruptions on family planning (Commission on Population and Development, 2021). As a result, several countries have made reproductive policies to encourage the use of contraceptives (Schwing, 2000).

Furthermore, women have become more important in family planning services, particularly contraception research and communication campaigns (Dadras et al., 2022). Even though female contraceptives are highly successful in preventing unwanted pregnancy, some women are unable to use them due to health issues or side effects, leaving some couples without viable contraception choices (Amory, 2016). Thus, worldwide health organizations have suggested emphasizing the importance of men's participation in the promotion and use of various forms of contraception (James-Hawkins et al., 2018).

Condoms and vasectomy are the only effective male contraceptive alternatives available. However, they are unacceptable to all men (Amory, 2016). Vasectomy, often known as male sterilization, is a type of birth control that involves occluding or removing a portion of the vas deferens (Nesro et al., 2020). It has also been shown to be a successful, safe, and efficient method of contraception in population control worldwide (Appiah et al., 2018). Although it is safer, simpler, and less expensive than female sterilization, it is one of the world's least-used and least-known methods of contraception (White et al., 2022). Misconceptions, lack of understanding, and acceptability of vasectomy as a family planning technique are all directly associated with men's degree of awareness.

Thus, this study explored the health beliefs of fathers in San Antonio, Arayat, Pampanga, Philippines on vasectomy as influenced by social media using the Health Belief Model as a guiding principle.

## Methods

The research utilized a quantitative research design to learn how vasectomy as a birth control method is conveyed in social media and how it affects father's health beliefs in San Antonio, Arayat, Pampanga, Philippines. It is classified as one of the barangays in Arayat with a high population count. According to McLeod (2017), quantitative research is the collection of data in numerical forms that may be classified or ranked. With this form of data, the researcher can create graphs and tables to analyze the acquired data. Quantitative research uses statistics and data to try to prove a point. The sample size for the study is 230 fathers with an age range of 25 to 45 years old and the data collection period was from December 2022 to January

2023. The researcher crafted the survey questionnaire guided by the study's objectives. The data gathered in the survey were presented using the Frequency Distribution Table (FDT), mean, and analyzed using Pearson Chi-square.

# **Result and Discussion**

# Socio Demographics

Age	Frequency	Percentage
25-30	66	29
31-37	87	38
38-45	77	33
Total	230	100
Number of children	Frequency	Percentage
1-3	81	35
4-6	134	58
7-9	15	7
Total	230	100
Civil Status	Frequency	Percentage
Single	13	6
Married	109	47
Annulled/Separated	56	24
Common Law	48	21
Widowed	4	2
Total	230	100
<b>Educational Attainment</b>	Frequency	Percentage
Elementary Undergraduate	5	2.2
Elementary Graduate	3	1.3
High School Undergraduate	21	9
High School Graduate	95	41.5
College Undergraduate	59	25.5
College Graduate	47	20.5
Total	230	100

Monthly Income (in Pesos)	Frequency	Percentage
10, 957 and below	127	55
10, 957 to 21, 914	84	36.5
21,914 to 43,828	15	6.5
43, 828 to 76, 666	4	2
76, 7669 to 131, 484	0	0
131, 483 to 219, 140	0	0
219, 140 and above	0	0
Total	230	100
Religion	Frequency	Percentage
Roman Catholic	131	57
Iglesia Ni Cristo	39	17
Born Again Christians	48	21
Seventh-Day Adventist	9	4
Jehovah's Witness	3	1
	230	100

Table 1. Socio-demographic profile

Table 1 presents the respondents' distribution by age, number of children, civil status, educational attainment, monthly income, and religion. Based on the results, most of the father respondents (38%) are from the 31 - 37 years age range, most (58%) have four to six children, most (47%) were married, most (41.5) were high school graduates, most (55%) have a monthly income of 10, 957 and below which is considered as poor, and most (57%) are Roman Catholic.

# Social Media Use and Acquired Information

Frequency of Social Media Utilization	Frequency	Percentage
Less than one hour	21	9
1 - 3 hours daily	75	33
4 - 9 hours daily	95	41
More than 10 hours daily	39	17
Total	230	100

Types of Social Media Used	Frequency	Percentage
Facebook	175	76
TikTok	27	12
Twitter	0	0
Instagram	2	1
YouTube	26	11
Total	230	100

Table 2. Frequency and type of social media

Table 2 presents the respondents' social media utilization and types of social media used. The results revealed that 95 (41%) respondents often use social media for four to nine hours per day, followed by 75 (33%) respondents who use social media for one to three hours a day, 17% (39) use it for more than 10 hours per day, and only 21 (9%) said that they use it for less than an hour each day. According to Baclig (2022), the average amount of time spent online by Filipinos using mobile devices is five hours and 47 minutes. It is higher than the global average of three hours and 43 minutes of mobile internet use spent online. The results of this study are parallel with Baclig's (2022) data since the four to nine hours daily use in this study is within the five hours and 47 minutes average of time spent online by Filipinos. This result indicates that most of the fathers are average users of social media.

