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Applying Petitmengin's Explicitation Interview Method to Elicit the Lived Experience of Breathing Upon Waking by an Individual With Cystic Fibrosis

Sigrid Ladores, PhD, RN, PNP, CNE[1]

Abstract

Breathing is an act that most people do not consciously evoke unless there is a presence of illness that affects the respiratory system. Adults generally take in 12 to 15 breaths per minute without even a thought about the body's mechanics that allow for proper oxygenation and ventilation. However, for those with pulmonary compromise, breathing becomes a very conscious, deliberate, and sometimes laborious act. The purpose of this paper is to demonstrate the use of the explicitation method by Petitmengin by interviewing a subject to elicit the lived experience of breathing by an individual with end-stage cystic fibrosis (CF). To apply the interview method, the following phenomenological question guided the interviewer's approach: What is the lived experience of breathing upon waking for an individual with CF? This paper includes a transcription of the interview followed by a self-critique, textual analysis, and discussion of the implications to health care.

Keywords

lived experience, phenomenology, breathing, cystic fibrosis, explicitation, method, qualitative methods

Breathing is an act that most people do not consciously evoke unless there is a presence of illness that affects the respiratory system. Adults generally take in 12 to 15 breaths per minute without even a thought about the body's mechanics that allow for proper oxygenation. However, for those with pulmonary compromise, breathing becomes a very conscious, deliberate, and sometimes laborious act. For instance, people with emphysema, asthma, or cystic fibrosis (CF) are acutely aware of their breathing, especially during episodes of dyspnea.

Emphysema and asthma are both acquired respiratory illnesses, whereas CF is genetic and follows an autosomal recessive pattern of inheritance. While emphysema and asthma are well-understood and well-publicized, CF is not as known by the lay public despite the fact that it is the number one genetic disease among Caucasians, affecting approximately 30 000 people in the United States (1). Cystic fibrosis is a multisystem, progressive, life-shortening disease. An abnormality in chromosome 7 results in the alteration of the body's ability to transport sodium and chloride across ion channels, thus producing excessively thick, tenacious mucus (1). The mucus becomes entrapped in various areas, primarily affecting the lungs, intestines, pancreas, and reproductive organs (1). Due to the advancement in medicine and technology, CF is no longer a disease of childhood. Recently approved highly effective modulator therapies that target the underlying genetic protein defect in CF are available to treat approximately 90% of individuals with CF and have been shown to improve quality of life and lung function, among other clinical indicators (1). Survival age for people with CF is now in the late-forties with complications from pneumonia as the most common cause of death (1).

Detailed reports on the experience and struggle of breathing by those affected with CF is lacking in the literature. A deep understanding of this experience can only be obtained through phenomenological studies as well as specific qualitative interviewing techniques. The purpose of this paper is to demonstrate the use of the explicitation method by Petitmengin by interviewing a subject to elicit the lived

[1] School of Nursing, University of Alabama at Birmingham, Birmingham, AL, USA

Corresponding Author:
Sigrid Ladores, School of Nursing, University of Alabama at Birmingham, 1720 2nd Avenue South, NB470L, Birmingham, AL 35294, USA.
Email: sladores@uab.edu

experience of breathing by an individual with end-stage CF (2). To apply the interview method, the following phenomenological question guided the interviewer's approach: What is the lived experience of breathing upon waking for an individual with CF? This paper will include a transcription of the interview followed by a self-critique, textual analysis, and discussion of the implications to health care.

Brief Overview of Phenomenology

Phenomenology is most commonly described as a philosophy, perspective, research approach, and less often described as a method. The goal of phenomenological inquiry is to fully describe a lived experience (3). Phenomenology's history is complex, and its current applications are diverse and continually evolving. Phenomenology was originated in the early 20th century by Edmund Husserl who believed that knowledge cannot be gleaned simply by empirical data or by what can be quantitatively measured and manipulated. Instead, he believed that great knowledge can be achieved by understanding one's experience and "going back to the things themselves" (4–7). Husserl had several students and scholars (eg, Heidegger, Sartre, and Merleau-Ponty) who incorporated his original ideas into their own set of modified phenomenological principles (5). These phenomenologists believed that a person's subjective experience is a powerful source of knowledge (5).

Phenomenology is a research approach frequently used in the social–behavioral sciences wherein each interaction between 2 persons creates a situated context embedded in time, space, embodiment, and relationships (8). Phenomenology seeks the meaning of life's nuances as described by the person experiencing them and by being a theoretical, liberating oneself from prescribed steps or formulas, and requiring the researcher to be open to receive whatever is revealed while being aware of, and setting aside biases, presuppositions, and prejudices (8).

Brief Overview of Petitmengin's Explicitation Interview Method

Claire Petitmengin, a French psychotherapist and phenomenologist, developed an interview method that allows her study participants to "gain consciousness of their own cognitive processes, and to make them explicit" (2). She is a leading expert in studying the subjective experiences of people with epilepsy and uses the explicitation interview method to delve deeply into the participants' lifeworld. The interview process requires the participants to describe their experiences with precision and in great detail. There are 6 nonlinear, iterative steps in the interview process: (a) stabilize attention; (b) turn the attention from "what" to "how"; (c) move from a general representation to a singular experience; (d) retrospectively access the lived experience; (e) direct attention to the various dimensions of the experience; and (e) deepen the description to the required level of precision.

In order to stabilize the interviewee's attention, the interviewer must be firm in his ability to refocus the former back to the experience itself (step 1). The process begins by having the interviewer state the overall objective as well as the context and conditions of the interview (2). For example, the interviewer begins by stating: "Please know that I am often going to repeat what you say to me to check that I have understood you correctly, and whether anything has been left out. Don't hesitate to interrupt me."

To achieve steps 5 and 6 which involve the verbalization of rich descriptions of the experience's multilayered dimensions, the interviewer must use step 2 as an effective way of gathering the interviewee's internal dialogue (2). Questions posed must begin with "how" rather than "what." This facilitates a vivid account of the various dimensions within the experience. These dimensions are visual, auditory, olfactory, gustatory, and tactile (also commonly known as the sense of sight, hearing, smell, taste, and touch, respectively).

Finally, in order to truly capture one's lived experience, it must be precisely situated in space and time (2). Thus, a singular experience must be chosen and retrospectively accessed, rediscovered, and reenacted (steps 3 and 4). The goal is to move the interviewer from a general description or explanation to a highly contextualized, sensorial response. An interviewee is noted as effectively reliving his experience when certain nonverbal cues and behaviors are seen. For instance, the use of the present tense in description signals the arrival of the interviewee within the exact spatiotemporal context of his previous experience (2). Furthermore, the slowing of the word flow, the unfocusing and shifting downward of the eyes, and other gestures are clues that the interviewee has effectively transformed his past into his present during the evocation process (2).

