

## Data Analysis Report

For the data analysis process, the researcher used the thematic analysis approach by Braun and Clarke. Thematic analysis is a flexible and accessible approach to analyzing qualitative data. It allows the identification of patterns within the data to form themes (Bryne, 2022).

The researcher also used Nvivo 14 to analyze data. Nvivo 14 is a well-established computer-aided qualitative data analysis software (CAQDAS).

The Braun and Clarke thematic analysis process include six steps that are:

1. Familiarizing with the transcript.
2. Generating initial codes.
3. Generating initial themes.
4. Reviewing potential themes.
5. Naming themes.
6. Producing the report.

The researcher first conducted the first step of familiarizing with the data. The first step involved reading through the transcripts to familiarize with them.

After familiarizing with the data, the researcher then developed the initial codes as the second step of thematic analysis. Some of the initial codes are shown in the table below.

Initial Codes	Files	References
A cardiac Problem	1	2
An Arrhythmia	1	3
Heart Acceleration	1	1
Heart palpitations	1	2
At 38 he started getting tired and also developed a severe headache, went to see a doctor and that when it was discovered that his valve was clogging up	1	1
Got ill while at work, went to hospital and thats how he found out he had a heart problem	1	1
Got sick during the second pregnancy and thats when the heart condition was discovered	1	1
Started to experience joint pains with fatigue, the doctor examined them and discovered a problem with her valve	1	1
Went to hospital after getting sick and thats how he found out he had a heart problem	1	1
Heart out of balance	1	1
Kidney failure	1	1
Valve closure	1	2
Accepted the situation	1	2
Felt Afraid	1	1

Felt confused	1	1
Felt desperate	1	1
Felt hopeless	1	1
Felt sad and cried a lot	1	2
Felt shocked	1	2

After developing the initial codes, the researcher then looked at pattern of shared meaning in the codes to come up with the initial themes. This was the third step of reflexive thematic analysis.

<b>Themes</b>	<b>Files</b>	<b>References</b>
Alternative Ways of Managing Atrial Fibrillation	1	10
Associated Feeling when Participants Take Anticoagulants	1	2
Atrial fibrillation Definition	1	8
Atrial Fibrillation Symptoms	1	3
Causes of Atrial Fibrillation	1	6
Effects of Atrial Fibrillation Medicines	1	5
Impact of Atrial Fibrillation on Other Heart Conditions	1	1
Medical Staff Definition of Atrial Fibrillation	1	4
Medication to Manage Atrial Fibrillation	1	11
Participants Compliance to Taking Atrial Fibrillation Medication	1	5
Participants Disclosure of the Diagnosis to Family and Friends	1	6
Participants Discovery of Atrial Fibrillation	1	5
Participants Feelings After the Initial Diagnosis	1	10
Participants Sources of Information about the Medical Procedure for Treating Atrial Fibrillation	1	5

The researcher then went through the themes and reviewed them as the fourth step of thematic analysis. The researcher then provided a definition for the themes as the fifth step of the thematic analysis.

Name	Description
Theme #1 Atrial Fibrillation Definition	How Atrial fibrillation is defined by the participants and the medical staff
Theme #2 Atrial Fibrillation Symptoms	The symptoms of atrial fibrillation
Theme #3 Causes of Atrial Fibrillation	What causes atrial fibrillation
Theme #4 Management of Atrial Fibrillation	How atrial fibrillation is managed
Theme #5 Process of Discovering Atrial Fibrillation	How the participants came to discover they had atrial fibrillation.
Theme #6 Participants Feelings about the Diagnosis and the Medication	How the participants felt after the diagnosis and about taking the medication to manage atrial fibrillation.
Theme #7 Participants Disclosure of the Diagnosis to Family and Friends	Whether the participants disclosed the atrial fibrillation diagnosis to family and friends.
Theme #8 Participants Sources of Information about the Medical Procedure for Treating Atrial Fibrillation	Where participants got information about the medical procedure for treating atrial fibrillation
Theme #9 Participants Compliance to Taking Atrial Fibrillation Medication	Whether participants took their medication as prescribed

After defining the themes, the researcher produced the report as the final step of thematic analysis. The report contained themes, codes and the participant's excerpts as evidence of the codes.

