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KNOWLEDGE AND ATTITUDES TOWARD IN-VITRO FERTILIZATION AMONG RESIDENTS OF BARANGAY BANILAD CEBU CITY

Asra Syed Yaqoob[1], Shruti Mahaveer[2], Sivakumar Barath Kumar[3], Rathod Nayan Sanjaybhai[4], Chandramohan Pavithra[5], Nagargoje Dhananjay Shivaji[6], Varne Om Mahesh[7], Daffni James Rajesh[8], Jeba Kiruba Davidraj Sugantha Selv[10], Sharma Lokesh[11], Kare Abhishek[12], Madasamy Lingarajan Sudharshana[13], Modugula Sai Jaswanth Reddy[14], Mariya Chauhan[15], Sundhar Yuvasankar[16], Sidhu Prabhjot[17]

[1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17]*Medical Students, Gullas College of Medicine, Banilad, Mandaue City, Cebu.*

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Corresponding Author:
Dr. Asra Syed Yaqoob
Medical Student, Gullas College of Medicine, Banilad, Mandaue City, Cebu
Email: asrassyyed5@gmail.com

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ABSTRACT

Background: In-vitro fertilization (IVF) is a major advancement in reproductive medicine, offering an effective treatment for infertility and renewed hope for individuals and couples seeking to build a family despite its significant emotional, social, and economic challenges. This study aims to evaluate the knowledge and attitudes towards in vitro fertilization (IVF) among residents of Barangay Banilad, Cebu City by structured survey questionnaire. The survey assessed participants' understanding of IVF procedures, success rates, ethical considerations, and potential risks, while the focus group discussions explored deeper attitudes, cultural beliefs, and personal experiences related to IVF.

Materials and Methods: This descriptive quantitative study surveyed 363 residents (age : 20–50 years) of Barangay Banilad, Cebu City, Philippines, using an adapted structured questionnaire to assess knowledge and attitudes toward in-vitro fertilization (IVF). Participants were selected through quota sampling. Data were analyzed using frequency, percentage, mean, standard deviation, Pearson's correlation, and chi-square with Cramer's V to examine associations between demographic characteristics, knowledge, and attitudes.

Results: Our findings indicate that while a basic awareness of IVF exists among the residents, there is a significant gap in detailed knowledge and understanding of the process and its implications. Many respondents expressed concerns about the ethical aspects and high costs associated with IVF, which influenced their attitudes towards its acceptance and utilization. Cultural and religious beliefs also played a crucial role in shaping opinions, with some participants viewing IVF positively as a means to overcome infertility, while others harbored reservations due to moral and ethical considerations.

Conclusion: The study highlights the need for enhanced educational initiatives to improve community knowledge about IVF, addressing misconceptions, and fostering informed attitudes. By increasing awareness and understanding, healthcare providers and policymakers can better support individuals and couples considering IVF, ensuring informed decision-making and potentially improving acceptance of assisted reproductive technologies within the community.

Keywords: In vitro Fertilization (IVF), Knowledge, Attitudes, Community perception, Assisted Reproductive Technologies (ART).

INTRODUCTION

In-vitro fertilization (IVF) represents a major advancement in reproductive medicine, holding new hope for couples and individual experiencing difficulty in conceiving. Since infertility has yet to be established as a priority public health problem with emotional, social, as well as economic impacts, techniques like IVF not only provide medical treatments but also hope for the building of families as well. While it is important, the availability of knowledge and attitudes toward IVF is tremendously diverse across populations.

This study specifically aims to assess the knowledge and attitude towards IVF among Barangay Banilad, Cebu City. Through contemplation of the local's perspectives, this research seeks to find out possible hindrances to IVF understanding, acceptance, and eventual use among the population. The reason for this is that the receptivity to reproductive health intervention is not only determined by clinical data but also cultural practice, religious practice, and socio-economics.

