



Article

# A Personal Experience of Working with Classical Grounded Theory: From Beginner to Experienced Grounded Theorist

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#### **Abstract**

In this article the authors offer an example of the application of principles of classical grounded theory (Glaser) in data collection and analysis and present how they generated a substantive grounded theory named Preparative Waiting for patients who underwent the diagnostic phase at a gastric ward. They demonstrate how patients' main concern emerged by constant comparison of data in open coding and how the core category of the theory and related concepts developed through selective coding. The authors offer examples of memos, the fitting of concepts to their data set, and the process of theoretical coding to illustrate how three different models were generated to improve fit, relevance, and workability of their grounded theory. They also discuss when and how to search and read the literature during a grounded theory study.

**Keywords**: Grounded theory, qualitative method, research method, theoretical coding, balancing, uncertainty

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## Introduction

This article is a personal account of the journey from being new to the method of grounded theory (GT) in developing a substantive grounded theory. Our aim is to illustrate the thinking and working processes involved in generating a substantive grounded theory by making explicit a seemingly chaotic process. We hope that this example can help others new to the method. We used the classical method developed by Glaser and Strauss (1967) and in the later writings of Glaser (1978, 1998, 2001, 2005), which offers the principles of how to conduct a GT study. Many researchers have discussed how to follow these principles (see, e.g., Baker, Wuest, & Stern, 1992; Cutcliffe, 2000, 2005; Duchscher & Morgan, 2004; McCallin, 2003; Wilson & Hutchinson, 1996; Wimpenny & Gass, 2000); however, few examples are given that illustrate the actual research process (Backman & Kyngäs, 1999). In this article we discuss key areas related to data collection, analysis, and development of a conceptual theory, which are central to grounded theory (GT) research.

The substantive area in which this study took place was a gastric ward at a university hospital in Norway. The purpose was to learn more about how patients going through the diagnostic phase experience and handle their situation. The study was approved by the regional ethical board. The inclusion criteria for the participants were that they should be 35 years or older, be hospitalized because of symptoms in the stomach-intestine area, and be physically and mentally able to take part in an interview. Data came from 18 in-depth interviews with 15 patients in 2002 and 2003. Eight women and 7 men, all ethnic Norwegians, participated. Their age ranged from 35 to 84, they had had their health problems from 1 to 9 years, and they had stayed in the hospital from 1 to 36 days when interviewed.

GT is a general inductive method based on a concept-indicator model where the aim is to generate new theory that is grounded in data and to present the processes going on in the field of study (Glaser, 1999, 2005). Meaning, action, and interaction are central to GT research; however a GT is conceptual, not interactional. A GT gives a conceptual account of how the participants resolve their main concern. The main concern is the prime mover of action in the area of study, and the core category and its variables explain how participants work to solve their main concern (Glaser, 2001). A core category is the highest level concept of the theory, relating to the other categories and properties of a GT; however, it does not indicate how the different categories are related to each other (Glaser, 1978, 1998).

The substantive GT in this study was called Preparative Waiting. Preparative Waiting showed how the participants resolved their main concern, which emerged to be related to how patients could prepare themselves for the concluding interview and life after receiving a diagnosis. The concluding interview was the interview where the medical team presented to patients their conclusion of the medical examination. Preparative Waiting emerged as the core category, and all the concepts of the theory were connected and could appear at any time. Seeking and giving information and Interpreting clues moved the participants forward in trying to make more and more sense of their situation. Handling existential threat and Seeking respite were more focused on dealing with the threat they experienced to self. Balancing between hope and despair was the filter through which everything flowed and described the way in which the participants tried to keep themselves on an even keel. The final model of Preparative Waiting is presented at the end of the article

The first author conducted interviews and data analyses under the supervision of the second author, who is an expert in grounded theory methodology.