## Results

Nine themes emerged after the analysis and they included: Atrial Fibrillation Definition, Atrial Fibrillation Symptoms, Causes of Atrial Fibrillation, Management of Atrial Fibrillation, Participants Process of Discovering that they had Atrial Fibrillation, Participants Feelings about the Diagnosis and the Medication, Participants Disclosure of the Diagnosis to Family and Friends, Participants Sources of Information about the Medical Procedure for Treating Atrial Fibrillation, and Participants Compliance to Taking Atrial Fibrillation Medication.

Themes	Files	References
Theme #1 Atrial Fibrillation Definition	1	12
Theme #2 Atrial Fibrillation Symptoms	1	3
Theme #3 Causes of Atrial Fibrillation	1	8
Theme #4 Management of Atrial Fibrillation	1	10
Theme #5 Participants Process of Discovering that they had Atrial Fibrillation	1	5
Theme #6 Participants Feelings about the Diagnosis and the Medication	1	12
Theme #7 Participants Disclosure of the Diagnosis to Family and Friends	1	6
Theme #8 Participants Sources of Information about the Medical Procedure for Treating Atrial Fibrillation	1	5
Theme #9 Participants Compliance to Taking Atrial Fibrillation Medication	1	5

### Theme #1: Atrial Fibrillation Definition

Atrial fibrillation definition was the first theme that emerged during the analysis. The theme focused on how the participants and the medical staff defined atrial fibrillation. The theme had two subthemes that were; medical staff definition of atrial fibrillation and participants' definition of atrial fibrillation.

Theme/ Subtheme	Files	References
<b>Theme #1 Atrial Fibrillation Definition</b>	<b>1</b>	<b>12</b>
Subtheme #1 Medical Staff Definition of Atrial Fibrillation	1	4
Subtheme #2 Participants Definition of Atrial fibrillation	1	8

### Subtheme #1: Medical Staff Definition of Atrial Fibrillation

The subtheme medical staff definition of atrial fibrillation focused on how the medical staff defined atrial fibrillation. The interviewed participants provided different statements to show how the medical staff defined atrial fibrillation.

Participant 2 and 4 said that their medical staff defined atrial fibrillation as a valve closure.

*Participant 2*

*The doctor said it was in the valve. It was closing*

*Participant 4*

*My problem was the valve*

Participant 3 highlighted that his doctor said that his heart was out of balance.

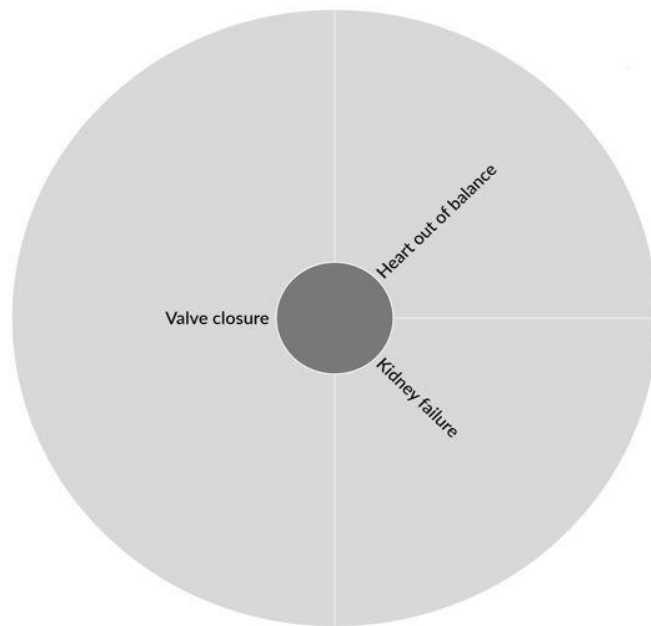
*Participant 3*

*He said my heart was out of balance*

Participant 3 also stated that the doctor said that his kidney had failed.

*Participant 3*

*the kidney had stopped.*



### **Subtheme#2: Participants Definition of Atrial fibrillation**

This subtheme focused on how the participants defined atrial fibrillation. Different participants gave their definition as follows.

Participant 1 and 5 defined atrial fibrillation as an arrhythmia.

*Participant 5*

*I believe it's an arrhythmia. That the heart suddenly gets out of step and starts singing another song.*

*Participant 1*

*it has to do with my arrhythmia*

Participant 3 and participant 1 described atrial fibrillation as heart palpitations.

*Participant 3*

*I feel palpitations,*

*Participant 1*

*I feel palpitations, apart from the problems I have, I feel palpitations*

Participant 1 also defined atrial fibrillation as a cardiac problem.

