

# A Content Analysis of Information Exchange in an Atrial Fibrillation Online Support Group

Natalia Lapshina, Paul J. Stozhkov, Joseph Finkelstein

*Chronic Disease Informatics Program, Johns Hopkins University, Baltimore, MD*

## Abstract and Objective

*Atrial fibrillation (AF) affects about 2.3 million Americans, and increases the risk of embolic stroke by about 4-5 times. The goal of the present study was to analyze content of messages exchanged between participants in an online AF support group using qualitative methodology in order to identify and classify major topics which are being discussed by the group participants. Using Grounded Theory, we conducted a content analysis of 626 messages, which were grouped into seven categories. We described the content of messages in each category. In addition, proportion of initial posts and responses to them was analyzed depending on message category. Practical implications of qualitative analysis of messages posted on an online support group are discussed.*

## Keywords:

Atrial fibrillation, Online support group, Qualitative analysis, Knowledge gaps, Social support

## Methods

A Grounded Theory approach was followed in the analysis of online posts. Research based on GT employs inductive thinking, aiming to understand a situation from 'inside' rather than stating a hypothesis first. Therefore, no categories were specified in advance of data collection. We analyzed archived messages posted on one of the AF support group web sites. The content of 626 messages posted during the period of 1/1 to 1/31 2008 by 144 anonymous users was analyzed using the NVivo 8 software. Messages were analyzed in terms of similarities or differences, which was followed by finding common themes and developing categories. These categories then were used as a basis for the creation of a hypothesis.

## Results

All messages have been grouped into seven major categories. Two hundred and fifty-two messages discussed *medications* prescribed to alleviate AF symptoms. Within this category, group members discussed medications prescribed to alleviate AF symptoms, which medications helped and which did not,

and medication side effects. The most frequently mentioned medications were amiodarone and coumodin.

The next category included two hundred thirty-nine messages and was related to *medical procedure*. This category included postings about effectiveness of such procedures as ablation, cardioversion, and half/full maze procedure. The *experience with AF* category contained fifty-nine messages describing was related to personal experience with AF symptoms, asking how common the symptoms are and how other members cope with them. The category named *quality of life* included forty-four messages about the impact of AF on physical exercise and travel. Also, members shared how the disease affects their everyday life activities such as shopping, work, leisure time. Thirty-nine messages in the *diet* category reflected how foods and drinks such as green and black tea, fruits and vegetables, affect the disease and blood coagulation. Twenty-nine messages in *helpful links and articles* helpful web sites, links and other sources of information were posted. The last category, *devices*, contained eighteen messages discussing devices helping to monitor and regulate the heart rhythm, such as atrial pacemakers and holter monitors.

Messages posted in some categories initiated active discussion of a topic, whereas in other categories number of responses was relatively low. For instance, the two most discussed categories were medications and medical procedures. At the same time, posts related to helpful links and articles were not discussed as actively as other messages.

## Conclusion

Our study provides evidence that an online support group for AF patients can help them to address knowledge gaps about their condition based on others' personal experience. In addition, by joining such groups, patients can find emotional and informational support and resources that can help them to deal with disease-related stress. Understanding information needs of people with AF can help medical professionals to provide better medical care and improve patient-provider communication.