## Criteria for evaluation of a GT

The credibility of a GT rests on the four criteria of fit, work, relevance, and modifiability (Glaser, 1978, 1998). In analyzing data, it is important that categories not be forced or selected out of preconceived understandings of the phenomena studied. It is essential that they be generated systematically from data and constantly validated by the hard work of fitting and refitting the categories to data. Later in the analysis, categories are fitted together to a dense and parsimonious theory that fits the substantive area (Glaser, 1978, 2001). Lomborg and Kirkevold (2003) have pointed to the criterion fit as most important for evaluating validity and truth of the grounded theory. Therefore, fit is more fundamental to a theory than the other three criteria of work, relevance, and modifiability.

The second criterion is work, which means that a grounded theory must be able to explain what happens in the data, predict what will happen, and interpret what is happening in the area studied. Workability is related to how well a theory accounts for the way in which participants solve their main concern (Glaser, 1998). The third criterion concerns relevance. A theory is relevant and has good grab for participants and practitioners in the substantive field when it allows the core problems and processes in the area to emerge. The fourth criterion is modifiability. A substantive GT has only partial closure because new ideas and more data can modify the theory. Modifiability is therefore an ever-ongoing process, and all GTs have potential for further development (Glaser, 1978).

# Preparation for a grounded theory study

In search of a final problem, a suitable method, and a supervisor for my doctoral dissertation, I (the first author) was introduced to a one-week grounded theory research course in 2001. The openness required in searching for the participants' problems and perspectives in GT and the way of analyzing data so that it should result in a dense and parsimonious conceptual theory sounded like a challenge full of meaningful work. According to Glaser (1998),

The first step in grounded theory is to enter the substantive field for research without knowing the problem. This requires suspending your knowledge, especially of the literature, and your experience. The researcher must take a 'no preconceived interest' approach and not ask questions that might be on his mind. (p. 122)

Such suspension of knowledge and experiences can be hard, but it is necessary to be able to do a GT study. I approached the doctoral study with an interest in learning more about how patients existentially experienced uncertainty and life-threatening situations. To be able to use GT, I had to be willing to enter the field with the attitude of not knowing the main concern of the participants, acknowledging that patients do not necessarily share professionals' view of problems. When I had accepted such initial openness in the planning process, we could move on to discuss what could be a suitable area for data collection. We searched for a field with multiple outcomes of diagnostic examinations and decided on a gastric ward because patients there could be diagnosed with either malignant or benign diseases, and either case could significantly influence their lives.

Because of the principle of seeking the participants' perspective, the aim of the research had to be formulated in a sufficiently open way to encompass the entirety of the participants' problems and how they worked to solve them. The main purpose of this study, therefore, was set to gain knowledge on how patients going through diagnostic workups in a gastroenterological ward experienced and handled their situation. Learning more about how health care professionals could

help such patients in the best way was also included. Qualitative interviews were chosen for data collection (Fog, 2004) because our study's aim was to learn the participants' perspective, experience, meaning, and reason for action.

In planning the study, we worked on phrasing possible questions to make sure that our own ideas, interests, or theoretical understandings were not imposed on the participants (Glaser, 1992). We especially worked on the opening and the ending of the interviews. The opening question used was variations on "Can you tell me what it is like for you to be here in the hospital." The ethical guidelines in Norway demand that participants receive oral and written information about the study. An information sheet was prepared, describing the aim of the study, and participants were invited to speak openly about their experience of being in the hospital as well as to share their thoughts, resources, and what they thought might make their situation more tolerable. The contact nurse at the unit provided this information to potential participants.

## Working for quality in data collection

The credibility of a grounded theory study depends on the how data are collected, analyzed, and developed into a conceptual theory. In GT data collection and analysis are done jointly, guided by the constant comparative method and theoretical sampling. Constant comparison means to constantly code new data and compare them with already developed codes to generate concepts in order to generate a conceptual and saturated theory (Glaser, 2001). Theoretical sampling concerns decisions related to what data to collect next and where to find them. In this way, data collection is led by the emergent theory. Theoretical sampling saturates categories and establishes relations between categories in the later phase of data collection (Glaser & Strauss, 1967). In this paragraph we limit our discussion to conditions related to data collection.

