

Background/Significance

When measured in 2005, there were more than 300,000 patients in America living with an Implanted Cardioverter-Defibrillator (ICD) (Bolsa, Hamilton, Flanagan, Carroll, & Fridlund, 2005, p. 4). Additionally, the National ICD Registry reported in 2010 that there were approximately "486,025 implantations from 1,434 participating hospitals..." (www.hrsonline.org). Defibrillators are implanted in patients who have survived a sudden cardiac arrest (SCA) and those who are at risk for SCA- as determined by current criteria by the American Heart Association and Heart Rhythm Society (www.heart.org; www.hrsonline.org). According to Heart Rhythm Society, SCA accounts for over 350,000 deaths in the US each year, and claims a life every 90 seconds, killing "more people each year than breast cancer, lung cancer, or AIDS" (www.hrsonline.org). Over the past two decades the criteria for having an ICD have changed dramatically and according to the Heart Rhythm Society ICD Registry (2011), approximately 10,000 ICDs are being implanted every month in America. Defibrillators are meant to reverse arrhythmias through various programmed therapies. "At present, ICDs can be programmed to rapidly recognize, defibrillate, and terminate lethal ventricular arrhythmias...response from the device is swift, taking less than five seconds to assess and deliver therapy" (James, Albarran & Tagney, 2001, p. 80). A previous study by Mauro (2008) found that uncertainty is a major factor in patients receiving ICD implant. The author stated "as predicted, ICD recipients with greater uncertainty had less overall psychosocial adjustment..." (p. 156). Further, patients experience a major life change when an ICD is implanted. The purpose of this study was to explore the research question "What is it like to live with an implanted cardiac defibrillator"?



Methods

The design of this study was qualitative and cross-sectional with a single data collection point for each participant. Five participants, four males and one female age 44-75 consented to taking part, age 44-75. Time from implant varied from two months to four years. Content analysis was completed to publish these findings. The choice of face-to-face interview allowed the participants to tell their experience in their own words, and share details including their anecdotal tales and teary descriptions of fear and worry. An initial demographic question was asked including the person's gender, age and time since implant. Four questions specific to research topic were asked including: Tell me about the experience of living with your defibrillator, including any shocks, hospitalizations, implant experience, and anything else you think is pertinent to having the ICD; tell me about a time when you experienced uncertainty specific to your ICD and how did you deal with it; tell me about any special lifestyle considerations that you take living with your ICD; please describe the timing of your diagnosis, implant, and how those experiences affected your life. Interviews were tape recorded and transcribed verbatim.

Findings

A theme grid was developed and relevant phrases/statements were initially coded, or categorized on paper transcripts. These were moved to poster board. Three themes emerged from the coded data: fear, uncertainty, and peace/acceptance. Each of these themes were expressed multiple times throughout the interviews. THEME 1- Unknown/fear: this theme was stated by each participant and was related to implant, fear of anticipated events, and fear of how the device would affect their lifestyle. THEME 2- Uncertainty: this theme was expressed multiple times by each participant and was related to lifestyle concerns and not knowing how certain activities would affect the device, shocks, and lack of information. Each of the participants expressed concerns of uncertainty related to living with the ICD. THEME 3- Peace/acceptance: this theme was expressed the most by each of the participants, and they each told a story of how they came to accept their device as part of their lives. They each talked about their gratitude for the device being present and that they felt safer with the ICD. There were multiple statements by the patients that reflected their wish to live with the device, and they all expressed a wish to enjoy their quality of life. Although the statements of worry related to shock were present, all participants expressed a desire to coexist with the device and avoid the risk of sudden cardiac death.

Implications and Recommendations

This study showed that uncertainty in illness is a very real issue for patients living with an implanted defibrillator. The research of uncertainty in illness is well established and this study supports previous findings (Flemme et al., 2011; Carroll & Arthur, 2009). Similar to those studies, each participant in this study admitted some level of uncertainty. Additionally, this study showed how each of the participants eventually came to peace and acceptance of the device. The science behind defibrillators is not a new technology, however the usefulness and indication for use is ever-changing. It is vital that nurses learn about this growing technology to arm their patients with the necessary education to have an ICD implanted. Any registered nurse can utilize the findings in this study. The subjective statements may help any nurse feel the fear that these patients encounter. Further, nurses in education or administration might use these findings to better develop patient education brochures or utilized for training of new nurses. These findings could be used by staff development as a template for basic understanding of the device patient. Recommendations for further research could be considered to involve a larger patient pool recruited from multiple device clinics. Looking closely at the lived experience of a device patient may be beneficial to research.

References

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