Meanwhile, the findings of the study revealed that 76% (175) of the respondents frequently use Facebook, followed by TikTok with a frequency of 27 (12%) and YouTube with a frequency of 26 (11%). Only two (1%) of the respondents used Instagram. In the study by the Pew Research Center (2015), social media use is widespread among parents, with 83% of parents utilizing it on a variety of platforms. According to the findings of their study regarding the most popular social networking sites among parents, it was revealed that Facebook is used by 74% of parents. The results of the Pew Research Center indicated that Facebook is the most often used platform among parents which is congruent to the results of this study where most of the fathers utilized Facebook.

Another variable in this study is the respondents' information acquired from any social media sites regarding vasectomy. It is important to note that the respondents of the survey were allowed to have multiple responses regarding their acquired information from social media. Information about vasectomy as a contraceptive or family planning method, specifically the information "vasectomy is one of the male contraceptives in preventing pregnancy" obtained the highest frequency of 189 (82%). However, most of the respondents did not acquire information that vasectomy is an acceptable and non-controversial method of contraception and that vasectomy is considered a safe and permanent contraceptive method. This result implies that most of the fathers acquired information on vasectomy as a means of preventing pregnancy which is a positive outcome since social media communicates such, but only a few acquired information on social media regarding vasectomy as an acceptable family planning method which could be considered a negative outcome.

Moreover, most (79%) of the fathers, with a frequency of 181, claim that they acquired information from social media on the long-term effect of vasectomy as a family planning method. This is a positive result since it indicates that social media forwards information

regarding vasectomy as having long-term effects on controlling birth. However, the statement "vasectomy is over 99% effective at preventing pregnancy" shows that only nine percent (21) of the fathers had seen the particular information on social media. This means that only a few of the fathers had acquired information regarding the advantages or benefits of vasectomy on social media which is a negative outcome.

The next finding reveals the acquired information on the health risks of vasectomy. Sixteen (7%) of the fathers acquired the information "Vasectomy can cause complications like infection and long-term testicle pain", "Vasectomy does not protect from sexually transmitted infections", with one (0.40%) and "Vasectomy can cause long-term loss of sexual function after the operation" with 12 (5%) fathers. The results reveal that the majority of respondents did not acquire the particular information regarding the health risks of vasectomy on social media, which is a negative result.

Meanwhile, on the acquired information about stigma caused by vasectomy, information such as "Vasectomy harms a man's physical strength, sex drive, and masculinity" was acquired by 11 (5%), and "Vasectomy loses the dignity of men" were acquired by eight (3%). None of the fathers acquired the information that "Vasectomy is not necessary, women's contraceptives are more accessible and effective". This is a good indication since stigma is not commonly acquired in social media.

Lastly, the information about vasectomy procedures in social media was acquired by a few of the fathers, specifically, the information "Vasectomy procedure will make two cuts on each side of the scrotum" with a frequency of 51 (22%), "Vasectomy can be reversed" with a frequency of nine (2%) and "Vasectomy is less complicated and less risky surgery" with a frequency of two (0.80%). This result reveals that most of the fathers had not acquired vasectomy procedure information in social media, which is a negative indication.

Perceived Susceptibility	Mean	Descriptive Rating
1. Vasectomy could lessen my sex drive and sexual activities.	1.47	Strongly Agree
2. Vasectomy could lead to long term sexual discomfort.	1.50	Strongly Agree
3. Vasectomy could affect my ejaculation and erection.	1.51	Strongly Agree
4. Vasectomy could create anxiety if the size, shape, or appearance of my sexual organ changes.	1.89	Strongly Agree
5. Vasectomy could change my sexual behavior with my wife.	1.83	Strongly Agree
Grand Mean	1.64	Strongly Agree

# Health Beliefs

Table 3. Perceived Susceptibility

Table 3 presents the respondents' health beliefs on vasectomy in terms of perceived susceptibility. Perceived susceptibility refers to the fathers' belief about the possibility of developing a condition while undergoing vasectomy as a birth control procedure. With a grand mean score of 1.64, the respondents strongly agreed with all the susceptibility statements. This means that the fathers believe that they are susceptible to developing possible conditions if they undergo vasectomy, which is a negative indication because fathers show a negative perception of undergoing vasectomy as a family planning method. In line with this, the study by Menlah et al. (2021) titled "Perceptions and Experiences Regarding Vasectomy Among Vasectomized Men at Lartebiokorshie" revealed that most of the respondents showed opposition to using vasectomy as a method of family control because they view it to be risky, unethical, and not the best form of birth control.

