

## Article

# Impact on a Person's Daily Life During Episodes of Supraventricular Tachycardia

## A Qualitative Content Analysis From a Holistic Perspective

Ann-Katrin Nordblom, RN, MScN  
 Skaraborg Hospital of Skövde, Skövde, Sweden

Anders Broström, RN, PhD  
 Jönköping University, Jönköping, Sweden  
 University Hospital, Linköping, Sweden

Bengt Fridlund, RNT, BScEd, PhD, FESC  
 Jönköping University, Jönköping, Sweden



Journal of Holistic Nursing  
 American Holistic Nurses Association  
 Volume 35 Number 1  
 March 2017 33–43  
 © The Author(s) 2016  
 10.1177/0898010116639722  
 journals.sagepub.com/home/jhn



**Purpose:** To describe the impact of episodes of supraventricular tachycardia (SVT) on a person's daily life from a holistic perspective. **Method:** A deductive descriptive design was used. Twenty semistructured interviews (12 women and 8 men) were conducted before planned ablation of SVT and were analyzed using qualitative content analysis. **Results:** Living with SVT had a complex impact on daily life. Initially, the patients described an inhibited existence due to demands to give up things that they had previously been doing, in case the unpredictable episodes of SVT would occur. The episodes caused fatigue and worry, which together created a barrier for living life to the full by making the person give up undertakings. The patients constantly needed to find short-term and long-term strategies to prevent new episodes from happening. **Conclusion:** Episodes of SVT entail a complex life situation as the person's entire existence is affected in daily life. To understand the impact of SVT on daily life, nurses and other health care professionals need increased knowledge and understanding to be able to provide support through relevant information and take optimal care measures.

**Keywords:** *arrhythmia; catheter ablation; holistic nursing; nursing care; supraventricular tachycardia*

## Introduction

Supraventricular tachycardia (SVT) is a generic term for cardiac arrhythmia on an atrial level and comprises atrioventricular nodal reentry tachycardia, atrioventricular reentry tachycardia, ectopic atrial tachycardia, atrial flutter, and atrial fibrillation (Badhwar, Kusumoto, & Goldschlager, 2012; Royster & Melander, 2013). The condition affects approximately 0.2% of the population in the Western world, and the prevalence varies with age, gender, and presence of other diseases (Orejarena et al., 1998). In most cases there is no underlying structural cardiac disease, but the person's heart is often healthy (Blomström-Lundquist et al., 2003). The diagnosis is based on symptom descriptions, mainly documented

as episodes of sudden palpitations by electrocardiogram or other types of heart rhythm supervision. The symptoms vary from mild to severe palpitations resulting in tiredness, respiratory distress, dizziness, and fainting (Blomström-Lundquist et al., 2003; Walfridsson, Strömberg, Janzon, & Walfridsson, 2009). The circulatory impact of SVT is controlled by factors such as heart rate, duration, other cardiac disease, as well as general condition. The SVT can vary from seconds to hours, in some cases days, and they can occur several times a day or less frequently

---

**Authors' Note:** Please address correspondence to Ann-Katrin Nordblom, Department of Cardiology, Skaraborg Hospital of Skövde, SE-54185 Skövde, Sweden; e-mail: ann-katrin.nordblom@vgregion.se.

(Walfridsson et al., 2009). Lifestyle factors can cause or trigger SVT, which is why a decreased intake of nicotine, caffeine, and alcohol is recommended (Badhwar et al., 2012; Blomström-Lundquist et al., 2003). Specific self-care, such as bending one's head down, inhaling deeply, putting cold water on one's face, or clearing one's throat, coughing, or straining at an early stage can interrupt the SVT (Smith, Morgans, Taylor, & Cameron, 2012). Pharmacological treatment aims to decrease the frequency and extent of SVT and slow down the heart rate during the ongoing episode. In cases of unacceptable side effects from medications and frequent, prolonged, and troublesome SVT, with or without apparent circulatory impact, ablation is an option (Blomström-Lundquist et al., 2003; Lane et al., 2015). Ablation is a procedure in which specially designed catheters is inserted via blood vessels to the atrium and ventricle of the heart. By registering and measuring the heart's electrical signals by special stimulation protocols, the exact location of the palpitation pattern and course is established. These patterns are then eliminated by heat (radiofrequency energy) or cooling (cryoablation), which after healing in the tissue scars prevents palpitations (Leitch & Barlow, 2012; Royster & Melander, 2013). Even though the symptoms of SVT are known among clinicians to cause limitations in daily life, evidence-based knowledge from a holistic perspective is lacking. The purpose of this study was therefore to describe the impact of episodes of SVT on a person's daily life from a holistic perspective.