As described by Petitmengin, the explicitation interview method is both noninductive and directive (2). It is noninductive because it starts with a *tabula rasa* and remains open to drawing the structural characteristics of the experience without inducing any content. Yet it is also directive because the interviewer is firm in his ability to reformulate and refocus the interviewee back to the singular experience in order to achieve depth and precision in description. This interview method requires a high level of trust between the interviewer and interviewee in order for the vividness of description to emerge (2). The interviewer must understand and safeguard the interviewee's state of vulnerability as the latter's life experience is intimately invaded.

Method

An audiotaped, in-depth interview was conducted with an individual with CF using Petitmengin's explicitation method to elicit the meaning of breathing.

Background of the Participant

J.D. (a pseudonym) is a 36-year-old Caucasian male who was diagnosed with CF immediately after birth. He had emergency surgery at day 2 of life to repair an intestinal obstruction from trapped mucus and meconium. Physicians told J.D.'s mother that he had, at most, 1 year to live with CF. Now in his mid-30s, J.D.'s intrinsic motivation to live fully and healthily has helped him recover from several surgeries including bilateral upper lobectomies to remove necrotic lung tissue and exploratory laparoscopy to remove intestinal adhesions and obstruction. He is followed by a multidisciplinary care team (eg, pulmonologist, gastroenterologist, respiratory therapist, physical therapist, pharmacist, etc) and sees his care team for quarterly routine visits and more often when acutely ill. He is hospitalized at least twice each year, with each hospital stay ranging from 10 to 14 days. The most common reason for hospitalization is pulmonary exacerbation secondary to CF.

At the time of the interview, J.D. was hospitalized for pneumonia. After explaining the purpose of the interview, J.D. gave his consent to participate. The interview was conducted in his hospital room and lasted for 40 minutes. It was audiotaped and transcribed verbatim (See Appendix for Transcript).

Background of the Interviewer

At the time of the interview, I was a PhD student and immersed in learning about qualitative research methods. I am also a pediatric nurse practitioner and nurse educator. I have conducted interviews prior to my interview with J.D. as part of my training and employment as a nurse, however, I have never used Petitmengin's interview method. J.D. is my husband, and this is the first time I have ever interviewed him using a prescriptive approach. While I am witness to his daily challenges related to CF, I have never conducted an interview with him to elicit a vivid description of his breathing experience. In preparation for the interview, I started to journal about my preconceptions, biases, and suppositions. Even though complete bracketing may not be possible, I continuously strove to set aside my personal and professional assessments of what J.D. shared with me. I arrived at the interview with a few written questions that I used to help guide and focus the interview.

Results

J.D.'s experience with breathing upon waking involved multi-sensorial contexts. He described his experience using mainly the visual, auditory, and tactile dimensions. He described seeing his chest rise and fall upon waking, hearing wheezing or gurgling, and feeling tightness in his chest. All of this happens simultaneously and instantaneously and indicates to him whether he would have a "good breathing day" or not. He described how he would consciously stretch his lungs by taking deep breaths, just as another person would stretch his muscles upon waking. He described how his labored breathing can be tiring and frustrating, especially when his brain was willing, but his body was not. He described sensations of hypoxia and his struggle to regain oxygenation by using several metaphors. He described how he must relinquish control over his breathing during periods of bronchospasm. Finally, he described in great detail his meditative technique in conjuring up a "little man" to clean up his congested lungs. All of these descriptions characterize the primary phenomenological concept of *embodiment* which explains that through consciousness we become aware of being-in-the-world and that it is through the body that we gain access to this world (8).

Self-Critique

The interview went smoothly primarily because of the inherent trust that J.D. and I had with each other. This is a crucial element in completing thoughtful interviews as a lack of trust can deter open dialogue and full disclosure. Petitmengin acknowledged that it is the responsibility of the interviewer to protect the interviewee's state of vulnerability (2). The trust undergirded the interview and allowed for positive exchange; however, it also permitted exploration of tangential topics which proved to be distracting from the targeted topic. There were instances when I was not directive in my approach and allowed J.D. to venture into discussions on exercise and discomfort, moving away from the focus of the interview which was the experience of breathing upon waking.

I made a concerted effort in following Petitmengin's 6 interview steps in order to elicit the multidimensional aspects of J.D.'s experience with breathing. I did an adequate job of stabilizing his attention by refocusing, reformulating, and rechecking accuracy. I also achieved my goal of moving from a general representation to a singular experience and had J.D. retrospectively access his lived experience. During the interview, I kept and referred to a list of dimensions (eg, visual, auditory, tactile, olfactory, and gustatory) to ensure that I fully inquire about the experience. The explicitation of dimensions facilitated the deepening of description to a precise level (Petitmengin's final step).

On the other hand, I could have improved in how I phrased certain questions. Rather than begin with "what," it would have been more appropriate to ask "how." Lastly, there were a few incidences where I asked leading questions which signified that I did not fully embody the ''unknowing" principle of phenomenology. The proximity of my relationship to J.D. as well as my professional background of having worked with many individuals with CF served to introduce personal opinions and biases into what was supposed to have been "noninductive" (2). Bracketing and decentering myself was not an easy task to be maintained throughout the 40-minute interview. Being "unknowing" is a true art that requires constant introspection and a willingness to be open

to the intersubjective interplay between interviewer and interviewee (8). It is challenging to continually liberate myself from presuppositions and assumptions to truly listen and grasp the meaning of someone's lived experience and finally "become phenomenologic."

Textual Analysis

To perform the textual analysis, I first read the transcript in its entirety to get a general appreciation for what was shared. Then I reread the transcript several times to "dwell with the data" in order to highlight and extract emerging descriptive expressions (8). I noted vivid descriptions using gerunds and in vivo codes on the transcript's page margins. Since this is only 1 interview with 1 participant, themes were not the intended outcome of this analytical process. However, similar descriptions that surfaced throughout the text were recorded and brought back to J.D. for final validation that his experience was accurately captured.

J.D. described his frustrations with the physical and mental act of breathing because it is accompanied by an incessant cough that rendered him exhausted and at times, close to becoming unconscious. He used several metaphors to describe the experience of labored breathing, including: "Feels like you've got a plastic bag over you trying to take in air with a straw." He also vividly described what it feels like to become hypoxic and feel lightheaded:

> You just, the blood just you can literally feel it. It's like pinching your finger for 30 seconds and then you release your finger and you can feel the blood flow . . . back . . . into their finger . . . Well, this is just the opposite. You can feel the blood like leave your brain. And you just can't catch your breath . . . And in those seconds you get a little wobbly . . . because your brain is trying to process everything and yet you're trying to balance yourself and focus on breathing.

These textual analyses demonstrated Petitmengin's primary tenet of delving deeply into the person's multilayered experience.

Discussion

I learned valuable lessons from my first attempt in using both a phenomenological approach to inquiry and Petitmengin's explicitation interview method. I realized that becoming phenomenologic is a continuous and, oftentimes, challenging process. Despite my conscious effort to bracket biases and prior knowledge, I failed to personify the principle of "unknowing" in several instances. Having J.D. as my participant proved to be a double-edged sword. While he afforded me the ability to delve deeply into his experience, my personal relationship with him also made it easy to digress into other peripheral topics.