Perceived Severity	Mean	Descriptive Rating
1. Vasectomy can lead to painful swelling and bleeding of the sexual organ.	1.48	Strongly Agree
2. Vasectomy can lead to different infections in the sexual organs.	1.47	Strongly Agree
3. Vasectomy can lead to hematoma formation or clotted blood in the sexual organ.	1.70	Strongly Agree
4. Vasectomy can cause prostate cancer, a disorder that causes abnormal cells to develop in the prostate tissues in the male sexual organ.	1.36	Strongly Agree
5. Vasectomy can permanently damage the sexual organ.	1.33	Strongly Agree
Grand Mean	1.47	Strongly Agree

Table 4. Perceived Severity

Table 4 presents the respondents' health beliefs on vasectomy in terms of perceived severity or the fathers' belief about the risks of vasectomy as a birth control procedure. The fathers strongly agreed with the statements under perceived severity, with a grand mean score of 1.47. The fathers strongly agreed that the risks of undergoing vasectomy as a birth control procedure are high. This result indicates that fathers believe that if they undergo vasectomy procedures, there will be a chance that they may get complications, which is a negative result because fathers show fear of undergoing vasectomy as a family planning method. This can be related to the respondent's belief about the possibility of developing a condition while undergoing vasectomy as based on the previous result. In relation, the study by Kamran et al. (2019) titled "Assessment of the Practice and Perception Regarding Vasectomy Using Health Belief Model: A Cross-Sectional Survey in Urban Jhang" showed that the negative consequences of vasectomy on sexual function, desire, and organs are poorly perceived by the respondents. The respondents were worried about its side effects, and some of them also had a negative opinion about vasectomy since their spouses had told them that the procedure was dangerous.

Perceived Benefits	Mean	Descriptive Rating
1. I am confident that vasectomy is a safe, highly effective and painless procedure.	1.80	Disagree
2. Undergoing a vasectomy would reduce my fear of getting my wife pregnant.	1.73	Disagree
3. I can control the number of my children when I undergo vasectomy procedure.	2.02	Disagree
4. I am confident that vasectomy would help my wife to ease the contraceptive burden.	1.84	Disagree
5. I am certain that vasectomy is a less aggressive operation that reduces the risk of bleeding and infection.	1.79	Disagree
Grand Mean	1.84	Disagree

Table 5. Perceived Benefits

Table 5 presents the respondents' health beliefs on vasectomy in terms of perceived benefits or their views on the positive outcomes of vasectomy as a birth control procedure. The fathers disagreed with all the statements under perceived benefits, with a grand mean of 1.84. It only demonstrates that even if vasectomy can prevent pregnancies, the fathers still believe that vasectomy will not bring them benefits, which is a negative result. In contrast, the study of Bunce et al. (2007) titled "Factors Affecting Vasectomy Acceptability in Tanzania" revealed that the respondents believe in using contraceptives, specifically vasectomy, and the benefit of having a smaller family. The respondents mentioned that using contraceptives meets the fundamental necessities of their children, such as proper food, health care, and education.

Perceived Barriers	Mean	Descriptive Rating
1. I am afraid that if I undergo a vasectomy procedure it would affect my masculinity.	1.64	Strongly Agree
2. As a son of God, I am certain that undergoing vasectomy is a sin.	1.20	Strongly Agree
3. As a man, it is hard for me to accept that I will be infertile.	1.20	Strongly Agree
4. I am afraid that vasectomy reversal is not always successful.	1.15	Strongly Agree
5. I am worried that my family and friends would laugh at me when I undergo vasectomy.	1.19	Strongly Agree
Grand Mean	1.27	<b>Strongly Agree</b>

Table 6. Perceived Barriers
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Table 6 presents the respondents' health beliefs on vasectomy in terms of perceived barriers or their views on challenges or hindrances toward vasectomy as a birth control procedure. The respondents strongly agreed with all the statements under perceived barriers. The result indicates that the fathers from San Antonio, Arayat, Pampanga, Philippines strongly believe that undergoing vasectomy will create challenges, which is a negative indication. The study of Shongwe et al. (2019) titled "Assessing the Acceptability of Vasectomy as a Family Planning Option: A Qualitative Study with Men in the Kingdom of Eswatini" revealed that one of the traditional beliefs is that men should be the family's head. The respondents believed that having a vasectomy would weaken their position as men in their families and society. They viewed vasectomy differently from others because of cultural and societal expectations, such as having numerous children, particularly male heirs who would carry the family name into the future. Eswatini is a nation where culture plays a central role and men stick to firmly held traditional customs and beliefs.