### Theoretical Framework

Sarvimäki and Stenbock-Hult (1996) stated that a person's life is a holistic and complex whole including biophysical, sociocultural, emotional, intellectual, and spiritual–existential dimensions that all interact in daily life. From a biophysical dimension, SVT can result not only in sudden palpitations but also shortness of breath and chest pain, which cause reduced work capacity (Meissner et al., 2009). Likewise, pronounced tiredness can act as a physical limitation (Wood, Stewart, Drew, Scheinman, & Froëlicher, 2010) while dizziness and feeling faint affects driving, among other things (Walfridsson, & Walfridsson, 2005). From the sociocultural and emotional dimensions, the constant insecurity arising from the possibility of another episode occurring at any time can be an emotionally stressful limitation (Meissner et al.,

2009; Wood, Wiener, & Kayser-Jones, 2007; Wood et al., 2010; Yildirim et al., 2012). The emotional burden also comprises fear and worry ahead of strenuous activities such as long journeys, as well as of what triggers SVT. A strategy for avoiding various activities facilitates the feeling of being on the safe side (Wood et al., 2007). When well-being is affected (Walfridsson et al., 2009; Wood et al., 2010), a need and demand for an intellectual understanding of the usability of self-care–related strategies is created (Walfridsson & Walfridsson, 2005; Wood et al., 2007). From a spiritual–existential dimension, there can be a lack of trust in one's own body, that is, the ability to handle pressure in daily life (Yildirim et al., 2012). There is also an existential battle to be believed, be correctly diagnosed, and receive optimal treatment (Wood et al., 2007). Thus, knowledge about the impact of SVT on people's daily life is unstructured and fragmentary (Estner et al., 2005; Meissner et al., 2009; Walfridsson et al., 2009; Wood et al., 2007; Wood et al., 2010). However, common and coherent knowledge regarding people with episodes of SVT is lacking (Sarvimäki & Stenbock-Hult, 1996), and as a result, it becomes difficult for nurses to provide relevant information about symptoms and measures. An increased understanding of the impact of SVT on a person's daily life improves the chances of optimal patient education, where all life dimensions for well-being are regarded as a whole.

### Method

#### Design and Method

This study, which had a deductive descriptive design, was conducted at a county hospital in southern Sweden with a catchment area of 250,000 people (Statistics Sweden, 2012). Graneheim and Lundman's (2004) qualitative content analysis was operationalized through Sarvimäki and Stenbock-Hult's (1996) holistic theory about life and its dimensions. The goal was to obtain a condensed and broad description of the phenomenon by identifying variations based on differences and similarities (Graneheim, & Lundman, 2004).

#### Patients

Potential patients were identified on a waiting list for ablation of SVT at the treatment hospital.

**Table 1.** Sociodemographic and Clinical Characteristics of Patients With Episodes of Supraventricular Tachycardia (N = 20)

Characteristics	N	Mean (Range)
Age (years)		55.6 (21-81)
20-39	2	
40-59	7	
60-69	6	
≥70	5	
Time (months) from self-rated onset of symptoms		72.6 (12-64)
Gender		
Women	12	
Men	8	
Marital status		
Married	8	
Co-habiting	8	
Single	2	
Widow/widower	2	
Education		
<6 years	1	
6-9 years	5	
10-12 years	8	
13-15 years	5	
>15 years	1	
Previous treatment experiences		
Own strategy to interrupt palpitations	13	
Previous ablation	4	
Pharmacological treatment		
Regular	13	
As needed	4	
No medication	3	
Structural cardiac disease (n = 4)		
Myocardial infarction	3	
Aortic valve replacement	1	
Coronary by-pass	1	
Heart failure	1	

After receiving the invitation letter for ablation the patients got a separate written invitation to participate in the study with the opportunity to accept or decline. Inclusion criteria for participation were >18 years of age, objectively verified episodes of SVT, preliminarily diagnosed with atrioventricular nodal reentry tachycardia or atrioventricular reentry tachycardia. Exclusion criteria were a diagnosis of atrial flutter and/or atrial fibrillation, as well as dementia or an inability to understand or speak Swedish. In total 36 patients during 8 months were approached before a strategic selection of 20 patients were reached aiming to achieve a variation

in terms of sociodemographic and clinical variables (Table 1). The strategic selection showed that the typical informant was a 55-year-old woman with a secondary education living in twosomes. She had suffered from SVT episodes in 6 years, medicated on regular basis, and had self-care strategy to the break palpitations.