The interview method was relatively easy to implement especially for a novice interviewer like myself who does not have a psychology background. However, steps 2 (*Turning the attention from "what" to "how"*) and 6 (*Deepening the description to the required level of precision*) were arduous because they required careful phrasing and active listening on the part of the interviewer. Additionally, the transcription process was laborious. The multiple and thoughtful reviews of the text for analysis was equally laborious. However, I welcomed both as they were crucial in my development as a scholar and novice qualitative researcher.

Clinical Implications

The experience of breathing as described by J.D. was enlightening because several processes happen within him at once. Upon waking, he becomes conscious of seeing, hearing, and feeling his breathing. An individual without lung compromise breathes without much thought; however, for J.D., breathing is a conscious, deliberate act. Results from this interview add to the work by Haugdahl et al who reported that for patients on mechanical ventilation, their experiences before and after intubation were intertwined with the whole illness experience, and breathing was not always an easily separable experience from being ill (9). The authors described 4 themes that emerged from their interviews with 6 patients: (a) existential threat, (b) the tough time, (c) an amorphous and boundless body, and (d) getting through. J.D. similarly reported a feeling of an existential threat when his breathlessness worsened and he experienced a difficult time overcoming his sense of breathlessness, and finally surrendering his uncooperative body during intense bronchospasms hoping that he would get through to the "other side" and wake up.

J.D.'s experience of breathing was also echoed in a recent study by van der Meide et al wherein individuals with chronic obstructive pulmonary disease (COPD) were asked to describe what it was like to have COPD using phenomenological interviews (10). The themes that emerged describe how these individuals viewed each breath as a possibility and how they must be vigilant in their fight against a "losing battle" that is highly isolating. Lastly, J.D.'s vivid descriptions were also illustrated in the qualitative synthesis by Hutchinson and colleagues who extracted and synthesized findings from 101 qualitative articles that described the experience of breathlessness from the perspectives of patients, caregivers, and clinicians (11). Their metaconcept of "breathing space" highlighted the deployment of self-coping by the breathless patient and the engaged interaction by the patient, caregiver, and clinician to alleviate respiratory distress.

J.D.'s vivid descriptions of the visualization technique he employs using the "little man" in his lungs to gobble up trapped mucus and clear his airways may be of utility for other individuals with CF or non-CF lung disease. A recent randomized controlled trial found that using cognitive behavioral therapy with integrated visualization techniques improved the quality of life among women with hypothyroid

disease (12). Similarly, another randomized controlled trial demonstrated that guided imagery exercises improved affect, optimism, self-efficacy in a group of patients with fibromyalgia (13). These findings support the development of targeted interventions for individuals with CF that include cognitive behavioral therapy and guided imagery.

Limitations and Future Research

While generally not regarded as a limitation in the area of qualitative research, especially when the purpose was to explicitly apply and describe the use of a particular method, the 1-person interviewee may be viewed as lacking by qualitative methodologists. Furthermore, while generalizability of findings was not the intent behind this project, there are several implications to future research and health care that are worth mentioning. First, additional work is necessary to fully understand the phenomenon of breathing, perhaps using a variety of participants who have different respiratory conditions and who do not have any respiratory issues to extract the fundamental essence of breathing. Second, future research is needed to investigate how Petitmengin's explicitation interview method is similar to, and different from other interview techniques (eg, unstructured, semi-structured, structured) (2). Lastly, it is clear that in order to deliver individualized care, health care providers must learn to listen to their patients with phenomenological ears. To truly understand their patients' perspective, health care providers must understand the meaning of their experiences.

Conclusion

Petitmengin's explicitation interview method is one approach to use when asking thoughtful questions that allow patients to fully describe their experiences from multiple dimensions according to their situated contexts (2). Only then will health care providers be able to demonstrate care that is holistic and humanistic which are, interestingly, also both phenomenological concepts.

Appendix

Transcript with author's Textual Analysis (TA) and Self-Critique (SC) noted at the end.

SL—interviewer

JD—interviewee

SL: Ok. This is an interview with participant, JD, on July 3 at 11 o'clock am. Um . . . Ok. Before we begin, please know that I am often going to repeat what you say to me to check that I have understood you correctly, and whether anything has been left out. Don't hesitate to interrupt me. I will be asking you to delve deeper into your experience to get a more precise description and, ultimately, the meaning of your experience. Let's begin. Please describe in great detail how it feels to wake up in the morning and feel your breathing on the days leading up to your hospitalization for pneumonia, what we're going to do together is to go back in time as though we have a tape recorder. Let's go back to Sunday morning, the day before you were admitted to the hospital (note 1). I would like to make sure that we capture all of the different dimensions in your experience with waking up and not being able to breathe well without the help of your aerosol medications. So, tell me, what's the process of waking up like for you? (note 2)

JD: Um . . . well, first, you know you kind of recognize that you're awake, you know you're not sleeping anymore and um . . . I'm aware that I'm alive that my wife is next to me um . . . and just try and take in the auditory surroundings. What noises do I hear? What do I feel with my hands? Um . . . when it comes to my breathing, I usually get there pretty quickly um . . . because just laying in bed that first breath that I am aware um . . . I can tell whether it's going to be a good breathing day or a bad breathing day. Um . . . and I usually brace myself to cough because that's usually coming pretty quick. Um . . . often times I have to sit up to really cough um . . . because I feel pretty congested. So, waking up is kind of a process which is kind of like anybody else just that I have to deal with either being able to breathe smoothly or not which on Sunday was difficult. And on top of everything I was wheezing so um . . . pretty much every breath I exhale I feel like I have to cough. And that's just kind of frustrating and tiring all at the same time, to always feel like you have to cough (note 3). (Cough).

SL: Ok. Um . . . tell me more about exactly how you become conscious of your breathing. Is it the coughing that prompts you to be conscious of it? Because most people don't generally um . . . pay attention to their breathing. They just breathe whereas you on the other hand, it's a very, very conscious act (note 4).

JD: Yeah, when I am just laying there I just um . . . I just . . . when I take the first breath that I'm really aware that I'm awake I just focus on taking the air in my lungs and breathing it out and getting a feel for how congested I am at that moment. And get a gauge for is this going to be smooth or easy? Am I feeling tight? Am I, you know, going to cough, you know? Um . . . whatever I feel at that moment to start my day.

SL: Ok. What do you see if anything, upon waking related to your body and breathing in particular? Do you see anything? (note 5)

JD: Well yeah, I just kind of take notice of my surroundings like I said. A lot of times I will put my hands on my chest um . . . just as a kind of reaction just to maybe calm myself. Um . . . and I like to feel the air go into my lungs um . . . it's kind of energizing because a lot of time I wake up I am a little groggy. Um . . . so I like that feeling of taking that deep breath and almost like people stretch their muscles, I feel like I stretch my lungs before I get out of bed by taking some deep breaths to really expand my lungs before I get up and do some type of you know, cardiovascular activity, which obviously is not much because you know, you walk around the house (note 6). But for me, sometimes that is difficult because it will make me cough just to walk to the

bathroom. So, I try and kind of get as much going in my body as I can before I get out of bed.