Infertility affects an estimated 186 million people worldwide, with male infertility contributing to over half of all cases. Despite this, the social burden is often placed on women, especially in regions with limited access to assisted reproductive technologies (ART). Improving access to affordable fertility treatments, including IVF, is increasingly recognized as an important gender and reproductive health intervention (Inhorn MC & Patrizio P, 2015).[1]

The World Health Organization report, Infertility prevalence estimates, 1990–2021, presents global and regional estimates of infertility prevalence from 1990 to 2021 based on relevant and representative studies. It also highlights ways to improve infertility prevalence estimation for more accurate and actionable data. The findings support a better understanding of the burden of infertility and help guide policies and services aimed at ensuring universal access to fertility care.[2]

Reliable global, regional, and national data on infertility prevalence and trends are essential for guiding prevention and treatment strategies (Mascarenhas MN et al., 2012).[3]

According to Ombelet W (2009), infertility is a major but often neglected problem, especially in resource-poor countries where childlessness leads to significant social, psychological, and economic hardship. Access to treatment is limited and unevenly available. The author emphasizes that improving care requires simplified and safer diagnostic and treatment methods, integration into existing reproductive health services, and stronger policy attention to ensure equitable access based on social justice.[4]

According to Shirai Y (1993), attitudes toward new reproductive technologies in Japan differed between groups. Infertile couples were more supportive than married individuals, and men were generally more positive than women. Support was mainly based on viewing these technologies as infertility treatment, while opposition was linked to the belief that they interfere with nature.[5]

While these are useful inputs, there is still a sharp necessity for localized studies. Most of the existing research offers insights at the national or international level, but they do not necessarily reflect the distinctive viewpoints of smaller groups, whose everyday lives and socio-cultural values may critically form IVF's image. Barangay Banilad, with its particular demographic and socio-cultural setting, is an interesting place to study these questions.

Knowing how this group knows and thinks about IVF can guide the development of education programs, targeted awareness campaigns, and policy that promote acceptance and informed choice.

This study bridges the research gap by conducting in-depth survey and analysis of Barangay Banilad residents. Through the application of the mixed-methods approach of using quantitative surveys in conjunction with qualitative interviews, we hope to create a comprehensive picture of the attitudes and knowledge of the community regarding IVF. The research will analyze factors like demographic features, beliefs, and information sources for their effect on IVF perception. Through this approach, the research will be able to yield significant local knowledge, informing policymakers and healthcare professionals on how to address misperceptions and improve education regarding IVF in similar groups.

MATERIALS AND METHODS

The study employed a descriptive quantitative research design using a structured survey questionnaire to assess the knowledge and attitudes of residents of Barangay Banilad, Cebu City, Philippines, regarding in-vitro fertilization (IVF). A total of 363 participants aged 20–50 years were selected through quota sampling, with inclusion criteria being residency in Banilad and willingness to provide informed consent, while non-residents and those outside the age range were excluded. Data were collected using an adapted, two-part questionnaire covering demographic details (age, sex, religion, education) and knowledge and attitudes measured on a 4-point Likert scale. The research process included pre-data gathering (literature review, proposal development, and tool preparation), actual data collection (distribution and retrieval of questionnaires with informed consent), and post-data processing (data cleaning, statistical and thematic analysis, and reporting). Data analysis involved frequency, percentage, mean, standard deviation, Pearson's correlation, and chi-square with Cramer's V to examine relationships between variables.

RESULTS

Table 1: Demographic Profile of the Residents of Barangay Banilad

Characteristics		(%)
Age		
20–29	193	53.2
30–39	117	32.2
40–49	53	14.6
Sex		
Male	130	35.8
Female	233	64.2
Religion		
Roman Catholic	302	83.2
Christian	42	11.6
Islam	10	2.8
Others	9	2.5
Education		
High School	94	25.9
College Graduate	71	19.6
Bachelor's Degree	164	45.2
Master's/Doctorate	34	9.4

n = 363, This study surveyed 363 residents of Barangay Banilad, Cebu City, to understand their knowledge and attitudes toward in vitro fertilization (IVF). [Table 1] presents the demographic characteristics of the respondents, which include age, sex, religion, and educational level

1.Age Structure: The majority of the respondents interviewed fell within the age bracket 20–29 years (53.2%), followed by those between 30–39 years (32.2%) and 40–49 years (14.6%).

2.Sex: In analyzing distribution by gender, women dominated the sample at 64.2%, while male respondents accounted for 35.8%. The female domination follows the general trend seen in the same surveys because reproduction health issues are more attractive among women.