### Interview

The interview was based on a semistructured interview guide operationalizing Sarvimäki and Stenbock-Hult's (1996) five life dimensions and created by the authors, who had significant knowledge in the topic as well as the method. All interviews conducted by the first author (AKN) started with the main question asking the patient to describe: "What it is like to live with sudden palpitations?" Sarvimäki and Stenbock-Hult's (1996) five life dimensions were highlighted either through the patient's spontaneous narration or the first author's relevant follow-up questions. The sociocultural dimension comprises possibilities, but also barriers for fulfilling oneself in a social and cultural context through relationships to other people (Sarvimäki & Stenbock-Hult, 1996). A follow-up question based on the social life dimension could be "Tell me how sudden palpitations affect you during social activities." The emotional life dimension describes how a person experiences herself/himself in the world. She/he expresses herself/himself through emotional states and moods (Sarvimäki & Stenbock-Hult, 1996). A follow-up question could be "How do you respond emotionally when you get your heart palpitations?" The biophysical life dimension, such as disturbances can manifest as physical illness and in severe cases threaten the maintenance of life processes (Sarvimäki & Stenbock-Hult, 1996). A follow-up question could be "tell me about your symptoms." The intellectual life dimension is made up by the person's perception of her/his surrounding reality, how identification and interpretation occur when needed. It is also about the way the person views herself/himself, the body and emotions, and the knowledge that has been used to handle various life situations (Sarvimäki & Stenbock-Hult, 1996). A follow-up question could be "How do you see your future based on your heart palpitations?" And finally, the spiritual-existential life dimension comprises the person's norms, ideals, and estimation of life and herself/himself (Sarvimäki

**Table 2.** Examples of Meaning Unit, Condensed Meaning Unit, and Code in a Domain

	Meaning Unit	Condensed Meaning Unit	Code
Sociocultural domain	Just the fact that you can't do some of the stuff that you often thought would be fun (Interview 11)	Can't do some of the stuff	Barrier for activities
	Now I don't want to go there either. . . . I feel that if I get this when I'm on my way there (Interview 19)	What if I get palpitations	

& Stenbock-Hult, 1996). A follow-up question could be "How do you think before your present life situation based on your heart palpitations?" The interview guide was tested by a pilot interview, which was reviewed and judged to be relevant for inclusion in the study.

The place for the interview was agreed on by the first author together with the patient, and the interview was conducted in a calm and private place. Thirteen patients chose to be interviewed at home, five were interviewed at the hospital, and two at their place of work. The interviews lasted between 20 and 54 minutes. They were recorded digitally and transcribed verbatim by the first author to ensure that anything essential for the analysis was included. Each separate transcription was followed by an assessment of the coauthors to whether rich material had been obtained (Graneheim & Lundman, 2004). Data saturation was reached after 18 interviews, but following a discussion between the coauthors, another two interviews were held to strengthen credibility.

### Data Analysis

Data were analyzed using deductive qualitative content analysis (Graneheim, & Lundman, 2004). The transcribed text was read through several times by the first author to obtain a sense of the whole. The analyses were then focused on the manifest content of the text. Five life dimensions, that is, descriptions of biophysical, sociocultural, emotional, intellectual, and spiritual–existential character (Sarvimäki & Stenbock-Hult, 1996), were identified and formed the domains of the analysis (Graneheim, & Lundman, 2004).

Descriptions of impact were compared based on the aim and abstracted to meaning units. These were compared and gathered in clusters based on shared content and sorted into the domain they were judged to belong to. The authors were involved and collaborated at every step in the whole analysis

process until negotiated consensus was reached. The data were then analyzed and reflected on from a deductive perspective, where each domain was analyzed separately. The meaning units were condensed with the intention to maintain the essential content. The analysis process continued by coding the meaning units with shared content, aiming to understand the connections based on their relationship with the text (Table 2). Codes with similar content were grouped and formed the basis for subcategories and categories. These were then sorted and abstracted into a structured pattern (Table 3). This procedure meant that the categories were tested with regard to their relationship to the aim and operationalization. The underlying meaning in the categories finally formed a theme that constituted the latent content (Graneheim & Lundman, 2004).

### Ethical Considerations

This study was composed in accordance with Swedish legislation (SFS, 1998:204; SFS 2003:460) and Nordic guidelines of research ethics, including the four ethical principles autonomy, justice, non-maleficence, and beneficence (CODEX, 2009; International Council of Nurses, 2012). The study was also approved by the university ethical review board (SFS, 2003:460). The head of the cardiac clinic concerned gave their formal approval, and the patients gave written consent.

### Results

The manifest content was identified and described in five categories (life dimensions) and related into the theme that expressed the latent content (Table 3): Living with SVT resulted in a complex impact on daily life. Initially, the patients described an inhibited existence due to demands to give up things that they had previously been doing,

**Table 3.** Structured Table With the Theme Based on Categories, Subcategories, and Codes According to the Domains in Sarvimäki and Stenbock-Hult's Life Dimensions (1996)