SL: So would I be correct in saying that when you first wake up what you see, what you like to see related to your body and your breathing would be maybe the rise and fall of your chest just like you said putting your hands on your chest and getting that visual of, "ok I can breathe today" (note 7).

JD: Yup

SL: . . . or "uh-oh I'm not breathing so well today"

JD: Right, at which point I tend to stay in bed a little longer until I . . . I kind of catch my breath. You know, settle my body to ready itself to get up and do the things I have to do for the day.

SL. So what do you hear? We've talked about see, but what do you hear if anything, upon waking related to your body and breathing? (note 8)

JD: Well, the first thing I listen for is am I wheezing? Am I . . . if I am congested, I kind of gurgle while I am laying down, so I listen for that. And all that kind of gauges how well I am going to be breathing that day. You know cause the days that I wake up that I don't wheeze and that I am not gurgling, feeling that congested feel, they're just better days (note 9). They're easier to get going. By the time I take my meds I feel even better so it's just a . . . I really think I kind of stretch my lungs out in bed by just taking some deep, deep breaths and allowing my body to tell me what it's like that day (note 10). Cause every day is different unfortunately, you know, I never know what to expect when I wake up. Sometimes I am surprised because I go to bed not feeling well and when I wake up I'm like, "oh . . . feel great." (note 11)

SL: Not bad . . .

JD: You know. I feel better than when I went to bed. Then there are days where I go to bed great and when I wake up, I'm like, "oh, this suck." I'm, congested. You know, what happened overnight that made me feel . . . all I did was sleep so it's . . . you just don't know what to expect. It's a wait and see game (note 12).

SL: Talk more about how you feel aside from just seeing, hearing, now let's talk about feeling. What exactly do you feel when you first wake up and notice your breathing? And be conscious of your breathing? (note 13)

JD: Umm . . . what do I feel?

SL: Uh-huh.

JD: Sometimes I am tight. Um . . . where it's really hard to get a breath in. That just feels like you've got a plastic bag over you trying to take in air with a straw (note 14). And no matter how hard you breathe through the straw you're only getting a little bit of air to what you're used to. And so, you kind of feel heavy and that congested feel and you just don't feel like you're ready to get up. That your body is just not really ready to get up and do the day. So, it's tiring. You feel a little tired and um . . . you know it's easy to just fall back into bed and rest it off instead of getting up and doing some physical demands which you just don't feel like you have the energy to do (note 15).

SL: And does resting off, does resting help a little bit?

JD: Not . . . yes and no. Sometimes it kind of works itself out where I'll be able to cough out congestion to a point where I am able to get some breaths and that's, that's a like a temporary thing. And that happens. And then there are days where I am just tight. My lungs are just you know, inflamed, congested, and tight and I'm wheezing. So, it's just going to be like that all day. And you just gotta basically fight through it and just go through your day, you know and not over exert yourself (note 16) so you, so you kind of exacerbate that feeling in the moment. Uh . . . and you just try and wait it out because at some point it tends to release but you just don't know when. There's no time frame. It's not like I can just take a pill or an aerosol that . . . ok if I take that I'll feel good in 20 minutes (note 17).

SL: Um hmm.

JD: It . . . it just . . . 'cause even if I take my meds of my aerosols sometimes you still feel like that even after. Um . . . and it's a very temporary relief, for the moment (note 18). Um . . . but having said that you just kind of work through that and you just try and kind of stretch your lungs out more. Work 'em, work 'em, work 'em to the point where you can take bigger, bigger breaths that are less restricted and hopefully you get here sooner during the day (note 19). It just makes the day better.

SL: You talked about (AL: cough) how you cope with it, you, you, you said you stretch your lungs out, you take deeper and deeper breaths as best you can, you try to work through it (note 20). But at what point do you ever feel as though, uh-oh, I feel like I'm in trouble here? Do you feel that sense of anxiety and at what point is that? (note 21)

JD: No. I don't get anxious about it.

SL: You don't. Ok.

JD: There's never a time that I'm anxious about it. Not in the normal course of waking up and going through the day. If I have a coughing fit where I'm in like a bronchospasm and I can't catch my breath and I'm coughing, um . . . but not being productive, almost like an asthmatic response but with the coughing then I get a little anxious because I tend to get light headed and disoriented because I literally feel the loss of oxygen to my brain. Um, because I'm not oxygenating well (note 22).

SL: Can you talk more about that, that feeling of light-headedness. For some people they, they've never felt that, they don't know what that's like. Can you describe that? (note 23)

JD: Sure, you just, the blood just you can literally feel it. It's like pinching your finger for 30 seconds and then you release your finger and you can feel the blood flow . . . back . . . into their finger. Everybody's done that at some point in their life. Or their arm's fallen asleep or their foot then you can feel the blood go back (note 24). Well, this is just the opposite. You can feel the blood like leave your brain. And you just can't catch your breath for those couple of seconds. And in those seconds you get a little wobbly, you just, because your brain is trying to process everything and

yet you're trying to balance yourself and focus on breathing because you're not breathing so you become very aware in the moment (note 25). And, you know as soon as you can finally catch your breath because the bronchospasm is finished and you finally get that ability to control your breathing again, the blood rushes back right away it's uh, it's . . . it's almost like that scene in "back to the future" where he's dying and his picture is fading and then all of a sudden they kiss and he pops, springs back to life. That's kind of what it's like because you suddenly get this rush . . . rush of oxygen and it just perks you right back up and your brain just kicks (snaps fingers) right back in (note 26). All of a sudden you feel normal again. But for those couple of seconds you feel like you're out of touch with what's going on and yet you are mentally trying to concentrate on breathing, but your body isn't allowing you to. It just physically won't do it. It's like biologically determined to not allow you to take a breath at your own discretion (note 27).

SL: It sounds to me as though there's a certainly . . . a loss of control there. That you're not in control of your body or your breathing (note 28).

JD: At times.