3.Religion: A vast majority of the respondents were Roman Catholic (83.2%), followed by Christian denominations (11.6%), Islam (2.8%), and other religions (2.5%).

4. Level of education: At the educational level, nearly half of the respondents (45.2%) stated that they had a Bachelor's degree, and 25.9% secondary school graduates, 19.6% undergraduate college attendees, and 9.4% postgraduate students (Master's or Doctorate). Education will likely be accompanied by health literacy and exposure to truthful information.

Summary of Demographic Profile: Overall, the sample population profile covers a relatively young, female-dominated, Roman Catholic, and well-educated population.

These characteristics are important to note because they are likely to influence the extent of knowledge, as well as attitudes towards IVF, in the population. Adolescence and higher levels of educational achievement among the respondents, on one hand, can facilitate openness and accommodation towards new reproductive technologies. Again, firm religious identifications, especially with Roman Catholicism, can moderate such openness with some reserve or moral caution.

Table 2: Level of Knowledge of the Residents on In-Vitro fertilization (IVF)

Items	Mean	Std. Deviation	Interpretation
Have you heard about invitro fertilization before?	3.09	0.96	Agree
In-vitro fertilization is a good option in the treatment of infertility?	3.09	0.83	Agree
Babies born through in-vitro fertilization are healthy?	2.89	0.93	Agree
In-vitro fertilization is expensive?	3.31	0.83	Strongly Agree
Do you know it could be applied for male infertility?	2.61	1.03	Agree
Are you aware that donor egg and sperm could be used for treatment?	2.78	1.02	Agree
Do you believe that in-vitro fertilization could be used to treat genetic fertility disorder?	2.70	1.02	Agree
Do you believe it is treatable?	2.84	0.91	Agree
Knowledge	**2.91**	**0.60**	**Knowledgeable**

Legend: Strongly Disagree 1.0 - 1.75; Disagree 1.76 -2.5; Agree 2.6-3.25; Strongly Agree 3.26-4.0. Legend for the standard deviation (SD) values in your data: SD ≤ 0.50: Very consistent responses (low variability); SD = 0.51–1.00: Moderate consistency in responses; SD > 1.00: High variability in responses (divergent opinions).

[Table 2] offers a comparison of the respondents' knowledge level on different areas of in-vitro fertilization (IVF). Each statement was scored on a

Likert scale with a higher mean score reflecting a greater level of agreement. The total mean knowledge score of 2.91 and 0.60 standard deviation imply that the people of Barangay Banilad, in general, have knowledge of IVF, although with differences on particular aspects.

General Awareness of IVF: General consensus of the respondents with the answer "Have you heard about in-vitro fertilization before" and "In-vitro fertilization is a good option in the treatment of infertility," both with mean of 3.09. Such type of answer reflects a moderate degree of awareness of the availability of IVF as a fertility technology.

Applications and Scope Knowledge: When referring to the application of IVF to overcome male infertility, the participants showed consensus (mean = 2.61) but scored lower than others for this application of IVF, which reflected scarce knowledge concerning this application of IVF.

Furthermore, the knowledge of the possibility of using donor sperm and eggs had a mean score of 2.78, which again asserts that even though the residents can acquire information regarding the concept of IVF in general, they have very little knowledge regarding the actual uses.

Knowledge of Genetic and Treatable Aspects: Several scores of responses "IVF might be able to cure genetic fertility conditions" (2.70) and "Do you believe it can be cured" (2.84) show that residents are highly educated but not necessarily optimally aware of IVF ability to cure genetic disorders.

IVF is typically very expensive, and this may deter people away from it, reflecting not enough access to health care in society at large. Lower degree of awareness of the applicability of IVF in male infertility, as evidenced by the lower mean score, indicates poor knowledge among residents about the wider applications and implications of IVF technology.

An overall knowledge score of 2.91 (rated as "Knowledgeable") shows residents do possess moderate knowledge about IVF but also hold misconceptions.