*Participant 1*

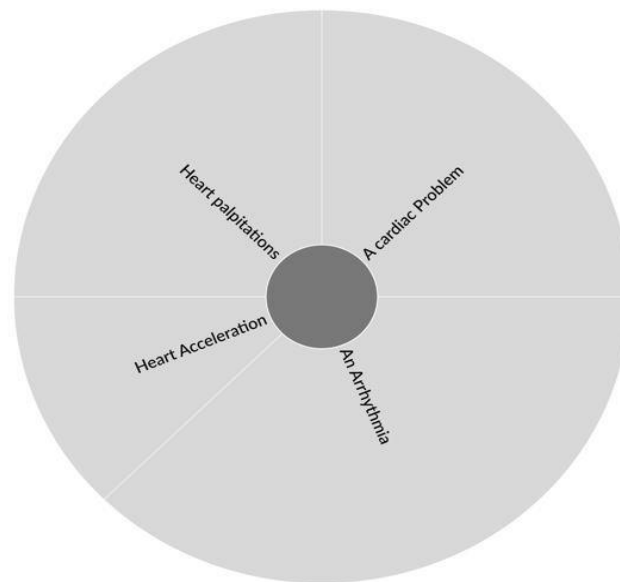
*A cardiac problem*

*A cardiac acceleration.*

Participant 2 described atrial fibrillation as a heart acceleration.

*Participant 2*

*Heart acceleration*



## **Theme #2: Atrial Fibrillation Symptoms**

The theme atrial fibrillation symptoms focused on the symptoms of atrial fibrillation. Three participants gave the symptoms of atrial fibrillation.

Participant 3 and 4 noted that one of the symptoms of atrial fibrillation was fatigue.

*Participant 3*

*The tiredness*

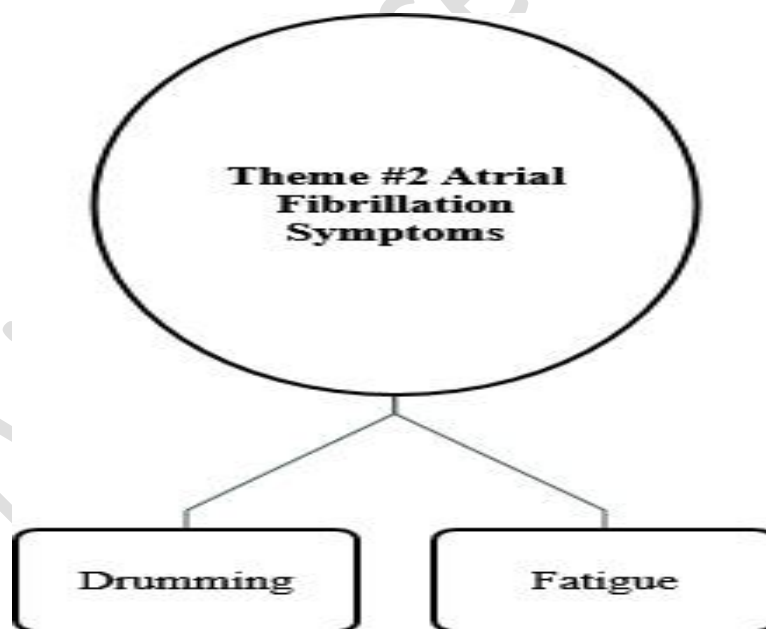
*Participant 4*

*Tiredness, I was going to say that.*

Participant 2 said one symptom of atrial fibrillation was drumming.

*Participant 2*

*The drumming.*





### Theme #3: Causes of Atrial Fibrillation

The theme causes of atrial fibrillation focused on what lead to atrial fibrillation. There were different factors that were highlighted by the participants.

Participant 2 and 3 mentioned drinking to be a cause of atrial fibrillation.

*Participant 2*

*What I think got worse was that at the time I was already drinking beer*

*Participant 3*

*The drink*

Participant 4 stated that being born with bicuspid valve contributed to the development of atrial fibrillation.

*Participant 4*

*In my case because I was born with a bicuspid valve.*

Participant 2 mentioned that excessive weight could also cause atrial fibrillation.

*Participant 2*

*I gained a lot of weight. I weighed 87, 90 kilos. Today I am 79, 77 kilos. The fat accelerated*

Participant 1 said that hereditary factors contributed to atrial fibrillation.