SL: Yeah. And how, how exactly does that make you feel? To be completely out of control? (note 29)

JD: It's just, you . . . you . . . it . . . it's just frustrating because there's really nothing you can do (note 30). You just have to weather the storm like a ship at sea just getting pounded. Nothing they can do that just have to hope they can make it through the storm and that the ship holds up because you don't know, you know? (note 31). But over time I also know that those moments are very temporary and that because I've had them enough you just concentrate on trying to stay focused on the moment. That you need to take a breath and just let it, let your body, kind of, do its thing. You just relinquish the control, so your body will relax itself and just cough itself out (note 32). Almost like a muscle that just you want it to relax, you want it to relax like a Charlie horse. And finally, you just have to relax yourself for the muscle to relax itself and then it finally isn't a Charlie horse anymore (note 33). It's kind of like that with your lungs, you just, you just, the processes going on in there you can feel how tight you are and trying to take a breath is just forcing the issue, it's not . . . it's not going to, it's not for whatever physiological things are going on, it's not going to take a breath. It's going to do this short burst, hyperventilation . . . um . . . bronchospasm, huff and puff coughing and then when it's done it will relax itself and so you just try and help it along by just letting your chest kind of go, you let your arms kind of go and you just mentally try and focus on ok, get ready to take a breath, get ready to take a breath, get ready, get ready, get ready (note 34).

SL: So basically you're saying uh . . . not to really fight it and kind of go with . . . go with it. Go with the whole experience? (note 35)

JD: Um hmmm. You just got to go with the flow (note 36).

SL: Um hmmm. Um hmm.

JD: And it's hard because you're struggling to breathe and your . . . your . . . your inclination mentally is to take . . .

SL: Right, right.

JD: . . . a breath, take a breath. But I think it's like with a lot of things in life. You can't fight certain things, you know. They teach you when you are driving that if you're going into a skid to turn with the skid not against it, but your inclination is uh, I am going left, I need to go back to the right (note 37). So, I . . . I really think this is the same thing. Your body is freezing up and so you naturally want to take a breath but your body really knows best. And so it's doing what it's supposed to do allow you to get to breath but in the moment you have to remember that and that's hard when you're not breathing. And your brain is suddenly disconnected from your ability to focus because you . . . you . . . you almost blackout temporarily. You know for a second, second and a half . . . it . . . it doesn't seem like a long time and it goes by very quick but there's a moment when you're like whoa, you know? (note 38)

SL: When people say that they're lightheaded or dizzy some people say they see lights, they see brightness. Do you get those? (note 39)

JD: I see darkness

SL: Darkness?

JD: You just kind of go blank. You just . . . you just . . . it's like this as the blood leaves it's like the shades are coming down, you know. Because there's no oxygen (note 40). I think when those people, I don't think that they have a loss of oxygen. I don't know but I don't think they do. I think they have other things going on. I have a loss . . . I have a physi . . . I can actually feel the lack of oxygen. I can feel in my fingertips. I can feel it in my arms . . . but the first place you feel it when you get like that is in your brain.

SL: Um . . . so you see this drape. It looks like a drape, a black drape coming down and it's blocking everything out? (note 41)

JD: Yeah. It just . . . it just comes down (slaps hands together) like out of nowhere. It's just down (note 42). You're in the middle of your bronchospasm, you're in the middle of your coughing and you're just trying to take a breath and as your body is going through this it just, at some point it just goes . . . your brain just . . . all of a sudden your . . . your . . . your . . . you feel like you're passing out.

SL: You're in that darkness (note 43).

JD: Yeah. And you're just there. It's just so quick. You know. I know test wise my saturations drop into the low 80s when that happens and so um . . . I should be on oxygen in that moment because my body is not producing enough to give it to my body. Um . . . and I get I probably have dropped into the 70s when I'm getting to that point so um . . . dangerous levels certainly. You can't . . . you can't sustain that for very long anyway. So it's really no surprise

that I feel that way because my body is going through it at that moment. Thankfully, they are very short moments.

SL: And you recover.

JD: And I recover you know from that moment, quick, (note 44)

SL: Um hmm. Um hmmm. What's the feeling of recovery like for you? (note 45)

JD: It's relieving.

SL: Uh huh. Uh huh,

JD: Because you're like I'm ok, I'm ok (note 46).

SL: Ok. The drapes come back up? (note 47)

JD: Yeah, as quick as they come down, they . . . it's just all of a sudden you get enough breath and your body (snaps fingers) recirculates whatever oxygen it has and it just goes that quick. It's, it's . . . just lightening quick. It's like turning the ignition on. When you turn it on (snaps fingers), it's on and it's even faster than that (note 48). It's just so quick. It comes, and it goes so quick. Your body just knows when it's getting oxygen. So . . .

SL: Because you've had CF all of your life and you've had many bronchospasm, many episodes of where you feel like you're going to pass out and you recover so quickly, do you even think about consciously these things that you go through? Or it's just mostly an automatic response that your body goes through? (note 49)

JD: You mean while I am going through it?

SL: Yes, Yes. Being lightheaded. You're thinking about it.

JD: Oh yeah. I am thinking about it. Because I'll go, "Whoa, hey, I almost passed out." And so you almost fight that urge to not pass out but you really can't. I mean if I had a prolonged period of that, maybe 3, 4 seconds I'm sure I would pass out because your head, you're just disoriented. You're just . . . for that second you . . . you really are just out of it. You are just absolutely out of it. There's no other way to . . . and if you've never felt that way it's very hard to understand that. But you are completely in another . . . in another place that you aren't aware of. You're just unaware temporarily (note 50). But like I said it kicks on as quick as it kicks (snaps fingers) off so it's really not that big a deal at the end of the day.

SL: Okay. Let's go back upon waking. We talked about seeing, hearing, feeling. What about smell? Do you smell anything when you become conscious of being awake and conscious of your breathing? (note 51)

JD: When I take my first breath I usually take it through my nose so yeah, I smell whatever the . . . the smells around me are. But I . . . I . . . I . . . I don't really focus on that 'cause that's of absolutely no importance to me.

SL: How about tasting? Do you taste anything? (note 52)

JD: Um . . . Not necessarily. Again, not really important because I am so focused on am I going to be breathing well this morning or not that the other things really aren't important. The only thing I probably really understand, and I think that's just because anybody is aware, you know, auditory, you are just aware of your surroundings before you open your eyes. You're listening just because you're awake . . . you're now conscious so you're taking in your sounds, you know, as you're opening your eyes . . . as you're waking yourself up for the day. And I think it's just because you can hear. You can't turn that off. But you cannot pay attention to taste or smell you know because you cannot do that unless there's just something in the air that I would notice (note 53). But everyday . . .

SL: Ok. We talked about you being short of breath but let's get as much detail about it. What do you do exactly to focus on your breathing and ease that feeling of shortness of breath? How do you get your mind to focus? (note 54)

JD: When I wake up?

SL: Yes. Or when you are short of breath (note 55).

JD: Ummm. I am short of breath a lot of the day so . . . you . . . you . . . in some ways I have learned to ignore that (coughs). It's just in moments of severe shortness of breath that I might really focus on my breathing, stop what I am doing to not exert myself anymore because that . . . that would not be good (note 56). Um . . . plus you really can't because you're out of breath, so you are kind of frozen where you are. Um, just mind over matter, I guess. I just when I get like that I just try and shut everything out and focus on my breathing (note 57).

SL: Ok. Focusing on your breathing (note 58). Do you think of something to get you to focus on . . .

JD: No, not in the moment.

SL: . . . your breathing.