Theme	An inhibited existence due to the unpredictable supraventricular tachycardia (SVT) that cause worry and fatigue is a barrier for living life to the full as there is a constant need to find strategies for every episodes				
Category	Fatigue and other symptoms	Obstructive uncertainty	Worrying unpredictable SVT	Strategies about and during SVT	Inhibited existence
Subcategory	Temporary and general tiredness	Do not want to be responsible for anyone else (children)	Frustration about disturbing condition	Attempts to identify connections	Insecure existence
	Impact of symptoms	Discomfort when driving	Fear of fainting	Strife to manage on one's own	Suppressed lifestyle
	Increasing episodes	Participating in social contexts	Worry before diagnosis	Played-down problems	Experienced doubts
		Receiving support	Comforting health care	Insufficient information about SVT	Withdrawal thought they would die
			Uncertain wait for treatment	Expectations on ablation	Constantly on their mind
Code	So tired; brain is too tired; out of sorts afterwards; nauseous; so dizzy; fainted; has become more; more often; longer; feels the same; two variations; changed symptoms due to medication	Barrier for taking responsibility; barrier for activities; do not want to expose others to; driving a car is unpleasant; could not drive after; could not join in; typical when you are about to do something; have to comfort people; at work I can forget about it for a while; support from colleagues	Can start at any time; unpredictable; became frightened; worst before I knew; annoying; frustrating; gets in the way; do not accept it; health care services have comforted me; health care services have given me tools; when nothing happens; how long should you wait?	Have to stop; lie down; cough; strain; pattern; no connection; will not call unless necessary; delay as much as possible; harmless; does affect; questions; no explanation; do have plans; my hope now	Insecure existence; inhibited; restrained life; do they believe me?; hope I get palpitations to prove them wrong; reserved; be alone; do you die?; time has come; think about SVT every day; healthy in-between; no barrier; getting used to; take it as it comes
Domain	Biophysical life dimension	Sociocultural life dimension	Emotional life dimension	Intellectual life dimension	Spiritual–existential life dimension

in case the unpredictable episodes would occur. Episodes caused fatigue and worry, which together created a barrier for living life to the full by making the patients give up their undertakings. The patients constantly needed to find short-term and long-term strategies to prevent new episodes from occurring.

### Biophysical Life Dimension

The patients described fatigue in terms of feeling tired during and directly after an episode, and also as a general tiredness between episodes that was pronounced in connection with comorbidity: "I feel like I have zero energy and my brain doesn't work, I can barely think straight" (Interview 16). The episodes had a sudden onset and varied in duration, with a tendency to progress over time: "It feels like (it comes) more often and with a longer duration" (Interview 2). Patients who had previously undergone

ablation described their SVT as being less severe or the same as before their first ablation. Individual or combined symptoms included dizziness, a feeling of weakness, palpitations in the chest and neck, shortness of breath, sweating, and increased urine. The duration and symptoms changed their characteristics during pharmacological treatment, ranging from less severe symptoms to pronounced discomfort, which made the patients refrain from pharmacological treatment: "I felt worse by the medication than by the palpitations" (Interview 17).

### Sociocultural Life Dimension

The patients felt that the possibility of an episode hindered them from undertakings such as taking sole responsibility for young children, grandchildren, or at work. The patients did not want to expose the children, or themselves, to the frightening situation that

could arise if they could not fulfill their responsibility of the children due to the impact of symptoms: "I am frightened, not for myself because I think that if it happens it happens, but I don't want to have the responsibility of anyone else at that time" (Interview 3). Driving a car was part of daily life and attitudes varied from no problem to discomfort and nervousness in case an episode occurred. It was not always possible to decide not to drive as it was required for travelling to work. The workplace was a source of support from colleagues, and also a source of uncertainty about whether the patient would be able to cope with a day at work or if they would have to leave and go home. The patients stated that work was important for their well-being as they could go there and forget about their problems for a while: "My work has been my salvation" (Interview 19). They found it trying when they had planned something they were really looking forward to, such as socializing with friends, doing something fun, and then having to cancel due to SVT. They kept thinking that: "I hope it will not happen now" (Interview 1). If episodes occurred when the patients were around other people, familiar or unfamiliar, they had to act as a support to the others by telling them what was happening and what type of help they required. It could be harder in public places as people would watch from a distance, which made the patients feel uncomfortable: "And then the palpitations began and I had to lay down on a bench, and that is so annoying" (Interview 11). Telling or not telling others separated the patients and it could be difficult for them to describe what was troubling them, especially as they did not always know what was happening to them. Others felt that that it was a matter of course to inform others to defuse the situation if something happened, and also so that they could receive help if required.

### **Emotional Life Dimension**

Patients described frustration about the episodes being so unpredictable and that they could occur without warning. It was a nuisance having to interrupt what they were doing and having to resolve situations by being helped by others. They also felt frustrated about having to contact health care services, which was time-consuming and made them obliged to tell their story yet again: "I don't get stressed or worried, but I get sort of frustrated

because I don't have time for this" (Interview 1). The patients felt worried and frightened about changed prerequisites, particularly if they had fainted. The worry concerned how they themselves would be able to handle life situations that could arise: "When I started to faint, the fear occurred 'where am I' and as a consequence I haven't dared to do somethings" (Interview 10). As a consequence of this fear the patients limited themselves even more, while it was also a motive for contacting the health care services and request expedited investigation and treatment. The contact with the health care services was a two-edged sword as it was important to be seen by the right physician who could identify the symptoms described and initiate an investigation if episodes occurred. It was also difficult to capture the episodes on an electrocardiogram, and the number of visits required to do so varied from just a few to a frustrating 20 to 30 visits. Once a contact had been established, everything went smoothly. The way that the patients were received instilled security while they, at the same time, received tools to manage their symptoms, such as instructions for the Valsalva maneuver. On the negative side, there was a lack of straight answers and uncertainty about the waiting time for ablation.