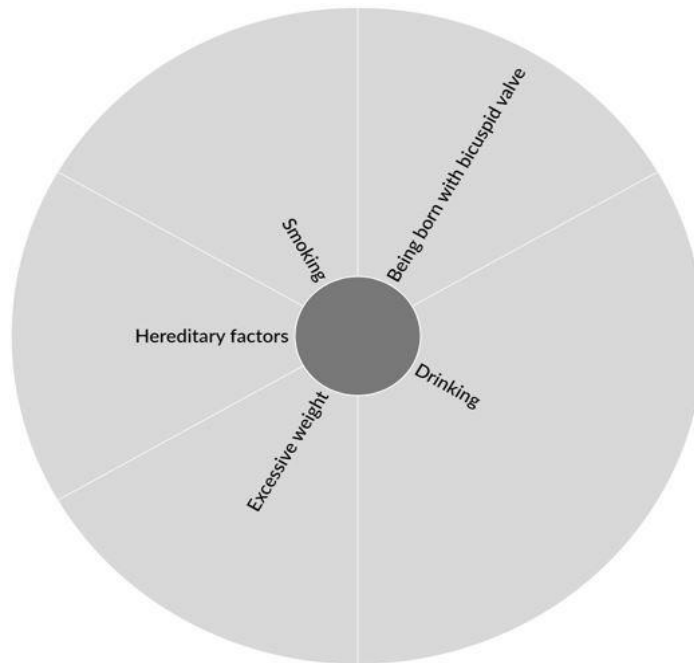
*Participant 1*

*I think it's a hereditary thing because I had two cases in the direct family. Then came atrial fibrillation.*

Participant 4 stated that smoking played part in getting atrial fibrillation.

*Participant 4*

*And because I smoked, I believe it accelerated the process.*



#### Theme #4: Management of Atrial Fibrillation

Theme four was the management of atrial fibrillation. The theme focused on how atrial fibrillation is controlled either using medication or alternative ways. The two subthemes that formed the theme are shown in the table below.

Theme/Subtheme	Files	References
<b>Theme #4 Management of Atrial Fibrillation</b>	<b>1</b>	<b>26</b>
Subtheme #1 Medical Management of Atrial Fibrillation	1	16
Subtheme #2 Alternative Ways of Managing Atrial Fibrillation	1	10

#### Subtheme #1: Medical Management of Atrial Fibrillation

The subtheme medical management of atrial fibrillation looked at how atrial fibrillation was managed medically. The subtheme had two categories as shown in the table below.

Subtheme/ Category	Files	References
<b>Subtheme #1 Medical Management of Atrial Fibrillation</b>	<b>1</b>	<b>16</b>
Category #1 Medication to Manage Atrial Fibrillation	1	11

Category#2 Working Mechanism of Atrial Fibrillation Medicines	1	5
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### Category #1: Medication to Manage Atrial Fibrillation

The category medication to manage atrial fibrillation focused on the medicines the participants took to control atrial fibrillation. Different participants mentioned different medicines that they were taking.

Participant 2 and 4 stated that they were taking Losartan.

*Participant 2*

*Losartan,*

*Participant 4*

*I take Losartan.*

Participant 4 and 1 mentioned that they were taking Spironolactone.

*Participant 4*

*She changed the medicine, but I didn't memorize her name. It's Spiro....*

*Participant 1*

*Spironolactone, I take it.*

Participant 2 and 1 stated that they were using Warfarin or Marevan.

*Participant 2*

*Warfarin which is Marevan too*

*Participant 1*

*I take Marevan*

Participant 2 also stated that they were using Amlodipine.

*Participant 2*

*Amlodipine*

Participant 5 highlighted that they were using Atenolol.

*Participant 5*

*I take Atenolol*

Participant 1 said that they were taking Carvedilol

*Participant 1*

*Carvedilol,*

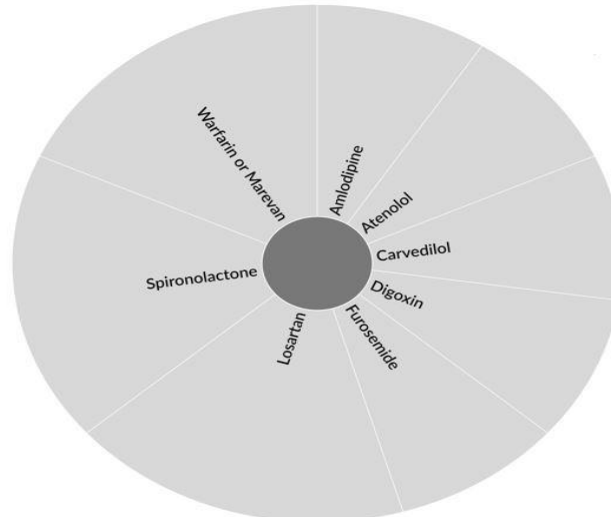
Participant 5 also mentioned that she was taking Digoxin and Furosemide.