Most of the interviews were conducted in the ward (bath, examination room, head nurse's office, patient room), depending on what was convenient for the ward and the patient. To meet with the participants in their environment facilitated an understanding of what they discussed in the interviews. In all contact with patients in qualitative research, ethical discernment is needed to avoid violation of people's integrity (Johnson & Long, 2006; World Medical Association, 2004).

Because quality and content of interviews depend to a great extent on the rapport developed between researcher and participant, there must be high levels of sensitivity in asking questions and focus on the dynamics in the interaction between them. To provide a relaxed beginning to the taped interviews, we started with a brief personal introduction, signed the consent form, and talked about facts to facilitate the filling in of biographies and background variables. Then participants were invited to share how they experienced being in the hospital and going through diagnostic workups. During the interviews it was important to establish an open atmosphere of trust so that the participants would feel free to share their experiences, thoughts, and feelings as well as balance it with their need for emotional protection by not dwelling too deeply on the possibility of a threatening future. I had to trust my judgment and be sensitive to gestures, silence, facial expressions, weeping, and change in the atmosphere between us.

## Theoretical sensitivity

Theoretical sensitivity is the ability the researcher increasingly develops to conceptualize and formulate a theory by constant comparison of data. It is about thinking in theoretical terms about what he or she knows (Glaser & Strauss, 1967). "The researcher does not go blank or give up his knowledge. He goes sensitive with his learning which makes him alert to [the] possibility of emergence and how to formulate it conceptually" (Glaser 1998, p. 123). Different researchers, therefore, bring different theoretical sensitivities to a study (Glaser, 2002). Openness and

sensitivity toward data in this study were stimulated by our reading literature in related fields (Glaser, 1978, 2005), such as suffering, grieving, ambiguous loss, and philosophy of science. As more data were collected and analyzed, my theoretical sensitivity increased, enhancing more focused interviews. I used a variety of interview styles depending on the conceptual level of the different categories in focus during data collection. Open questions promoted the participants' thoughts about their experiences, and more specific questions were asked in relation to certain events, behaviors, or experiences, such as relationships with staff, fellow patients, and medical examinations. These were helpful in saturating concepts and their properties.

My background as a nurse and nursing teacher had given me considerable experience in meeting patients in the diagnostic phase, which influenced my theoretical sensitivity, as did my interest in spiritual care (Giske, 1993, 1995). It is generally known that uncertainty about one's health condition and consequences for the future can bring into focus the existential and spiritual aspects of life. Relying on clinical experience, studies, and knowledge, I knew that most Norwegian patients would not easily speak about such concerns (Mjølnerød, 1997; Thoresen, 1993; Tønnessen, 1999; Ueland 1997, 2002). In fact, none of the participants in our study talked explicitly about their spiritual concerns before they were asked, but once prompted, all of them had something to share about it. The question chosen to investigate possible existential concerns was formulated openly enough to give room for their total experience: "Where do you draw your strength from?" This is an example of how preunderstanding and theoretical sensitivity influenced data collection. By constant comparison of data from interviews, I found that my ideas would either fade out as irrelevant or earn their way into the theory. In this study we found that Handling existential threat was an important concept of the theory.