### **Intellectual Life Dimension**

To handle their daily life of episodes the patients created both short-term and long-term strategies. Short-term strategies consisted of measures to be taken during an episode, such as interrupt what they were doing, sit down, lie down, cough, strain, and drink ice-cold water. The ambition was to try and stop the episodes of SVT while others intended to endure the situation, calm down, focus on their breathing, and think of something else. The strategies included a strife to manage on their own as far as possible, which meant that the patients waited until "they could not handle any more" before they sought acute care: "If someone say that we should call an ambulance I just say that we should wait a little bit more, I try to delay the call until I feel "that's enough, now I have to get some help" (Interview 4). Long-term strategies aimed to avoid having an episode, which could entail trying to identify patterns and triggering factors to avoid situations or movements that triggered sudden palpitations. The difference between the patients was whether

their strategies were only short term, or if they applied both strategy models which then encompassed all their daily life: “It starts when I’m stressed and exert myself, and when I’m tired and when I bend down, then I just have to stop” (Interview 6). The information that SVT is harmless was a relief, although it could be perceived that the actual impact of the episode was played down. Receiving a diagnosis confirmed the patients’ symptoms and problems, and knowing that SVT could be treated was a relief. Patients described that they were encountered with insufficient information about diagnosis, treatment, treatment options, and self-care measures: “I would like more concrete advice, because then I wouldn’t have to worry, it would have calmed me down instead of dispatching me like he did” (Interview 6). The patients experienced a lack of intelligible information and health care professionals that they could contact about questions they might have. After having been called for ablation the patients obtained an information leaflet, which they had wanted at an earlier stage. The patients experienced mixed emotions ahead of the ablation as the procedure caused worry and thoughts as to whether it would be successful or if there would be any complications: “Well you can get diabetes or other diseases and then have to deal with it, but this, when you doesn’t have to, I rather live my life to the full!” (Interview 10). Receiving help was experienced as positive and the patients were hopeful about the future in terms of not having to constantly think about their SVT or medicate, but live life to the full in their daily life instead.

### Spiritual–Existential Life Dimension

Patients described an inhibited existence because of the episodes, and they did not want to risk anything by keep doing what they had done before. It could be about travelling to relations who lived a few hours away or going to a trade fair. By limiting their existence, the patients’ lives felt safer: “I have become very inhibited, it’s not that I want to really, but that’s what’s happened in the past year” (Interview 19). Not being believed included the patients as well as others doubting them. The patients described thoughts that they might be the problem, which created uncertainty in case they were just imagining things. The patients experienced doubt in the

encounter with health care professionals who would explain that their symptoms were due to stress, nothing to worry about, and who would in extreme cases question the reason for seeking acute care: “And then I went to the healthcare, and then it stopped, it didn’t show anything and then I thought—please, can it not just come so that they see?” (Interview 1). Their identity was affected as they did not view themselves as healthy anymore, something was not right and something was wrong. The patients became more reserved, withdrew from the community, and preferred not to join in. From this uncertainty about what the future would hold, thoughts about death arose, that is, that their time had come because they did not know what was happening in their body “The first times when I didn’t know what it was, I did understand that something was wrong, but then I just thought that this was my life, yeah I thought it was the end!” (Interview 3). The patients described a constant and tangible awareness that the episodes of SVT could occur anytime, but also that this was something they had to get used to as this was what their life was like now. The patients simply had to take every day as it came.

### Discussion

The findings show that the patients were affected in all life dimensions from a holistic perspective. The episodes caused fatigue and worry, which entailed barriers to living life to the full by, for instance, giving up undertakings. The unpredictable episodes resulted in the patients constantly having to find short-term and long-term strategies for every life situation, which created an inhibited existence and made them give up things that they had previously done in their daily life.

The symptoms described by the patients belong to the *biophysical life dimension*. Fatigue appears to be a particularly burdensome symptom. The tiredness occurs in connection with the episodes, lasting for hours after the episode or for some time of the patients’ life existence. Fatigue as a phenomenon has previously been described by patients with SVT as a frequent symptom (Blomström-Lundquist et al., 2003; Walfridsson & Walfridsson, 2005; Wood et al., 2007; Wood et al., 2010) that is overwhelming and disabling, and that can be momentary or last for days after the SVT has ceased (Wood et al., 2007). Fatigue has a negative impact on activities in daily

life among patients with heart failure, predominantly for physical reasons (Norberg, Boman, & Löfgren, 2010). Fatigue can be viewed as a relatively unspecific symptom, even if the patient has been diagnosed with SVT. It can be difficult to communicate about it with next of kin or nurses, which is why understanding from others can be affected. Increased awareness among nurses, who can use patient education as an opportunity to describe fatigue as a phenomenon associated with episodes, can help patients' next of kin and health care professionals to gain an understanding of the issue.