*Participant 5*

*Digoxin*

*Participant 5*

*Furosemide*



## **Category #2: Working Mechanism of Atrial Fibrillation Medicines**

The category working mechanisms of atrial fibrillation medicines focused on how the medicine for atrial fibrillation worked.

Participants 4, 2, and 5 noted that Marevan was an anticoagulant.

*Participant 4*

*Marevan, as I understand it, it is an anticoagulant,*

*Participant 2*

*It's an anticoagulant*

*Participant 5*

*Marevan thins the blood to pass through the veins so that we don't have a more serious problem*

Participant 1 stated that Dextro thinned the blood.

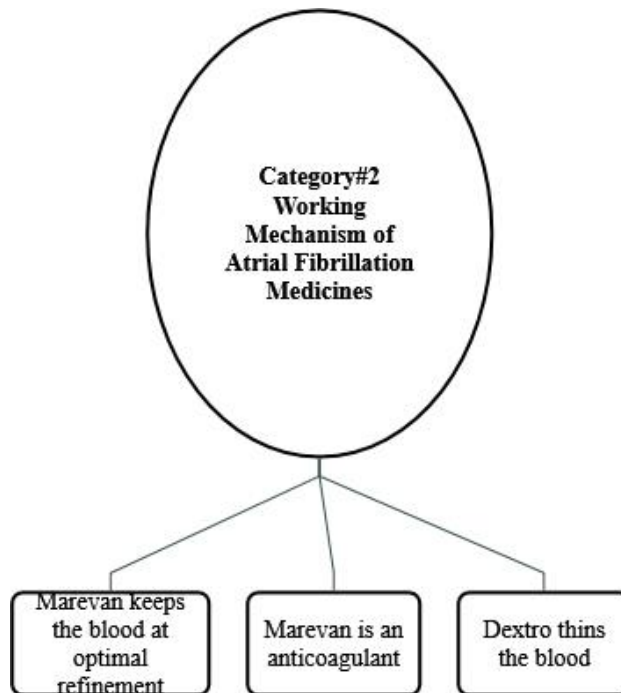
*Participant 1*

*Dextro twice every day, I can see my blood is more or less thin.*

Participant 1 also said that Marevan keep the blood at optimal refinement.

*Participant 1*

*It keeps my blood at an optimal refinement level for my use*



### **Subtheme #2 Alternative Ways of Managing Atrial Fibrillation**

The subtheme alternative ways of managing atrial fibrillation focused on other ways other than medicine in which atrial fibrillation was managed. The participants gave the different ways in which they managed atrial fibrillation.

Participant 3, 2, 5, and 4 stated that they used less salt in their diet.

*Participant 3*

*my diet is all without salt, rice, beans, nothing with salt*

*Participant 2*

*I salt very little,*

*Participant 5*

*My food is light, the salt is very moderate,*

*Participant 4*

*I always like to put very little salt in the food*

Participant 3, 2, and 4 mentioned walking as a way to manage atrial fibrillation.

*Participant 3*

*walk,*

*Participant 2*

*walk every day, 8 km, 9 km, in the morning or at night, I do them every day, from Monday to Monday.*

*Participant 4*

*promise every day that I have to walk,*

Participant 2 said that he has adopted a vegetarian diet.

*Participant 2:*

*I am a vegetarian of 5 years*

Participant 4 highlighted that he avoids green leafs because of Marevan.