Table 3: Level of Attitude of the Residents on In-Vitro fertilization (IVF)

Items	Mean	Std. Deviation	Interpretation
Babies conceive through in-vitro fertilization are normal and natural baby?	2.86	0.94	Agree
In-vitro fertilization should be encouraged in the society?	2.77	1.00	Agree
Do you think IVF offers hope for infertile couples?	3.10	0.89	Agree
Do you think IVF is not a natural process?	2.69	1.00	Agree
Do you think IVF is too costly?	3.23	0.89	Agree
Do you think IVF is not affordable/accessible?	3.03	0.91	Agree
Do you think babies born via IVF are legitimate?	2.89	0.97	Agree
Attitude	**2.94**	**0.55**	**Positive Attitude**

Legend: Strongly Disagree 1.0 - 1.75; Disagree 1.76 -2.5; Agree 2.6-3.25; Strongly Agree 3.26-4.0. Legend for the standard deviation (SD) values in your data: SD ≤ 0.50: Very consistent responses (low variability); SD = 0.51–1.00: Moderate consistency in responses; SD > 1.00: High variability in responses (divergent opinions).

[Table 3] depicts the residents' attitudes towards in-vitro fertilization (IVF), where the mean scores on each statement show a general positive attitude (mean = 2.94) towards IVF. The standard deviation of 0.55 shows relative consistency of attitudes between respondents.

Acceptance of IVF and Views of Legitimacy: The statement "Babies conceived through in-vitro fertilization are normal and natural" received a mean rating of 2.86, indicating that there was widespread general positive opinion among the respondents. It is apparent from this that people consider IVF-conceived children to be as natural as naturally conceived children, thus lending legitimacy to the idea of assisted reproductive technologies. Similarly, the question "Do you believe that IVF babies are valid?" yielded an average of 2.89, affirming social validation of IVF-conceived children as valid family and societal members.

Social Support and Hope among Infertile Couples The participants supported the statement "In-vitro fertilization should be encouraged in society" (mean = 2.77) and "IVF gives hope for infertile couples" (mean = 3.10). The results confirm a positive attitude towards IVF as an acceptable treatment of infertility in society. These findings indicate that the respondents are aware of the aim of IVF to eliminate both the emotional burden as well as social stigma that mostly accompany infertility. Skepticisms about the naturalness of IVF despite positive attitudes, there were some reservations regarding the naturalness of IVF. The survey item "Do you think IVF is an unnatural process?" had a mean of 2.69, indicating agreement with the notion that IVF can be seen to be somewhat unnatural. These views are typically the outcome of cultural and ethical issues surrounding use of technologies in human reproduction.

Economic Issues: Cost and affordability economic concerns were one of the most prevalent concerns

identified in the research. Highest mean score of 3.23 was achieved with the question "Do you think IVF is too expensive? ", with 3.03 being followed closely by "Do you believe IVF is not accessible or affordable?". The above results validate having a strong grasp that IVF is too expensive and out of reach for the majority of individuals in society.

The overall results indicate that, in general, the people of Barangay Banilad are positive about IVF, with a general mean attitude rating of 2.94 under the "Agree" category. The respondents recognize the validity of IVF-conceived children, concur in the adoption of IVF as a viable treatment for infertility, and view the practice as a source of hope for couples with little else to turn to. However, two underlying issues mute this optimism: cost and the unnaturalness of IVF. Overall, with the society also being friendly and even more accepting of IVF, myths will need to be broken down—more specifically, male infertility and the perceived unnaturalness of the process—along with breaking through economic issues in order to gain broader acceptance and support for assisted reproductive technologies for infertility. These items suggest that respondents recognize the emotional and social relief IVF can provide to individuals struggling with infertility.

Table 4: Relationship between Residents' Knowledge on In-Vitro Fertilization and Demographic Profile.

Relationship between Knowledge &	Chi-Square Statistic	p-value	Cramer's V	Interpretation	Decision
Age	4.66	0.863	---	Not Significant	Fail to reject
Sex	0.11	0.991	---	Not Significant	Fail to reject
Religion	5.73	0.767	---	Not Significant	Fail to reject
Education	4.19	0.898	---	Not Significant	Fail to reject

Legend: Chi-Square Statistic: Tests the association between the variables. p-value: Reports the significance of the association. A p-value > 0.05 indicates not significant. Cramer's V Tests the strength of association (values near 1 indicate stronger associations). Interpretation: Reports whether the association is statistically significant.