JD: Not in the moment. But I do some visualizations to um . . . allow me to heal or just breathe better day to day just sometimes (note 59).

SL: Can you talk more about that? (note 60)

JD: Yeah. I do a visualization where I created a little man, basically, and I can visually put him inside my lungs and essentially I am . . . he has what would be a paint brush or a broom and he basically kind of in my mind I can have him sweep my lungs to clear out some of the mucous that's in there. But instead of just sweeping I have him painting, it's a paint as well, it's like a bright florescent paint, like a yellow or a bright green or orange. And the design for me is to give positive light and energy to my lungs which are, you know, filled with a lot of dark mucous and infection and so while he's kind of sweeping this crap away he's adding some positive energy (note 61). So, I do that. I do it frequently. I don't know how often but I do it frequently and I, you know, I can do it very quickly. I mean I can get to that mindset in a matter of seconds. And, uh . . . you know . . . sometimes it just, it kind of makes you feel better. Just, kind of, if I'm a little tight or if I feel a little burning and I'll do that sometimes it just kind of like eases that burn, like ice would you know. And so I don't know if it does anything obviously on a, you know, medical level (note 62).

SL: a physiological level . . .

JD: But is certainly helps me. It's doing something.

SL: Would you liken that to um . . . other people who say that meditation does that for them? (note 63)

JD: Yeah, yeah . . . certainly its's a meditative technique. There's no question. That's where I learned it from, from meditation. And I just applied that to the part of my body that needs really the most amount of work um . . . in order for me to stay health 'cause unfortunately you need to breathe (note 64). So . . .

SL: If you were to teach me about trying to get this little man to work on my lungs what exactly would you tell me to do? Begin from the very beginning (note 65).

JD: Um . . . you'd have to get into a quiet place, 'cause . . . especially when you are starting out where you have no distractions and meditate. You just get yourself into a very relaxed state where you're unaware of everything around you yet aware of everything around you. And um . . . by that I mean you are really just aware of how you are in your surroundings. And you have to be in a safe place, a familiar place because you are not going to feel comfortable and be able to really let yourself go if you're in a place where you're worried about someone walking through the door or disturbing you or hurting you or any of those things. So (coughs) um . . . and once you're in that place, where you're very calm and relaxed, you need to create something . . . a person, and object um . . . and I created a person because I felt like I could maneuver that person like a joystick. And I gave him some tools that I thought would be applicable. Um . . . because of the issues that I deal with I figured a broom and a paintbrush would accomplish my goals. And sometimes I give him other tools so um . . . you would give yourself the tools that you think you need. Um . . . and you have to . . . I would tell you to kind of digest that person, like you ate them (note 66).

SL: Um hmmm. Ok.

JD: So you swallow them.

SL: Ok.

JD: And of course, if you swallow them they are not going to go to your stomach. You have to, through the magic of your mind.

SL: . . . put him where he needs to be . . .

JD: . . . put him where he needs to be. And um . . . the way I did it at first was I would talk to him. Hey, you're going here, I need to do this, this is what I am looking for, this is what I want you to do. You'll be there for 5 minutes (note 67). And it was my way of staying focused for that period of time on what I . . . what my meditation was going to be about, my visualization was for that 5 minutes or 8 minutes or whatever I was doing. And they're usually short because it's very hard to expend that kind of energy . . .

SL: Yes.

JD: So, you know it's not like a 20 minute thing. The meditation process may be a 20-minute process from relaxation to visualization to meditation and then coming out of it. But the actual visualization work you know, 5 minutes, 8 minutes, 7 minutes. It's really just short but very intense and I make him move very quick and cover as much of my lung (note 68). Almost like he's a crayon coloring in . . . in . . . that space. And I visualize, and I would tell you to visualize what your lungs look like. So if you don't know what lungs look like go see a picture of lungs in a book what they look like. And use that as your way of visualizing your lungs. Visualize them filling up like the balloons they are. If you've never seen that you might want to see that on video. So, 'cause that all helps. Cause as you take a breath, I make him move a little but faster cause he's able to accelerate through and really work. And then when I breathe out I . . . I . . . I use that as my time to eliminate all the thing that he's sweeping (note 69).

SL: Um hmmm.

JD: So you have to be an active participant with the visualization and that's why you really need, its . . . it's very intense. It's a lot of work in your mind but it can all be done, you know (note 70). And you . . . you . . . have to get out of it what you want. Um . . . and that would be the other component. If you don't think that is helpful that's fine, find something that is. You know, I don't know that I would know what else is because it's worked for me. I got lucky that I was able to do that, and I felt benefit from it. So that's how I'd guide you (note 71).

SL: Now how would you know if the little man had done his job for your lungs? (note 72)

JD: Um . . . if I just feel better. If my lungs feel a little lighter and looser. Um . . . and relaxed, what the goal of the meditation would be. Um . . . just that as opposed to just relaxing my entire body or my brain I use it to relax my lungs so that the rest of me can focus on whatever it needs to focus on instead of my breathing. So, because I am aware of my breathing a lot. When I talk I try and, you know, rush words out because I only have so much breath and then I need to suck it all in to get the next group of words out. So, but I have to be conscious of that sometimes (note 73). So, it's better if I don't have to worry about the breathing part of it I can just, you know, fluidly move along and let my brain do it's own thing. So, it's not preoccupied.

SL: How would you know if the little man, unfortunately, has not done his job and you now need to get your bronchodilators out? (note 74)

JD: Um . . . I wouldn't really think of it that way.

SL: Ok . . .

JD: He always does his job.

SL: He always does his job. He's a great little man.

JD: He's a great little man

(joint laughter) (note 75)

JD: It just speaks to the power of mediation. I mean, it certainly works but you know, you . . . you . . . have to want it to work. It's like anything else.

SL: Is there anything else I should've asked you to um . . . paint a detailed picture about your breathing and you becoming aware of it and what you have to deal with every day? (note 76)

JD: Um . . . I . . . I . . . don't know . . . you could've asked about pain, discomfort.

SL: Ok. Discomfort related to breathing.

JD: And the coughing.

SL: And the coughing, ok. Can you talk about that?

JD: Well, yeah . . . you know coughing a lot like I do it takes a wear on your body because your ribs hurt, especially if you cough too much during the day. And even though I'm used to coughing a lot, if I get sick my coughing rate goes way high and . . . and . . . my abdominal muscles and ribs will be sore for days. Uh . . . so much so that it's like when you work out and you're really really sore, this is like really sore and then some because um . . . on top of being tired from breathing all the time those specific muscles are now being overworked and now they're really sore and then it's even harder to breathe. So, you get a lot of discomfort uh . . . and it makes you more tired. The fatigue factor sets in. It's just harder to breathe (note 77). And so you really kind of at those times you can really feel your body forcing itself, the muscles of your diaphragm to expand, um . . . because they are so tired and they're not able to do it. And then on top of that you have issues with your lungs themselves that are constricted. So, you've got a lot of complicated interactions between what should be very easy and you . . . your muscles should be strong enough to move your diaphragm but now they're tired and weak which complicates your lungs because now they're not moving freely. They're restricted even more than they normally are. So, it makes breathing a . . . a . . . a . . . definite challenge. It's hard. And it . . . it causes you to be more fatigued because to take a deeper breath you really have to force and then you're forcing through a lot of discomfort on top of that so you really don't want to take a deep breath. And then if you take a deep breath you're going to cough. Which of course if you cough it hurts more. So, it's kind of a bad cycle (note 78).