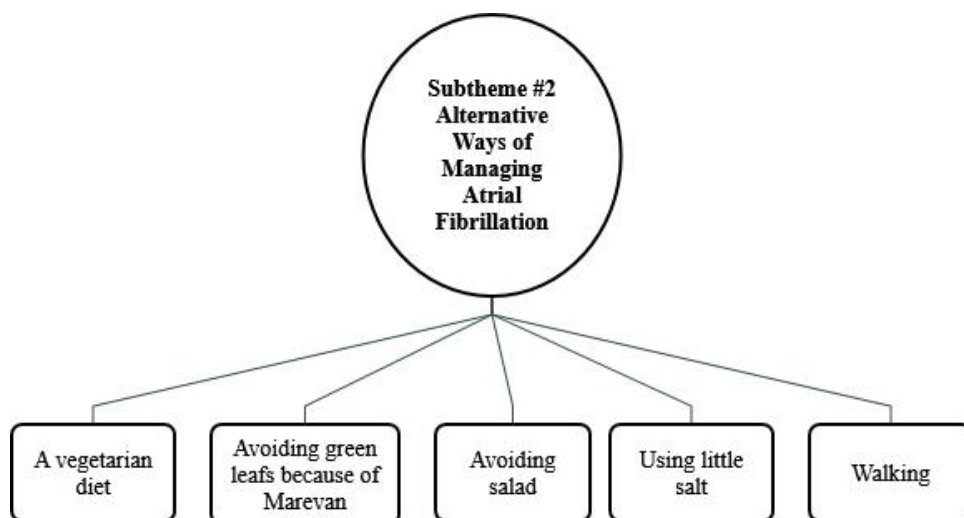
*Participant 4*

*I control green leaf because of Marevan, I avoid green leaf too much.*

Participant 4 also stated that he avoids salads.

*Participant 4*

*I avoid salad*



### Theme #5: Participants Process of Discovering that they had Atrial Fibrillation

The theme participants process of discovering that they had atrial fibrillation focused on how the participants came to discover that they had atrial fibrillation. Various participants gave an account of how they came to know they had atrial fibrillation.

Theme\Code	Files	References
<b>Theme #5 Participants Process of Discovering Atrial Fibrillation</b>	<b>1</b>	<b>5</b>
Developed fatigue and a severe headache, went to see a doctor and that's when it was discovered that his valve was clogging up	1	1
Got ill while at work, went to hospital and that's how he found out he had a heart problem	1	1
Got sick during the second pregnancy and that's when the heart condition was discovered	1	1
Started to experience joint pains with fatigue, the doctor examined them and discovered a problem with her valve	1	1
Went to hospital after getting sick and that's how he found out he had a heart problem	1	1

Participant 2 stated that at 38 he started getting tired and developed a severe headache, he went to see a doctor and that's when it was discovered that his valve was clogging up.

#### *Participant 2*

*until I was 38 years old. Then I started walking up a street and I started to get very tired. I was taking a shower and it started to give my head a bursting pain. I told my wife and we went straight to the doctor. I had a doctor at the time, and he said, "I have to admit*



*you now, it's a bad situation." It wasn't at the time he admitted me, he left me another week, but I went for a catheterization. When I went to have a catheterization, he had already admitted me. It was the valve itself; it was clogging up.*

Participant 1 said that he got sick while at work, went to hospital and that how it was discovered that his heart had a problem.

*Participant 1*

*I was working, I didn't feel anything cardiac, this was exactly in the year 2000, I was seeing a client and in seconds I had a weakness that was knocking me down, knocking me down, and I said to a colleague "Call my kids because I'm feeling sick. My son told me to go to the hospital and not the emergency room. I felt something was strong. They took me to Santa Catarina and everything started there with this moment. I don't see a reason that led me to this. As he said, "Oh, I started drinking, and I don't know what..."*

Participant 5 said that she got sick during the second pregnancy and that when the heart condition was discovered.

*Participant 5*

*In the second pregnancy I started to feel sick, then I went to the doctor, then it really proved that I have a disability since I was a child. The doctor said it was mitral stenosis. The valve clogged up, but thank God it didn't need to change the valve, but just unclog it and it worked. But it was a rheumatic fever which I had since I was a child, but I discovered it only in my second pregnancy.*

Participant 4 stated that he started to experience joint pains with fatigue, the doctors examined them and that's when a problem with a valve was examined.

*Participant 4*

*I started to feel a lot of pain in my joints. Anything I did, I got really tired, but I smoked and thought it was because of the cigarettes. I was already 45 years old when this doctor examined me. I thought it was an exaggeration because I went with my husband. He told me "You have a problem with the valve, I don't know if it's in the mitral valve or the aorta, and you're going to have to have surgery." And he told me to do all the exams. He said I had high blood pressure, which I didn't know either. I did all the exams and found it to be the birth problem. It never gave me anything but this tiredness.*

Participant 3 stated that he went to hospital after getting sick and that's how he found out he had a heart problem.