#### **Relationship of Variables**

Based on the findings, the respondents' age did not affect the health beliefs of the fathers. The fathers' number of children has a highly significant relationship (0.001) with their health beliefs in terms of barriers. It can be indicated that fathers who had more children are more likely to recognize the barriers if they undergo vasectomy and they tend to believe that vasectomy procedures would affect them physically and psychologically.

The fathers' civil status has a highly significant relationship with their health beliefs in terms of susceptibility (0.004), severity (0.000), and barriers (0.000). This indicates that married fathers and those who were once married were more likely to believe the possibility of developing conditions in performing their sexual functions and other psychological conditions if they undergo vasectomy, that vasectomy is a risky procedure, and believe in the disadvantage of undergoing vasectomy as a birth control procedure.

Educational attainment also has a highly significant relationship with the fathers' health beliefs in terms of susceptibility (0.003), benefits (0.000), and barriers (0.000). This indicates that the more the fathers attain higher education, the more that they believe that they develop negative conditions in terms of sexual behavior and sexual actions if they undergo vasectomy, and the more that they do not believe in the positive outcome of vasectomy as a birth control procedure, and the more that they believe in the challenges of vasectomy in terms of physical and psychological aspects of their sexual life.

In terms of the fathers' income, it has a highly significant relationship with all the health beliefs (0.000). This indicates that the more the fathers' income is insufficient, they tend to believe that they are more prone to the adverse effects of vasectomy, they believe that vasectomy is a risky surgery, and do not believe that getting a vasectomy would help them in limiting the number of children in the family, and perceive the hindrances of undergoing vasectomy procedures and it could affect them in terms of physical and psychological aspects of their sexual life.

As to the frequency of social media utilization and health beliefs of the fathers, it has a significant relationship in terms of susceptibility (0.040), a highly significant relationship in terms of severity (0.008), benefits (0.000), and barriers (0.000). This shows that fathers who use social media frequently are more likely to perceive the possibility of developing conditions in performing their sexual functions and other psychological conditions if they

undergo vasectomy, are more likely to perceive how serious the complications they may get such as fear and anxiety, the more that they do not believe in the positive outcome of vasectomy, and the more they are likely to believe that vasectomy procedures would affect them physically and psychologically.

Lastly, the fathers' acquired information has a highly significant relationship with their health beliefs (0.000). This indicates that the acquired information of the fathers from social media affected their beliefs in developing adverse conditions in terms of their sexual behavior and sexual actions in using vasectomy, their belief in the severity such as the medical risk of vasectomy, and their belief that undergoing vasectomy will affect them physically and psychologically.

## Conclusion

The respondents' frequency of social media utilization influenced their health beliefs in terms of perceived susceptibility, severity, benefits, and barriers. Also, the acquired information from the fathers influenced their health beliefs in terms of perceived susceptibility, severity, benefits, and barriers. Since it has a significant relationship between the frequency of social media utilization and acquired information under perceived susceptibility, perceived severity, and perceived barriers, it affirms the core assumption of the Health Belief Model which states that a person will behave in favor of their health if they have confidence in their ability to carry out a suggested health action. Meanwhile, for the perceived benefits, it disproves the core assumption of the Health Belief Model that a person will take a prescribed method for their health if they have the belief that by doing so, they will avoid a harmful condition (Rosenstock et. al, 1988).

Vasectomy is still a less used and less researched method of birth control in the Philippines. Men (and their female partners) who do not want children or who have achieved their ideal family size may find a procedure like vasectomy to be an appealing alternative to explore due to its efficacy, permanency, and safety. Thus, this research brings new knowledge associated with vasectomy regarding the use of social media in the father's health beliefs and acquired information. On the other hand, the study did not seek further explanation from the fathers which calls for further in-depth study regarding their health beliefs on vasectomy.