# Theoretical sampling

My growing understanding of data, concepts, and their properties also guided further data sampling in relation to which participants to select and areas to sample more about (theoretical sampling). All participants in this study came from the same hospital ward, but as their main concern and their ways of resolving it became clearer, variations were sought in the participants' age, time spent waiting, medical history, and whether they stayed in the hospital or patient hotel or slept at home. Questions such as what it meant to them to receive a diagnosis and what information they wanted are examples of aspects and processes I asked more specifically about to saturate categories and establish the relationship between them (Glaser, 1978; Glaser & Strauss, 1967). Glaser (personal communication, January 7, 2006) argued at a Trouble Shooting Grounded Theory Workshop in London that theoretical sampling can be very short if the researcher samples only for what he or she needs, and this can move the developing theory quickly forward. This principle was not followed in our research because we saw it as unethical to sample merely for what was needed for the development of the theory and not listen to the experiences participants wanted to share about being in such a vulnerable and stressful situation.

During the interviews I summed up what was said to make sure that I had understood the participants correctly. The interviews were transcribed shortly after they were conducted, a process that I completed myself. Taping instead of writing notes during interviews gave much better qualitative data because taping preserves the wording, the tone of the voice, the silence, laughter, sighs, crying, and so on. This provided rich data with considerable variety for coding. The transcribed interviews contained data for which we did not see the relevance at the time of the interview but which emerged as important later in the analyses. In this way, early and rich interviews became a source of theoretical sampling in the selective coding process.

# Table 1. An example of memo writing

#### Ambivalence and balancing 19 August 2003

All the 14 patients talk about ambivalence, balancing, and controlling of thoughts. They know—some with hope and others with fear—that there is a truth about their symptoms waiting for them to be revealed. This truth they cannot change with all their hopes and fears.

To be able to live without breaking down and to prepare themselves in this time of waiting, ambivalence and controlling of thoughts and feelings are important. In the back of their mind, thoughts are constantly working, and they cannot shut this activity totally down, but they try to control how much of this activity actually gains access to their awareness. How much of this process they can tolerate differs from person to person. They control it by drawing some arguments up front for themselves such as: The doctors are so clever nowadays; they feel so well; all examination has been negative so far. The other way of balancing and controlling fear is by not thinking of what they fear, pushing their thoughts in front of them to get rid of importunate and depressing thoughts.

This ambivalence and balancing is an internal process that can be challenge and disturbed from the outside. Coming to the hospital, meeting other patients with cancer, listening to fellow patients stories—especially in the smoking room—threatens the control they manage to keep of their own fear.

I also think that the ambivalence and balancing work can be threatened by nurses that get too close in dialogue, and that is the reason why the patients want information and not to talk about how they experience their situation.

## Working for quality in coding and analyzing

In this section we describe steps and processes we went through in the analyzing process. The phases overlapped each other; they moved back and forth and were not as clear cut as this presentation implies.

## **Open coding**

As soon as interviews were transcribed, they were coded by hand in the right-hand margin, with keywords summing up what the participants were sharing. In open coding everything is coded so as to find as many codes as possible without considerations of relevance (Glaser, 1978). (See examples later in the article.) Memos were written along the way, recording thoughts, questions, relationships between interviews, specific themes that emerged, and references to concepts and themes in the literature. Memos were organized so that only one idea, hypothesis, or question was written for each memo, and every memo was given a heading and a date; for example, "Ambivalence and balancing, 19.08.03" and "Properties of making sense, 18.03.04." This made it possible to track the process and to make the upcoming sorting easier (Glaser, 1978). An example of a memo is given in Table 1.

# Searching participants' main concern

After open coding of the first interview, we sought to name the patients' main concern and later the core category. To search consciously for their main concern was very important as well as a practical way to ask the question "What is this data a study of?" (Glaser, 1978, p. 57). After seven interviews we tried Knowing what is wrong with me; later we used Balancing fear until they get to know and How to manage life/self while waiting for a diagnosis. The analysis continued with validation of the participants' main concern until in April 2004 we reached the formulation How to prepare for the concluding interview and life afterwards. Going back to memos written at an early stage (fall 2002), we see that we were well on our way to understand the main concern and the core category as we were reflecting on how the participants could prepare themselves and make a plan for handling uncertainty. It took 1½ years of analysis and comparative work before we were able to verbalize this as exactly as required by the rigor of GT.