[Table 4] shows the correlation of knowledge about in-vitro fertilization (IVF) among residents with demographic variables such as age, sex, religion, and educational level. The findings are that no correlation was observed for any of the demographic variables with knowledge about IVF as reflected by the high p-values for each factor.

Age: Chi-square test for age provided the following value of 4.66 and p-value of 0.863, indicating that there was no positive relationship of awareness of IVF with age. This indicates that residents across all ages have equally similar levels of awareness of the procedure. That is, it was irrelevant whether respondents were young or old because their awareness of IVF was unaffected by this.

Chi-square test 0.11 and 0.991 p-value for gender, with no association between gender and IVF awareness being demonstrated. This finding indicates that the female and male respondents were equally knowledgeable, refuting the argument that knowledge of reproductive health is significantly gender-varying.

Religion: Also, the correlation between religion and knowledge in IVF was also not statistically significant with a chi-square of 5.73 and a p-value of 0.767. This shows that religious group, Roman Catholic, Christian, Muslim, or other, did not necessarily have an impact on respondents' level of knowledge. What is implied here is that it is possible to spread knowledge more diffusely through secular means such as schooling and media reports.

Education: The educational analysis gave a chi-square value of 4.19 and a p-value of 0.898, meaning there is no significant correlation between level of education and IVF awareness. The evidence presented here reveals that perhaps cultural beliefs, advertising by the media, or local-level information sharing could be playing a larger role in flattening IVF awareness across education groups.

General Interpretation: Together, the inability to find statistically significant associations between age, sex, religion, and education and IVF awareness suggests that awareness pertaining to this reproductive technology in Barangay Banilad is quite level across groups. There is also space within the results for further consideration of other determinants that are likely to influence IVF awareness, including cultural values, family or individual experience of infertility, and variations in access to reproductive health care. Incorporating these aspects on board in further research could construct a more nuanced concept of social determinants of IVF awareness.

Table 5: Relationship between Residents' Attitude on In-Vitro Fertilization and Demographic Profile.

Relationship between Attitude &	Chi-Square Statistic	p-value	Cramer's V	Interpretation	Decision
Age	3.72	0.929	---	Not Significant	Fail to reject
Sex	2.00	0.572	---	Not Significant	Fail to reject
Religion	9.41	0.400	---	Not Significant	Fail to reject
Education	6.68	0.670	---	Not Significant	Fail to reject

Legend: Chi-Square Statistic: Measures the association between the variables. p-value: Indicates the significance of the association. A p-value > 0.05 is considered not significant. Cramer's V: Measures

the strength of association (values closer to 1 suggest stronger relationships). Interpretation: Indicates whether the association is statistically significant.

[Table 5] presents the analysis of the relationship between residents' attitudes toward in-vitro fertilization (IVF) and demographic factors, including age, sex, religion, and education level. The results indicate no significant relationships for any of the demographic variables with residents' attitudes toward IVF, as indicated by the high p-values associated with each factor.

Age: The chi-square for age was 3.72 and the p-value was 0.929, indicating that no significant relationship existed between attitude and age when it comes to IVF. This is viewed as a shift in societal attitudes, and generation gap is crossed with regard to the acceptance of IVF.

Sex: For sex, chi-square was 2.00 and p-value was 0.572, and again there was no significant relationship. Male and female respondents thus shared the same attitudes towards the acceptance and use of IVF. These results reflect attitudes towards IVF as being relatively evenly split between the two sexes, and therefore gender differences are not as important as cultural or community-level ones.

Religion: Religion test provided chi-square 9.41 with p-value 0.400 and found no significant religious origin association with IVF attitudes. This indicates that despite differences in religious beliefs, there were shared notions regarding IVF.

Education: The education chi-square statistic was 6.68 and the p-value was 0.670, again showing no significant relationship. In this culture, individuals' beliefs about IVF appear to be based on something other than official educational levels, maybe a measure of the impact of shared cultural values, local cultural debate, or access to information on IVF through the media and public debate.

Overall Interpretation, taken as a whole, these findings suggest little correlation between demographic indicators—age, gender, religious affiliation, and level of education—and attitudes towards IVF among the Barangay Banilad sample. The effects may also encompass the presence of educational campaigns at the community level, public discussion, or media attention to representations of IVF that percolate among inhabitants across social strata and thus influence attitudes more evenly. Other variables, such as direct personal or family exposure to infertility, cultural myths about parenthood, and availability of reproductive health care, need to be investigated in future work in the evaluation of determinants of such shared attitudes.