*Participant 3*

*I found out when I started drinking a lot, drank like an old pig, when Tuesday arrived, I got sick and came to the HU. I arrived here, my kidney had stopped working and my*

*heart was out of rhythm and that's when I found out I had all these problems. High blood pressure I already knew I had, but then I found out that my heart was out of rhythm.*

#### **Theme #6: Participants Feelings about the Diagnosis and the Medication**

The theme participants' feelings about diagnosis and the medication focused on how participants felt after they got a diagnosis of atrial fibrillation and also how they felt about taking medication.

The theme had two subthemes as shown in the table below.

Theme/Subtheme	Files	References
<b>Theme #6 Participants Feelings about the Diagnosis and the Medication</b>	<b>1</b>	<b>12</b>
Subtheme #1 Participants Feelings After the Initial Diagnosis	1	10
Subtheme #2 Associated Feeling when Participants Take Anticoagulants	1	2

#### **Subtheme #1 Participants Feelings after the Initial Diagnosis**

The subtheme participants' feelings after initial diagnosis dealt with how participants felt or reacted after they were told they had atrial fibrillation.

Participant 2 highlighted that he felt shocked.

*Participant 2*

*Mine was a shock*

*I was in shock.*

Participant 4 stated that he felt sad and cried a lot.

*Participant 4*

*I cried a lot and so did my husband. To this day I don't like to remember. I cried a lot because I had already lost my father to a heart attack, he had a stroke.*

*The feeling was anguishness, sadness. I cried a lot*

Participant 5 said that she accepted the situation.

*Participant 5*

*"My daughter, I'm sure and be at peace."*

*I am prepared to die and to live too. when you have that type of attitude It seems like that, they are even more relaxed to operate. I said, "I'm ready."*

Participant 2 also mentioned that they felt afraid.

*Participant 2*

*I was afraid to die*

Participant 2 also highlighted that they felt hopeless.

*Participant 2*

*I thought it was hopeless*

Participant 5 said that she felt confused.

*Participant 5*

*then I lost my ground a little,*

Participant 3 stated that he got desperate.

*Participant 3*

*I got desperate. "Will I survive this year?"*



### **Subtheme #2 Associated Feeling when Participants Take Anticoagulants**

The subtheme focused on how participants felt because of taking anticoagulants. One participant gave their views of how they felt.

Participant 1 stated that they felt good taking anticoagulants.

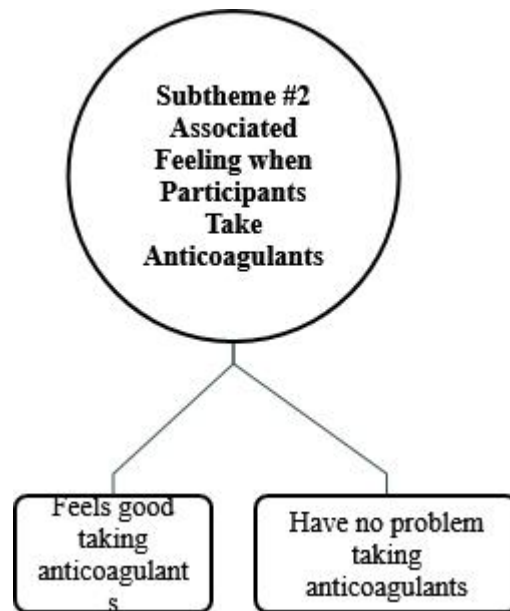
*Participant 1*

*I feel good about it.*

Participant 1 also mentioned that they had no problem taking anticoagulants.

*Participant 1*

*I don't have that kind of problem*



### **Theme #7: Participants Disclosure of the Diagnosis to Family and Friends**

The theme participants' disclosure of the diagnosis to family and friends addressed whether the participants disclosed their diagnosis to family or friends.

Theme/Code	Files	References
<b>Theme #7 Participants Disclosure of the Diagnosis to Family and Friends</b>	<b>1</b>	<b>6</b>
Did not disclose to anyone because he was admitted	1	1
Doctor told the family about the patient's state	1	1
Family already knew	1	1
Told family and friends	1	3

Participants 3 and 2 highlighted that they disclosed to family and friends.