SL: It is a vicious cycle.

JD: And it takes time, it just takes time to work through that. You know, those are the days that you're just skatin' by. You do as little as you can and you just try and work through that and you hope that you don't cough a lot and your body just heals (note 79). Um . . . and then you know . . . I have issues with my back from coughing a lot. Your shoulders tend to hurt when you cough a lot because you tend to be hunched over and your throat of course uh . . . you can bleed, you can get hoarse, you know . . . your . . . your . . . you can lose your voice from coughing. I mean there's a lot of things that take place when you do that (note 80). Um . . . so those are secondary things that come. So you know, you just don't know what to expect. So . . .

SL: Great. I think you were very good at describing it . . . (interrupted by announcement over hospital PA system) and what it is that you do go through on a daily basis. Um . . . before we end is there anything you'd like to add or did we cover quite a bit as it is? (note 81)

JD: Um . . . No, I think that's pretty much it from a day to day. The only thing I can think of is if you want to talk about exercising.

SL: Ok. What does exercising do for you? (note 82)

JD: Exercising is a unique challenge because it's hard to do things in a non-controlled environment. So, by that I mean, playing sports is difficult not just because of endurance but if I have to do a quick burst of speed it . . . it . . . that's difficult because it's hard to prepare my body for that whereas it was more level and constant yet within my capability . . .

SL: . . . like on a treadmill?

JD: . . . like on a treadmill, I can do that. Um . . . but you know if you ask me to play basketball . . . (note 83)

SL: uh huh . . .

JD: and sprint over here and defend here and then sprint up the court and then back up and slowdown . . . I can't do that (coughs). Because my heart rate fluctuates so quickly that the demands for oxygen can't be met. So um . . . I have no endurance. I mean I am shot in 15-20 seconds and then it takes me minutes to recover um . . . to where my heart rate settles back down to where I can just catch my breath. And in those moments you're really aware of your breathing because you're trying to get in as much air as you can and yet your . . . my brain says that I can physically do it. And so that's a weird struggle. Because it's different if your body says you can't and you know it (note 84).

SL: Uh huh . . .

JD: Uh . . . just 'cause like you know maybe I am capable of running at X speed. Just . . . I don't know whatever that is, but my lungs won't allow me to do that. But my brains says faster, faster, faster because I can physically do that without a problem. And yet I can't . . . because my body holds me back (note 85).

SL: Right. Your lungs hold you back (note 86).

JD: It just shuts down. Yeah, at some point they just literally shut down and (claps hands together) uh oh . . . now I'm struggling to just get through the next couple of seconds which turn into minutes because you are breathing so heavy with such a little amount of oxygen being pumped through because I put such a demand on my body and all the muscles. So, umm . . . that's a unique challenge too. To find a balance of pushing myself to expand my lung field but yet not overdoing it to the point where um . . . I feel like I am going to pass out . . .

SL: Right.

JD: . . . and hurt myself.

SL: Right.

JD: . . . and my body from being able to do what it needs to do. So that's . . . that's also unique (note 87).

SL: Yeah. The balancing act. And certainly you . . . you've brought back the connection and um . . . the very connection between mind and body and how without one or the other you can't do anything (note 88).

JD: Right. I can't

SL: Um hmmm.

JD: Whereas when I was younger, I didn't have such complicated lung issues and I really didn't think about them. It was something that I had to learn about as an adult. So . . .

SL: Ok . . .

JD: . . . and that was a . . . a . . . that transition was . . . was . . . difficult because it was scary to go through

these changes um . . . because you feel . . . you really feel like you may die in that moment. And then, of course, you don't and you learn that you're not going to die you're just going to be uncomfortable for those couple of seconds or minutes or whatever the case may be and that you just really have to relax, wait it out and you'll be fine (note 89).

SL: Ok. Thank you so much for sharing with me. I appreciate it.

JD: Sure (note 90).

Notes

1. Self-critique (SC): This is Petitmengin's interview steps #3 and 4: Moving from a general representation to a singular experience; retrospectively accessing the lived experience.
2. SC: This introduction may be too lengthy. The interviewee may forget the initial question.
3. Textual Analysis (TA): Breathing can be frustrating and tiring because of the accompanying cough.
4. SC: This is a leading question and does not follow the phenomenological principle of being "unknowing."
5. SC: This is the beginning of the dimensional exploration of the experience (visual). Petitmengin's interview step #5
6. TA: Stretching his lungs by taking big breaths upon waking. Using the metaphor, " . . . like people stretch their muscles."
7. SC: This is seeking validation and being intersubjective. Restating and reformulating to confirm with the interviewee. Petitmengin's interview step #1: Stabilizing attention.
8. SC: This is exploring another dimension of the experience (auditory). Petitmengin's interview step #5.
9. TA: Listening for wheezing and gurgling lung noises as a gauge for what the day will be like.
10. TA: Stretching out the lungs and taking deep breaths. Allowing the body to tell him what the day will be like.
11. TA: Waking up in the morning is never the same each day.
12. TA: Waking up to a surprise (good or bad).
13. SC: This is exploring another dimension of the experience (tactile). Petitmengin's interview step #5.
14. TA: Using a metaphor, "feels like you've got a plastic bag over you trying to take in air with a straw."
15. TA: Feeling heavy; feeling congested; tiring; lacking energy to get up and start the day.
16. TA: Fighting through the breathing despite the wheezing and congestion. At the same time, making accommodations to avoid overexertion.
17. TA: Feeling uncertainty and lack of control over when lungs would open up. Hoping for, "release" of lung congestion that may or may not come.
18. TA: Knowing that, "release" of lung congestion, when it does happen, is temporary.
19. TA: "Work 'em, work 'em, work 'em." Working lungs to take bigger breaths.
20. SC: This is restating and seeking validation. Petitmengin's interview step #1.
21. SC: This is a good follow-up question; however, I could have used an open-ended approach and not assumed the interviewee feels anxious, which as he reveals is untrue.
22. TA: Clarifying when he does feel anxious which is during bronchospasm, and not during his waking period.
23. SC: This is an appropriate question to follow his revelation about feelings of lightheadedness. Petitmengin's interview step #6: Deepening the description to the required level of precision.
24. TA: Using metaphors to describe feelings of hypoxia.
25. TA: Being wobbly as his brain is trying to process everything at once during an episode of hypoxia. Becoming aware of his breathing in that moment.
26. TA: Using a movie scene to describe experience of losing and regaining oxygenation.
27. TA: Feeling out of control as his mind tries to regain good breathing yet his body would not allow it.
28. SC: This is rechecking accuracy and seeking confirmation. Petitmengin's interview step #1.
29. SC: This is adhering to Petitmengin's interview step #2: Turning the attention from "what" to "how."
30. TA: Feeling frustrated that he does not have full control of his body during periods of bronchospasm.
31. TA: Using a metaphor of a ship weathering a storm to describe a bronchospasm.
32. TA: Relinquishing control to relax the body and cough itself out. Having comfort in the knowledge that the bronchospasm will pass and that it is temporary.
33. TA: Using another metaphor of a "Charlie horse."
34. TA: Helping himself during bronchospasm by relaxing his body; his brain telling his body to get ready to take a breath when the bronchospasm finally releases its tight grip.
35. SC: This is restating and seeking validation. Petitmengin's interview step #1.
36. TA: Going with the flow.
37. TA: Using another metaphor of, "going with the skid not against it"- not to fight the feeling of chest tightness.
38. TA: Allowing the body to do what it does during a bronchospasm. This is difficult to do because the instinct is to fight against it to catch a breath.
39. SC: This is a leading question. I could've asked, "When you get lightheaded or close to blacking out, what do you see?"
40. TA: Seeing darkness and shades coming down as the body is deprived of oxygen.
41. SC: This is focusing and checking accuracy Petitmengin's interview step #1.
42. TA: Enveloping darkness, coming down of the drapes.
43. SC: This is a re-enactment, a rediscovery of the experience. Petitmengin's interview step #4.
44. TA: Recovering quickly from the episode of hypoxia.
45. SC: This is an appropriate follow-up question; however, I could have rephrased by using "how" to start the question rather than "what" (Petitmengin's interview step #2). A better question would be, "How would you describe the recovery process after an episode of hypoxia?"
46. TA: Checking himself and willing himself to be ok.
47. SC: This is deepening the level of precision in description. Petitmengin's interview step #6.
48. TA: Using another metaphor for the speed of hypoxia's onset and recovery.