# Naming the core category

As our understanding of data developed, we tried to fit different concepts to the core category. The first attempt, in November 2002, was Living on hold, but that was too passive and did not describe the process well enough. Striving to get to know was more active but still not broad enough to cover all of our data. We moved on to Contingency preparation, which touched on an important aspect but was still not satisfactory. Then we tested different combinations of uncertainty, which was a very important theme in our data, but it did not fit as the core category. In October 2003 we considered Preparing self for the concluding talk but rejected it because it was too weak and had no grab. Preparing for alternatives was closer but was still missing grab along with being too ordinary for the painful process the participants experienced. When my mentor woke up one morning, after we had discussed the pictures (see later paragraph) the evening before, with the concept Preparative Waiting in mind, we both knew that we had fitted the core category with our data, that this concept covered the whole process, and that it had grab.

## **Selective coding**

Simultaneously with validating participants' main concern and the core category, we went on to selective coding, which meant limiting coding to those variables that were related to the core category (Glaser, 1978). For selective coding, I used the software NVivo 2.0. A memo from March 2003 discussed weather balancing, creating meaning, and creating a room of rest, which were key categories in our data, and these concepts are examples of what was coded for. The coding reports for every concept, which NVivo 2.0 offered, were helpful as I could go back to data and compare incidents to incidents and see more easily how concepts and patterns emerged from data (Glaser, 1978). In Table 2 we give examples of how we coded data.

At this stage (spring 2003) we had many concepts at different abstraction levels, such as uncertainty, patient putdowns, giving information, and contact qualities of staff; however, it was hard to find the right way to organize them. Living with this chaos is important when doing grounded theory, and it is necessary to go through so that the participants' main concern and how they resolve it can emerge from data and not be forced. This is crucial to the relevance of the theory. Perhaps the conceptualization of what was going on in this study was particularly difficult because it was a partially hidden process for the participants themselves because of the threatening uncertainty of diagnostic workups.

Table 2. Examples of how data were coded

Data	Open coding	Selective coding	Final concepts
Sometimes you think about the worst, you know, but	Thinks about the	Ambivalence	Balancing
they have informed me that they have taken so many	worst	Uncertainty	between hope
tests; I have been to gynaecological examination,	Uncertain despite		and despair
they have taken lots of blood samples, and my liver	many samples		
is OK, and they find nothing. But even though it lies	and no findings		
there smouldering. (Interview 3)	Smoulders		
It is important for me to get to know, to be able to	Wants to know to	To receive	Seeking and
move on, either with treatment, that I am well, or	move on	information	giving
that I have to live with this. If they can tell me; Ok,	Can live with it if		information
this is nothing dangerous, you can come to controls,	he knows why		
so can I manage to live with the pain. But I have to			
know the reason why it is so. (Interview 9)			
I read a book I brought and I listen to music to possess	Try to think of	Create a room of	Seeking respite
another world while I am here. I need to overcome a	other things	rest	
threshold to get rid of what my head is full of.			
(Interview 11)			

# Creating paintings assisted the conceptualization process

Our inability to organize the concepts into a theory gave birth to a creative idea of expressing our current understanding of waiting for a diagnosis as a picture. It was obvious that being in the diagnostic phase meant experiencing many feelings simultaneously. We also found that the participants were preparing themselves for different possible outcomes by tasting a small portion of emotions in these scenarios. Memos concerning the waiting process written at that time (spring 2003) stated that the participants prepared themselves for the future in two ways: first, to face the information about their results; and, second, for different scenarios after they had received the final result of examinations. I invited Gunhild Øverli, who was a student nurse and a painter, to work with me. After having listened to my narration of waiting for a diagnosis and preparing for the final interview conceived as walking down a corridor with many doors, where the patient faced the door at the end symbolizing the concluding interview, she produced some paintings (see Figure 1). The significance of the symbol in the painting is that behind the doors different possible scenarios are hidden. The doors ajar symbolize that patients are in contact with hopes and fears related to different potential outcomes. After having seen this painting, we knew that it expressed the whole idea and that when we would finally be able to express the main concern and the core category, it would come out of that picture. In this way, the pictures facilitated our process of conceptualizing what was happening in our study. Having done so, we later could explain the picture to others.