### References

- Adongo, P., Tapsoba, P., Phillips, J., Tabong, P., Stone, A., Kuffour, E., Esanti, S., & Akweongo, P. (2014) "If you do vasectomy and come back here weak, I will divorce you": a qualitative study of community perceptions about vasectomy in Southern Ghana. https://pubmed.ncbi.nlm.nih.gov/24885663/
- Amory, J. K. (2019). Development of Novel Male Contraceptives. Clinical and Translational Science, 13(2), 228–237. https://doi.org/10.1111/cts.12708
- Appiah, S., Agyen, J. K., Garti, I., & Menlah, A. (2018). Married Men and Vasectomy: A Focused Group Study in an Urban Community in Ghana. SAGE Open Nursing, 4, 237796081879038. https://doi.org/10.1177/2377960818790380
- Azmat, SK., Ghulam, M., Waqas, H., Muhammad, A., Aftab A., & Mohsina B. (2012) Barriers and perceptions regarding different contraceptives and family planning practices amongst men and women of reproductive age in rural Pakistan: a qualitative study. Pakistan J Public Health. https://www.cabdirect.org/cabdirect/abstract/2013309575
- Bechard, L. E., Bergelt, M., Neudorf, B., DeSouza, T. C., & Middleton, L. E. (2021). Using the Health Belief Model to Understand Age Differences in Perceptions and Responses to the COVID-19 Pandemic. Frontiers in Psychology https://doi.org/10.3389/fpsyg.2021.609893
- Concepcion, E. L. (n.d.). Knowledge and attitudes toward family planning: Their relationship to family planning practice among married men in selected urban and rural barangays in the Municipality of Leganes, Iloilo (Unpublished Master's thesis). Central Philippine University, Jaro, Iloilo City. https://repository.cpu.edu.ph/handle/20.500.12852/808
- Dadras, O., Khampaya, T., & Nakayama, T. (2022). Child Marriage, Reproductive Outcomes, and Service Utilization among Young Afghan Women: Findings from a Nationally Representative Survey in Afghanistan. Studies in Family Planning, 53(3), 417–431. https://doi.org/10.1111/sifp.12207
- James-Hawkins, L., Dalessandro, C., & Sennott, C. (2018). Conflicting contraceptive norms for men: equal responsibility versus women's bodily autonomy. Culture, Health &Amp; Sexuality, 21(3), 263–277. https://doi.org/10.1080/13691058.2018.1464209
- Jones, C. L., Jensen, J. D., Scherr, C. L., Brown, N. R., Christy, K., & Weaver, J. (2014). The Health Belief Model as an Explanatory Framework in Communication Research: Exploring Parallel, Serial, and Moderated Mediation. Health Communication, 30(6), 566–576. https://doi.org/10.1080/10410236.2013.873363
- Mckellar, K., & Sillence, E. (2020). Current Research on Sexual Health and Teenagers. Teenagers, Sexual Health Information and the Digital Age, 5–23. https://doi.org/10.1016/b978-0-12-816969-8.00002-3

Mcleod, S. (2017). Erik Erikson. https://www.simplypsychology.org/Erik-Erikson.html

- Nesro, J., Sendo, E. G., Yesuf, N. T., & Sintayehu, Y. (2020). Intention to use vasectomy and associated factors among married men in Addis Ababa, Ethiopia. BMC Public Health, 20(1). https://doi.org/10.1186/s12889-020-09316-x
- Payne, J. G., & Erbenius, T. (2018). Conceptions of transgender parenthood in fertility care and family planning in Sweden: from reproductive rights to concrete practices. Anthropology &Amp; Medicine, 25(3), 329–343. https://doi.org/10.1080/13648470.2018.1507485
- Roser, M., Ritchie, H., Ortiz-Espina, E., & Rodés-Guirao, L. (2019). World population growth. Our World in Data. https://ourworldindata.org/world-population-growth
- Schwingl PJ. (2000) Safety and effectiveness of vasectomy. https://www.tandfonline.com/doi/full/10.1080/2331205X.2016.1250320
- Shongwe, P., Ntuli B., & Madiba, S. (2019). Assessing the Acceptability of Vasectomy as a Family Planning Option: A Qualitative Study with Men in the Kingdom of Eswatini. https://www.mdpi.com/1660-4601/16/24/5158
- White, K., Martínez Órdenes, M., Turok, D. K., Gipson, J. D., & Borrero, S. (2022). Vasectomy Knowledge and Interest Among U.S. Men Who Do Not Intend to Have More Children. *American Journal of Men's Health*, 16(3), 155798832210985. https://doi.org/10.1177/15579883221098574
- Wilkinson, A., Vasudevan, V., Honn, S., Spitz, M., & Chamberlain, R. (2009). Sociodemographic Characteristics, Health Beliefs, and the Accuracy of Cancer. Knowledge. Journal of Cancer Education, 24(1), 58–64. https://doi.org/10.1080/08858190802664834
- World Health Organization. (2019). Contraception. https://www.who.int/health-topics/contraception
- World Health Organization. (2020). Family planning/contraception methods. https://www.who.int/news-room/fact-sheets/detail/family-planning-contraception
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