49. SC: These are close-ended and leading questions.
50. TA: Being disoriented and unaware temporarily during episodes of hypoxia.
51. SC: This is reformulating and refocusing back to the original question of the experience with breathing upon waking. Petitmengin's interview step #1. This is also exploring another dimension to the experience (olfactory). Petitmengin's interview step #5. The interviewer and interviewee were temporarily distracted by the discussion on the experience of hypoxia which, while interesting as a separate topic, was not the topic to be explored.
52. SC: This is exploring another dimension to the experience (gustatory). Petitmengin's interview step #6.
53. TA: Tasting and smelling are 2 sensorial dimensions that the interviewee does not fully engage in upon waking. Rather, he reiterates that he focuses on the other dimensions of seeing, hearing, and feeling.
54. SC: This is deepening the description to the required level of precision. Petitmengin's interview step #6.
    The second question also turns the attention from "what" to "how." Petitmengin's interview step #2.
55. SC: The interviewer is being tangential and again reverting back to the discussion on being short of breath which is not the original experience to be explored. Even the interviewee was confused and needed direction which the interviewer was not clear in providing.
56. TA: Learning to ignore the many episodes of shortness of breath that happens during the day.
57. TA: Shutting everything out to focus on breathing.
58. SC: This is restating to check accuracy. Petitmengin's interview step #1.
59. TA: Doing visualization to help heal or breathe better.
60. SC: This is deepening the description. Petitmengin's interview step #6.
61. TA: Visualizing a "little man" to clean up his lungs and put positive energy back into his lungs that may be filled with dark mucus and infection.
62. TA: Triggering the "little man" is done frequently and quickly.
63. SC: This is still a continuation of the deepening of description. Petitmengin's interview step #6.
64. TA: Meditating to conjure up the "little man" specifically for the lungs.
65. SC: This uses several Petitmengin's interview steps (#1, 3, 4, 5, and 6). All to acquire an explicit description of how the "little man" is triggered into action.
66. TA: Describing in detail how he conjures up the "little man."
67. TA: Instructing the "little man" what to do to help clean up his lung.
68. TA: Cleaning up his lungs by the "little man" takes only a few minutes as the "little man" is expected to work quickly.
69. TA: Visualizing what the "little man" does as the interviewee breathes in and out.
70. TA: Completing the visualization work is intense.
71. TA: Using the 'little man" is effective in helping his lungs.
72. SC: This is accessing the lived experience while asking the "how" question. Petitmengin's interview steps #2 and 4.
73. TA: Being conscious of his breathing even when he talks.
74. SC: This is again accessing the lived experience while asking the "how" question. Petitmengin's interview steps #2 and 4.
75. TA: Visualizing the "little man" always makes him feel better afterward.
76. SC: This is to ensure that the interviewee is allowed the full opportunity to describe the experience in other ways not already explored.
77. TA: Coughing can be tiring and painful which then makes it harder to breathe.
78. TA: Feeling trapped in a bad cycle of coughing, fatigue, bronchoconstriction, and pain.
79. TA: Waiting for the body to heal itself while minimizing exertion.
80. TA: Complicating the lung issues are other bodily aches and pains (ie, back, throat, shoulders).
81. SC: This is acknowledging the interviewee's time and effort in describing his experience as well as allowing one last opportunity to share.
82. SC: While the topic of exercise may be important for the interviewee to share, it is outside of the targeted experience of breathing upon waking. This interviewer should have been more assertive in restating the purpose of the interview and should not have been drawn into another tangential discussion.
83. TA: Exercising is a unique challenge if it involves a non-controlled environment (ie, on a treadmill in a gym).
84. TA: Being torn between what his brain tells him ("you can do it") versus what his body allows him ("you have to stop and catch your breath") during exercise.
85. TA: Being held by his body can be frustrating.
86. SC: This is restating and seeking validation. Petitmengin's interview step #1.
87. TA: Finding a balance between pushing himself to open up his lungs and overexerting himself a unique challenge.
88. SC: This is restating and confirming. Petitmengin's interview step #1.
89. TA: Feeling afraid that he will die during acute periods of hypoxia, then realizing that he is not going to die. Instead, he tells himself to relax and wait for his body to recover.
90. SC: The closure sounds abrupt for several reasons: (1) the interviewer realized again that they have ventured outside of the targeted topic and wanted to cut away; and (2) the nurse entered the room to administer medications.

Acknowledgment

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ORCID iD

Sigrid Ladores, PhD, RN, PNP, CNE https://orcid.org/0000-0003-2867-5619

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Author Biography

Sigrid Ladores is a PhD-prepared pediatric nurse practitioner and associate professor at the University of Alabama at Birmingham School of Nursing. She is a Fellow of the American Academy of Nursing. Her research areas include quality of life, fertility and reproductive health, and palliative care in the cystic fibrosis patient population.