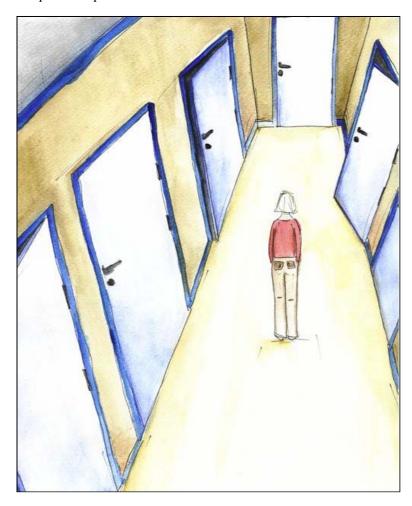


Figure 1. The patient is alone in the hallway, waiting to pass through the door at the end, a symbol of the concluding interview. The doors along the corridor symbolize the patient's hopes and fears. Some of the doors are ajar; others are shut. The patient does not walk into these rooms; he or she just knows what is inside them and what might become a reality when he or she get to know the results from the medical team at the concluding interview. Painted by Gunhild Øverli. Reprinted with permission of the artist.

Along with creating the painting, selective coding continued, and we coded for 14 aspects of being in the hospital and waiting for a diagnosis. Examples of codes were examination, information (getting, giving, and information to family), diagnosis, uncertainty, ambivalence, staff qualifications, room, and clues about seriousness. The limited application of NVivo 2.0 was time consuming, but it offered a good overview of codes and their properties. In the final stage of selective coding, theoretical sampling and theoretical memo writing assisted in saturating categories and their properties (Glaser, 1978; Glaser & Strauss, 1967). As an example of saturation of properties (dimensions or aspects of the category) for the category of Interpreting clues, we identified the properties to be one's own bodily symptoms, former experiences with one's own and others illness, nonverbal expressions of the staff, the hospital environment, examinations conducted, and schedule patterns. Theoretical saturation of the theory was reached when no new properties of the categories were found in data and the integration and density of the theory was at a high level. In GT theoretical coverage is partial because a substantive theory always can be modified as more data are compared (Glaser, 1978).

# Theoretical coding

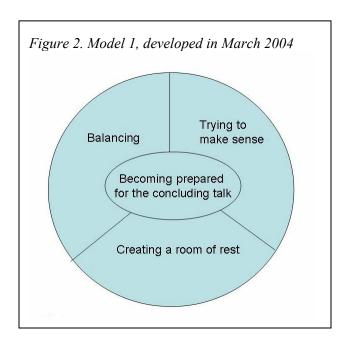
The open and selective coding had fragmented data but provided us with dimensions and variations within the concepts. Now it was time to move on to theoretical coding, which relates the concepts of a theory to each other in a clear and distinct way. In this work sorting of memos was important and assisted us in developing categories that covered all the concepts related to the core category (Preparative Waiting). A lot of work was put into fitting and refitting the codes and in trying out different ways of relating concepts to each other. We found that conceptual mapping and experimenting with different models were helpful tools (Artinian, 1982; Glaser, 1978). The drive was to find a way of presenting the substantive theory of Preparative Waiting so that it covered the whole data set and communicated the process in a clear way.

As we worked on theoretical coding, we discussed different ways of relating the concepts to each other and how it would be possible to put the participants' main concern in the model. Different models were discussed with members of Bergen Grounded Theory Research Group, at doctoral seminars at the university, and at several international conferences. Because we knew our data and codes so well, it was difficult for us to evaluate how well the different models communicated to people. Questions and critical feedback from various people were essential in driving the theoretical coding forward. In the next paragraphs we will comment on some models as they occurred over time. Only the models representing major changes are presented here.