Table 6: Relationship Between Respondents' Knowledge and Attitude towards IVF

Variables	Pearson r	p-value	Decision	Interpretation
Knowledge & Attitude	0.69	0.000	Reject Ho	Significant

[Table 6] presents respondents' attitudes and knowledge towards IVF correlation. The p-value of 0.000, which is assigned to the association, is significantly less than the typical significance level of 0.05 and thus negates the null hypothesis that there is no meaningful association between knowledge and attitude. The meaningful association once again reconfirms that knowledge is a key driver of positive attitudes towards IVF. These findings endorse the need to pay greater attention to targeted education campaigns and outreach programs at the community level. Putting onto the market truthful and affordable information regarding IVF procedures, success rates, cost, and ethical dilemmas can demystify the process and reduce misconceptions. Actionable steps may involve workshops by medical professionals, education sessions at community centers in local areas, and the release of culturally relevant educational materials.

DISCUSSION

Key Findings are as following

Demographics: Over half of the sample were 20-29 years of age (53.2%), and there was a considerable female sample (64.2%). Roman Catholic was the most represented religion (83.2%), and educational attainment was diverse, with a significant number holding a bachelor's degree (45.2%).

Knowledge Levels: The sample presented a generally knowledgeable stance when it came to IVF, with an overall mean score of 2.91. Maximum mean (3.31) was for the feeling that IVF is expensive, and minimum mean (2.61) was for the least awareness regarding the utilization of IVF for male infertility.

Attitudes: The attitude score was 2.94, and in general, it shows a positive attitude towards IVF. Highest mean score (3.10) was associated with the perception that IVF gives hope to infertile couples, while lowest score (2.69) highlighted fear of IVF not being natural.

Statistical analysis did not show meaningful relationships between demographic variables (age, sex, religion, education) and IVF knowledge or attitudes, which indicates that these demographic variables might have little impact on IVF perceptions in this sample.

In summary, Bernard Gajudo (2024) emphasized that the successful growth of IVF facilities depends on effective financial management, efficient resource utilization, ethical practice, patient-centered communication, and strategic marketing. Continuous research and adaptation to emerging technologies are essential to maintain high-quality fertility services and improve reproductive healthcare outcomes for individuals and couples seeking parenthood.[6]

Infertility affects about 48.5 million couples globally, with higher prevalence in low- and middle-income countries, particularly in Sub-Saharan Africa.

Limited access to assisted reproductive technology due to high costs and social, cultural, and legal barriers leaves many couples without treatment options. Although affordable IVF has gained attention as a potential solution, evidence regarding its safety, effectiveness, and integration into existing healthcare systems remains limited (Chiware TM et al., 2021).[7]

According to Boivin J et al. (2007), data from 25 population surveys involving 172,413 women estimated a global infertility prevalence of about 9%, with rates varying across developed and less-developed nations. Although many infertile couples seek medical help, only around 22% receive treatment. Overall, an estimated 72.4 million women worldwide experience infertility, and about 40.5 million actively seek infertility care.[8]

According to Sundby J et al. (1998), a population-based study in the Gambia found that primary infertility was relatively low (3%), while secondary infertility was more common (6%). Many infertile couples did not seek formal healthcare due to limited diagnostic and treatment services, often relying on alternative care. The study emphasized the need for accessible infertility services within primary healthcare systems in resource-limited rural areas.[9]

According to Dyer SJ et al. (2013), a South African referral hospital study assessed the financial burden of assisted reproductive technology. Using household surveys, it measured out-of-pocket costs and catastrophic expenditure, identifying socioeconomic factors linked to high financial strain through Chi-square and logistic regression analyses.[10]

According to Schmidt L (2006), coping and communication patterns among infertile couples influence stress, marital outcomes, and satisfaction with fertility care. Avoidant coping and poor partner communication are linked to higher stress, while secrecy is associated with lower marital benefit in men. Although assisted reproduction in Denmark shows high success and satisfaction overall, a subgroup experiences significant distress, indicating the need for targeted psychosocial support.[11]