Barriers for living life to the full belong to the *sociocultural life dimension*. They entail problems for patients to do what they used to do, which in turn have consequences for both their private and working life. A broad spectrum of barriers can be observed both during and between episodes, where sudden palpitations become very tangible, characterizing the patients' entire daily life. The barriers primarily consist of an uncertainty about when and where SVT will occur, which leads to limitations in daily life in general (Meissner et al., 2009), and social activities in particular (Wood et al., 2007). This uncertainty about the risk of a sudden onset of symptoms limits patients with atrial fibrillation in the same way, not only in terms of social activities, but also in their working life (Ekblad, Rønning, Fridlund, & Malm, 2012; McCabe, Schumacher, & Barnason, 2011). It is thus necessary that patients with SVT receive advice and recommendations about how and who to contact if symptoms occur, which in turn means that there should be clear routines and guidelines for nurses about how and why to look after patients with SVT in a secure and humanistic manner.

The fact that episodes can start without warning makes them unpredictable. In that way, they cause frustration, which belongs to the *emotional life dimension*. The unpredictability results in uncertainty, which is an established problem (Walfridsson et al., 2009; Wood et al., 2010; Yildirim et al., 2012), for instance, among patients with an implantable cardioverter defibrillator. Uncertainty is a prominent problem in this group and it is related to the unpredictability with regard to the possibility and timing of the next episode and its impact (Flemme, Hallberg, Johansson, & Strömberg, 2011). Nurses and other health care professionals can help and support by simply asking the patient how it affects the life situation of living with

sudden palpitations. It can be a good relief just telling the story for someone listening.

This unpredictability can also be related to the *intellectual life dimension*. If sudden palpitations occur, there is a need and demand for finding out strategies. The constant search for triggering factors and techniques to prevent, shorten, or interrupt these episodes can then become a taxing intellectual challenge. However, as shown in other studies, some patients have great difficulties creating strategies, whereas others find it easier (Ekblad et al., 2012; Wood et al., 2007). In comparison with heart failure patients, it is clear that those with good knowledge use intentional and planned strategies for handling self-care-related problems (Harkness, Spaling, Currie, Strachan, & Clark, 2015). Information that SVT is harmless is positive, but at the same time insufficient. When a diagnosis is not accompanied by an explanation about what it entails and what the treatment options are, patients can experience that their problems are being played down. Instead, nurses need to provide comprehensive information that is adapted to the patient's daily life and takes its starting point in making the patient participate, with the intention to strengthen their faith in their own self-care ability, that is, techniques to prevent, shorten, or interrupt episodes.

The experience of an inhibited existence in daily life belongs to the *spiritual-existential life dimension*. This impact means that patients limit their activities geographically to their local area to maintain security within a manageable distance from work and, above all, home. These tangible limitations in daily life that intend to avoid episodes is a known problem (Meissner et al., 2009; Walfridsson & Walfridsson, 2005; Wood et al., 2010; Yildirim et al., 2012), not least among patients with atrial fibrillation (Dalteg, Benzein, Sandgren, Fridlund, & Malm, 2014; McCabe et al., 2011). Patients seeking help from health care services, despite their insecurity about the meaning of the symptoms, can be seen as positive, something that cannot be said for the doubts they encounter from health care professionals. Unfortunately, this experience of health care services is well-known to patients with atrial fibrillation (Dalteg et al., 2014; Ekblad et al., 2012; McCabe et al., 2011) and reinforces the need for health care professionals in general and nurses in particular to receive further pedagogical and factual education on how to care for patients with SVT.



## Trustworthiness

Trustworthiness in qualitative analyses is normally judged from quality aspects: credibility, dependability, confirmability, and transferability (Graneheim & Lundman, 2004). As for the credibility of this study, focus was to describe and also understand how SVT affects daily life, which directed the choice of theoretical frame of reference and deductive data analysis to Sarvimäki and Stenbock-Hult's (1996) life dimensions and a qualitative content analysis. Credibility was also strengthened through the selection of patients and method for data collection, that is, patients with pronounced and different experiences of the phenomenon were allowed to express their subjective descriptions in interviews. The selection of 20 patients was considered to be varied, but it is possible that more younger and foreign-born patients could have added further information. No member checking was performed, but a prolonged engagement was obvious due to the 8-month-long data collection period, which strengthens the analysis adherence. There was also "a peer debriefing" of the authors whom made sure that all steps were considered during the analysis process through repeated discussions and reflections. Dependability based on the success of the data collection and analysis, that is, the amount of meaningful data generated in the interviews and the way these data have been handled by the authors during the analysis. The first author was well aware of the importance of a good interview climate, both in terms of physical and personal presence, and also of the authors being aware of the importance of pre-understanding, both individually and in a group. Thus, the patients decided on a suitable place for the interview and the first author was careful to ensure that the structure of the interview guide was covered. Confirmability is an estimate of a study's objectivity, which in this case was strengthened with presentations of codes, categories, themes, and quotations. Accordingly the intentions with quotes were to strengthen the result. The authors also experienced data saturation after 18 interviews, although 20 were conducted to confirm and ensure the extent of the content. Confirmability was also strengthened through authors' demonstration in detail of reflective and preunderstanding under the analysis process. Transferability refers to