#### *Participant 3*

*I told everyone. I've told my family, my friends to see if they didn't get that in their head.*

#### *Participant 3*

*I have practically lost four brothers and my mother all to this problem. My mother had six strokes. Apart from strokes, she had other complications. She had pneumonia, she had bronchitis, she had a lot of things. So, I didn't hide it*

*Participant 2*

*My wife took me because she saw that I was kind of bad. The family already knew too, I didn't hide it*

Participant 1 said that they did not disclose to anyone because they were admitted.

*Participant 1*

*I didn't tell anyone because when I found out I was already in the hospital.*

Participant 1 also said it was the doctor who told family about his state.

*Participant 1*

*Doctors called my wife and my children from the first marriage who are adults. Called, and said, "You're going to say goodbye to daddy he's leaving."*

Participant 5 mentioned that her family already knew of her diagnosis.

*Participant 5*

*but the problem, they always knew*

#### **Theme #8: Participants Sources of Information about the Medical Procedure for Treating Atrial Fibrillation**

The theme participants' sources of information about the medical procedure for treating atrial fibrillation focused on who provided the participants with information concerning the medical procedure for treating atrial fibrillation. The participants stated different sources of information.

Theme/Codes	Files	References
<b>Theme #8 Participants Sources of Information about the Medical Procedure for Treating Atrial Fibrillation</b>	<b>1</b>	<b>5</b>
A heart valve team provided the patient with the necessary information	1	1
Doctor provided the patient with all the necessary information	1	3
Looked up for the information on the internet	1	1

Participant 2, 1, and 5 stated that doctors provided them with the necessary information.

*Participant 2*

*As my doctor was already paid, he said that he needed to put the metal valve in because the other one had to be changed every ten years. The metallic one he indicated. It was the*

valve he highlighted. At the time I looked for additional information and chose the metallic one

#### *Participant 1*

*Doctor came to talk to me because I want to know everything. He said, "you're going to get out of here in an ambulance you are going to go laid down." Then he told me how the eventual return would be. I knew from A to Z, in a non-technical way, everything that was going to happen.*

#### *Participant 5*

*In the preoperative period, the doctor entered the room to talk to us a few hours before. We slept there, did all the exams. The doctor talked about the valve and I chose the pig valve.*

Participant 4 mentioned that a heart valve team provided them with the necessary information.

#### *Participant 4*

*I was referred to "Incor", so I had the heart valve team accompany me. And every time I asked and they said it was just a valve change, but we have to wait, because there are a lot of people*

Participant five also stated that they looked up for the information on the internet.

#### *Participant 5*

*I went looking on the internet.*

### **Theme #9: Participants Compliance to Taking Atrial Fibrillation Medication**

The theme participants' compliance to taking atrial fibrillation medication focused on whether the participants took the medication as prescribed.

<b>Theme/Code</b>	<b>Files</b>	<b>References</b>
<b>Theme #9 Participants Compliance to Taking Atrial Fibrillation Medication</b>	<b>1</b>	<b>5</b>
Doesn't forget taking meds	1	2
Forgot one day to take the meds	1	1
Have forgotten sometimes to take meds	1	2

Participant 3 and 2 stated that they do not forget taking their medication.

*Participant 3*

*I can't forget because every morning you must take it. I have my medications that I take every day and I must give it a month, then I don't go without taking them, I never forget it, I leave all my medications in a box and, every morning I get up and I take Marevan half a pill during the weekdays and a whole one during the weekend.*

*Participant 2*

*I never forget it, I do it like him, it's already prepared, in the morning I already drink them after breakfast, to hit the stomach directly, I never forgot either, for me it's normal.*

Participant 4 and 1 stated that they have forgotten to take their meds sometimes.

*Participant 4*

*I already forgot it; it's been a while since I forgo it t. It was Sunday and I ended up taking it and I don't take it on Sunday, then I messed up, I don't take it on Sunday and Wednesday, I ended up forgetting until Wednesday, I made some confusion, but now I've got it right, on the eighth I'll do the exam, then everything is fine.*

*Participant 1*

*I've already forgotten,*

Participant 5 stated that they forgot to take their medication in the past

*Participant 5*

*I did, there was a day that I forgot and the exam changed, because the doctor said when did you forget to take it? Oh doctor, i.t was one day of the week that I forgot to take it, because it changes, but I didn't feel anything, and when they increase the dose or take it, you're already use to, with that whole day like that, for example yesterday I was supposed to have taken one and a half,*



## References

Byrne, D. (2022). A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & quantity*, 56(3), 1391-1412.

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