According to Nachtigall RD (2006), around 80 million people globally experience infertility. Causes differ by setting, with delayed childbearing in industrialized countries and infection-related secondary infertility in developing regions. Despite high stigma and limited access to care in low-resource settings, infertility treatment—including IVF—remains scarce and largely unaffordable for most who need it.[12]

According to Hammarberg K & Kirkman M (2013), infertility in low-resource settings is often underestimated despite severe social consequences, especially for women who may face stigma, exclusion, and abuse. While access to infertility care has historically been overlooked in favor of population control priorities, global recognition is increasing. International efforts, including WHO recommendations, emphasize infertility as a public health issue and support expanding access to reproductive care in low-income countries.[13]

According to Ombelet W et al. (2008), the true prevalence of infertility in developing countries is unclear due to limited data. Infertility care has also not been a priority for many international health programs. The authors highlight that improving access requires simplified diagnostic and assisted reproductive technology procedures, reduced complications, trained healthcare workers, and integration into reproductive health services. They conclude that infertility treatment should receive greater global attention as a matter of social justice.[14]

According to Kovacs GT et al. (2003), 14 Australia-wide surveys conducted between 1981 and 2001 found that public approval of IVF increased significantly over time. Based on repeated nationally representative samples, the findings show growing community acceptance of IVF as a treatment for infertility in Australia.[15]

According to Szalma I et al. (2021), as publicly funded assisted reproductive technology use increases in Hungary, individuals should be better informed about its risks, effectiveness, and age-related success rates. ART is highly effective for younger women but much less successful after age 40. The authors recommend broader public health education, including school-based information, alongside clinical counselling to improve awareness and prevent involuntary childlessness.[16]

According to Skoog Svanberg A et al. (2006), a survey of postgraduate students found that most intended to have children, but many underestimated age-related fertility decline and overestimated IVF success. Women were more concerned than men about balancing parenthood with studies and career. The authors conclude that better fertility education is needed to support informed family planning decisions.[17]

The study on women attending a Nigerian fertility clinic found moderate awareness of assisted reproductive technology, mainly through healthcare workers, but low utilization despite willingness to use services. High cost and misconceptions—especially about treating male infertility—were key barriers (Chikeme PC et al., 2022).[18]

According to Loke AY et al. (2012), fertility and family planning should be included in premarital counselling. Sub-fertile couples should receive early referral, treatment, and support, with their decisions respected. The study also highlights the need to understand how each partner experiences and copes with infertility.[19]

CONCLUSION

Demographic Profile: The highest concentration of respondents in Barangay Banilad are young adults aged 20-29, female majority with a very high percentage of Roman Catholics and a mixed

educational attainment. This demographic profile indicates a youth population who could be more open to accepting these discourses of reproductive technologies.

Level of Knowledge: The residents possess a reasonable level of knowledge on IVF, and the general mean score indicates that they are knowledgeable. However, there are considerable gaps, most importantly male infertility, highlighting the need for targeted educational interventions to increase awareness of all aspects of IVF.

Level of Attitude: Residents have a favorable attitude towards IVF, as reflected in their agreement with its advantages for infertile couples.

Despite this, concerns about the unnatural nature of the process and its high cost show the need for better communication and explanation.

Demographics, Knowledge, and Attitudes: No strong associations were found between demographic factors (age, sex, religion, education) and knowledge or attitudes to IVF. This suggests that awareness and attitudes to IVF are perhaps more controlled by society and culture rather than by demographics.

Recommended Interventions: In accordance with the results, educational interventions within the community to increase information in terms of IVF, particularly male infertility and the financial implications involved in the process, is recommended. This would help bridge the gap towards the more informed decision-making process in reproductive health and promote attitude change towards the acceptance of IVF within the community.

Recommendations: Address knowledge gaps through targeted workshops and awareness campaigns on IVF, especially male infertility. Foster positive attitudes via community engagement, success stories, expert-led question and answer sessions. Use feedback tools and collaborate with local health services to improve impact and access. Develop inclusive, tailored materials and engage community leaders to reach diverse groups. Encourage open forums to reduce stigma and support awareness campaigns with real-life experiences. Evaluate outcomes using surveys and consider longitudinal studies for long-term impact.

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