how well a finding can be translated to similar contexts in terms of usability. Obviously, the result could not be considered from a statistical perspective of generalizability, but it brought meaningful information of how to better understand as well as support and care for patients with SVT from an individual, that is, holistic perspective. Nevertheless the enrollment was done in a big catchment area—about 3% of the Swedish population—and the selection of patients with SVT displayed both depth and width regarding sociodemographic and clinical characteristics, the usability in similar contexts was considered good.

## Conclusion

The impact of SVT on a person's life dimensions is so complex that it more or less controls daily life. Good care exists, but there are often shortcomings in the encounter with health care services. It is a challenge to health care professionals in general, and nurses in particular, to improve care, not least in acute situations. Nurses need knowledge and an understanding of life dimensions on an overall level to support and keep a dialogue with adequate information in a relevant manner, and optimize professional (patient education) as well as layman (self-care) measures. Further research entails an investigation of the impact on daily life for next of kin.

## References

- Badhwar, N., Kusumoto, F., & Goldschlager, N. (2012). Arrhythmias in the coronary care unit. *Journal of Intensive Care Medicine*, 27, 267-289. doi:10.1177/0885066611402165
- Blomström-Lundquist, C., Scheinmann, M., Aliot, E., Alpert, J., Calkins, H., Camm, A., . . . Tomaselli, G. (2003). ACC/AHA/ESC guideline for management of patients with supraventricular arrhythmias executive summary: A report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. *Circulation*, 108, 1871-1909. doi:10.1161/01.CIR.0000091380.04100.84
- CODEX. (2009). *Rules and guidelines for research*. Retrieved from <http://www.codex.uu.se/en/etik9.shtml>
- Dalteg, T., Benzein, E., Sandgren, A., Fridlund, B., & Malm, D. (2014). Managing uncertainty in couples living with atrial fibrillation. *Journal of Cardiovascular Nursing*, 29, E1-E10. doi:10.1097/JCN.0b013e3182a180da