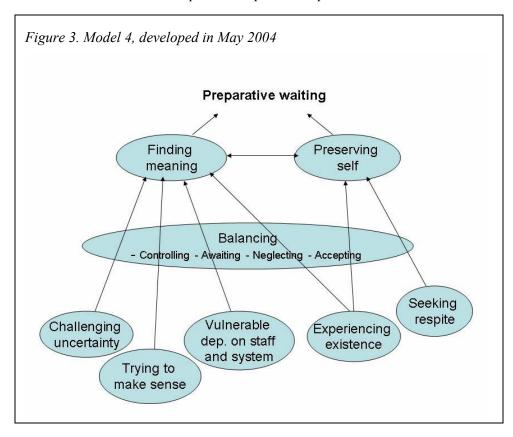
# Conceptual mapping and models

In Figure 2 we present the first attempt to express key concepts of the theory and how they were related to each other. The main concern was put in the middle to illustrate what was driving the participants to action. The concepts of Balancing, Trying to make sense, and Creating a room of rest were seen as closely related to each other and important aspects of how the participants resolved their problem. We were aware, however, that this model did not cover all of the categories related to the core and that it needed to be further developed.

In Figure 3 we illustrate the fourth model developed. This model was more complicated and showed more clearly the two main processes in our data. Patients worked on Finding meaning, related to what was going on simultaneously with Preserving self. Already at this stage we saw four patterns of Balancing between hope and despair, which later on turned out to be another way to theoretically code our theory. Balancing was very important and guided how the strategies of Challenging uncertainty, Trying to make sense, and so on were conducted. Therefore, Balancing

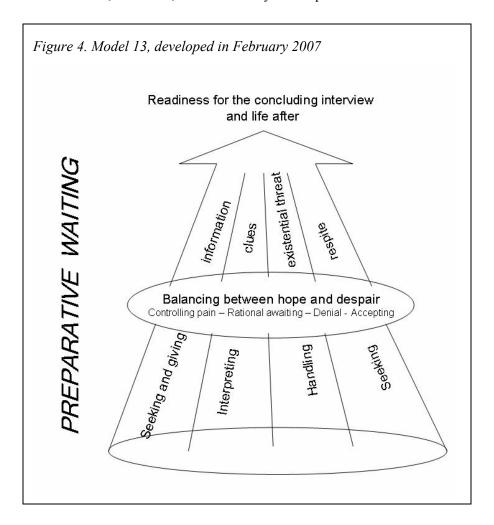


was placed in the middle of the model. Having the arrows passing through it was intended to indicate that the other categories were dependent on how Balancing was conducted. The category of Making sense from Model 1 was split into Challenging uncertainty and Trying to make sense, and the categories Vulnerable: Dependent on staff and system and Experiencing existence were added to the model. The conceptual fit was improved, but the theory did not work well to explain what was happening in the area, and the relevance and grab of the theory were still low. When this model was presented, people found it interesting but unclear and confusing, so we concluded that it did not work well to explain what patients experienced.