- Ekblad, H., Rönning, H., Fridlund, B., & Malm, D. (2012). Patients' well-being: Experience and actions in their preventing and handling of atrial fibrillation. *European Journal of Cardiovascular Nursing, 2*, 132-139. doi:10.1177/147451512457132
- Estner, H., Ndrepepa, G., Dong, J., Deisenhofer, I., Schreieck, J., Schneider, M., . . . Schmitt, C. (2005). Acute and long-term results of slow pathway ablation in patients with atrio-ventricular nodal supraventricular tachycardia—An analysis of the predictive factors for arrhythmia recurrence. *Pacing and Clinical Electrophysiology, 28*, 102-110.
- Flemme, I., Hallberg, U., Johansson, I., & Strömberg, A. (2011). Uncertainty is a major concern for patients with implantable cardioverter defibrillators. *Heart & Lung, 40*, 420-428. doi:10.1016/j.hrtlng.2011.02.003
- Graneheim, U., & Lundman, B. (2004). Qualitative content analysis in nursing research concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today, 24*, 105-112. doi:10.1016/j.nedt.2003.10.001
- Harkness, K., Spaling, M., Currie, K., Strachan, P., & Clark, A. (2015). A systematic review of patient heart failure self-care strategies. *Journal of Cardiovascular Nursing, 30*, 121-135. doi:10.1097/JCN.0000000000000118
- International Council of Nurses. (2012). *The ICN code of ethics for nurses*. Retrieved from [www.icn.ch/who-we-are/code-of-ethics-for-nurses/](http://www.icn.ch/who-we-are/code-of-ethics-for-nurses/)
- Lane, D., Aguianaga, L., Blomström-Lundquist, C., Boriani, G., Dan, G.-A., Hills, M., . . . Potpara, T. (2015). Cardiac tachyarrhythmias and patient values and preferences for their management: The European Heart Association (EHRA), Asia Pacific Heart Rhythm Society (APHRS), and Sociedad Latinoamericana de Estimulación Cardíaca y Electrofisiología (SOLEACE). *Europace, 17*, 1747-1769. doi:10.1093/europace/euv233
- Leitch, J., & Barlow, M. (2012). Radiofrequency ablation for pre-excitation syndromes and AV-nodal re-entrant tachycardia. *Heart, Lung and Circulation, 21*, 376-385. doi:10.1016/j.hlc.2012.03.016
- McCabe, P., Schumacher, K., & Barnason, S. (2011). Living with atrial fibrillation. A qualitative study. *Journal of Cardiovascular Nursing, 26*, 336-344. doi:10.1097/JCN.0b013e31820019b9
- Meissner, A., Stifoudi, I., Weismüller, P., Schrage, M.-O., Maagh, P., Christ, M., . . . Plehn, G. (2009). Sustained high quality of life in a 5-year long follow-up after successful ablation for supra-ventricular tachycardia. Results from a large retrospective patient cohort. *International Journal of Medical Sciences, 6*, 28-36.
- Norberg, E.-B., Boman, K., & Löfgren, B. (2010). Impact of fatigue on everyday life among older people with chronic heart failure. *Australian Occupational Therapy Journal, 57*, 34-41. doi:10.1111/j.1440-1630.2009.00847.x
- Orejarena, L., Vidaillet, H., Destefano, F., Nordstrom, D., Vierkant, R., & Smith, P. (1998). Paroxysmal supraventricular in the general population. *Journal of the American College of Cardiology, 31*, 150-157. doi:10.1016/S0735-1097(97)00422-1
- Royster, C., & Melander, S. (2013). Radiofrequency ablation for common supraventricular tachycardias other than atrial fibrillation. *Journal for Nurse Practitioners, 9*, 368-373. doi:10.1016/j.nurpra.2011.04.014
- Sarvimäki, A., & Stenbock-Hult, B. (1996). *Caring: An introduction to health care from a humanistic perspective*. Stockholm, Sweden: Liber.
- SFS. (1998:204–SFS 2010:1969). *Personal data act*. Stockholm, Sweden: Department of Justice. Retrieved from [http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Personuppgiftslag-1998204\\_sfs-1998-204/?bet=1998:204](http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Personuppgiftslag-1998204_sfs-1998-204/?bet=1998:204)
- SFS. (2003:460–SFS 2008:192). *The act concerning the ethical review of research involving humans*. Stockholm, Sweden: Department of Justice. Retrieved from [http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Lagometikprovningavforskningsomavsermanniskor-2003460\\_sfs-2003-2003-460/?bet=2003:460](http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Lagometikprovningavforskningsomavsermanniskor-2003460_sfs-2003-2003-460/?bet=2003:460)
- Smith, G., Morgans, A., Taylor, D., & Cameron, P. (2012). Use of the human dive reflex for the management of supraventricular tachycardia: A review of the literature. *Emergency Medicine Journal, 29*, 611-616. doi:10.1136/emmermed-2011-200877
- Statistics Sweden. (2012). *Population by time, municipalities and sex*. Skaraborg, Sweden: Statistics Database Sweden. Retrieved from <http://www.scb.se/en/>
- Walfridsson, U., Strömberg, A., Janzon, M., & Walfridsson, H. (2009). Wolff-Parkinson-White syndrome and atrio-ventricular nodal re-entry tachycardia in a Swedish population: Consequences on health-related quality of life. *Pacing and Clinical Electrophysiology, 32*, 1299-1306. doi:10.1111/j.1540-8159.2009.02476.x
- Walfridsson, U., & Walfridsson, H. (2005). The impact of supraventricular tachycardia on driving ability in patients referred for radiofrequency catheter ablation. *Pacing and Clinical Electrophysiology, 28*, 191-195.
- Wood, K., Stewart, A., Drew, B., Scheinman, M., & Froëlicher, E. (2010). Changes in patient perceptions and quality of life following ablation in patients with supraventricular tachycardia. *Heart and Lung, 39*, 12-20. doi:10.1016/j.hrtlng.2009.04.001
- Wood, K., Wiener, C., & Kayser-Jones, J. (2007). Supraventricular tachycardia and the struggle to be believed. *European Journal of Cardiovascular Nursing, 6*, 293-302. doi:10.1016/j.ejcnurse.2007.02.006
- Yildirim, O., Yontar, O., Semiz, M., Erdem, A., Canan, F., Yontar, G., & Kugu, N. (2012). The effect of radiofrequency ablation treatment on quality of life and anxiety in patients

with supraventricular tachycardia. *European Review for Medical and Pharmacological Sciences*, 16, 2108-2112.

**Ann-Katrin Nordblom**, RN, MScN, is a cardiac nurse at the Department of Cardiology, Skaraborg Hospital of Skövde, Sweden, mainly working in the cardiac team at the Electrophysiology Lab.

**Anders Broström**, RN, PhD, is a professor at the School of Health and Welfare, Jönköping University. He holds also a

position as a professor in cardiac care at the Bergen University College, Bergen, Norway, and works also as a senior research nurse at the Department of Clinical Neurophysiology, University Hospital, Linköping, Sweden.

**Bengt Fridlund**, RNT, BScEd, PhD, FESC, is a professor and director of postgraduate studies at the School of Health and Welfare, Jönköping University. He also holds a position as a professor in cardiac care at the Bergen University, as well as Bergen University College, Bergen, Norway.