# Balancing as the theoretical code

Theoretical coding continued until the model reached its final form, as illustrated in Figure 4. In this model Balancing between hope and despair is identified as the theoretical code that integrates the substantive GT of Preparative Waiting. Theoretical codes are difficult to understand and therefore are often missed by novice researchers. They are not necessary, but a GT becomes more integrated and relevant when theoretical coding is used because it raises the theory to a higher level (Glaser, 2005). Model 13 is more dense and parsimonious, and contains fewer concepts. The core category of Preparative Waiting integrates the whole process of preparing for the concluding interview and life afterward, and the theory is more solidified, with interrelated categories reduced to a smaller set of higher level concepts. Challenging uncertainty was reformulated to Seeking and giving information, a concept that is easier to understand. Trying to make sense was changed to Interpreting clues. Dependent on staff and system (see Figure 3), which had a considerable number of codes in our data, was a condition participants acted in relation to. In Model 13 this is built into all the other categories. The theoretical code of Balancing between hope and despair, with its four patterns, is put in the middle of the figure to demonstrate that it is the guiding principle of how Preparative Waiting is carried out by patients. In analyzing more closely how the different patterns of Balancing were carried out, we realized that the best fit to the full data set of the category covering the existential threat was Handling existential threat rather than the former Struggling with existential threat. The whole process of Preparative Waiting was formed as an arrow, indicating that it led to readiness for the concluding interview and life afterward. When this final model was presented, people listened, accepted it, and said they understood. The fit, relevance, and workability had improved.



# Reading literature

The last key area we would like to address is related to how a grounded theorist relates his or her substantive theory to other theories and previously developed bodies of knowledge. According to classical grounded theory, searching and reading literature is done differently in different stages of a study. In the planning stage literature is searched in an attempt to identify gaps in knowledge. In our study we were aware that women with breast disorder had been studied, but we could not identify any study of patients with gastroenterological problems going through the diagnostic phase. During data collection, coding, and writing of memos, literature related to grounded theory methodology, symbolic interactionism, and other areas were read to improve openness to our actual study (Glaser, 1998). When our substantive theory of Preparative Waiting was grounded and developed enough to stand on its own feet, we reviewed the literature to compare and contrast our findings with the knowledge base of the field. Even at this stage, however, the attitude of a GT researcher is to read research and theories as ideas and not as truths and to compare other concepts and ideas with the concepts of our theory. This can be fruitful work where the theory can be extended further and transcended.

To contribute to the field, we wanted to show how our work fitted into the area by weaving our findings into the body of already existing knowledge. Thus, in spring 2005 we undertook a systematic literature review. A GT is abstract of time, place, and people because it conceptualizes processes (Glaser, 2003), and the concept of Preparative Waiting applies to many fields, which challenged our ability to judge the relevant reading of research and other theories. In the systematic review we did not find research conducted with patients where the outcome of the diagnostic examination was as open as it was with our participants. We found a lot of research conducted on breast disorders, and these studies were evaluated as important because the diagnostic phase was crucial to our research. The drawback of comparing our findings with this body of knowledge was that it covered only women and that the examination process was much more defined and organized than for our participants.

We also looked for theories that were relevant to our GT of Preparative Waiting, such as uncertainty in illness, motivated information management, and stress and coping. We have discussed elsewhere our theory related to stress and coping theory (Giske & Gjengedal, 2007) and also the vulnerability that patients experience in relation to health care professionals (Giske, Gjengedal, & Artinian, in press). Theories in other areas, such as system theory and authority structure, highlighted other aspects of the theory of Preparative Waiting that traditionally are less focused on in health care professions. Pursuing these aspects is a future challenge for us.

## Conclusion

To be able to carry out a GT study, one must be willing and able to stay open to the experience of the participants, to live with degrees of chaos until the concepts emerge, and then be able to conceptualize. This requires hard work combined with creativity. In our study we have put much effort into letting the core problem and processes of the participants emerge (relevance) and to fit the concepts with data so that they work in presenting what happens in the area we have studied. It has been a process of learning by doing while extending our grasp of GT methodology, which has promoted the development of a beginner into becoming more experienced grounded theorist.

In this article we have given examples of how to apply GT procedures, to trust in emergence, and to develop conceptual models by fitting and refitting them to the data set. To the best of our ability we present Model 13 in Figure 4 as the model that accounts for the participants' actions in the most powerful way. The theory of Preparative Waiting contains many aspects of going

through the diagnostic phase in a hospital setting. Future research and reading in different areas could promote further development and modification of our theory.

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