Original Article

The Term 'Critical' Helps to Sharpen Consequences when Life is Threatened –A Hermeneutic Concept Analysis

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Abstract

Background: In most western countries, healthcare systems are organized by dividing the patients into acute, critical and chronic groups. These concepts do not have clear meanings and do not always provide direction in prioritizing patients.

Objective: The purpose of this study was to examine the term critical through semantic concept analysis on a universal level and from a caring science perspective to better understand the consequences of critical conditions.

Methodology: The term critical was explored semantically, and the findings of the concept analysis are discussed hermeneutically. The concept critical is discussed from a caring sciences perspective used in connection with the phenomena of disease and suffering.

Ethical consideration: In all parts of the study, ethical considerations have been followed concerning gathering data from dictionaries and interpreting these data.

Findings: The findings showed that the term critical is an important concept in framing dangers and serious situations that might occur in connection with disease and suffering. The term critical puts great emphasis on the ability to judge a dangerous situation correctly. It is therefore important to have transparent criteria for judging situations, diseases and suffering that patients may experience. The goal is to prevent dangerous situations to escalate to the point at which they become irreversible.

Conclusions: The concept critical helps us to sharpen the focus when assessing a patient's condition independent of the problems that are rooted in the disease/illness or suffering. The term provides a concept that frames a clear direction.

Key words: Critical, concept analysis, life-threatening health conditions, disease, endurable / unendurable suffering

Introduction

In most western countries the healthcare systems are organized by dividing patients into groups with *acute*, *critical* and *chronic* diseases. The emphasis is placed on how the diseases make their appearance. One speaks of acute heart infarction, critical head injuries and chronic respiratory problems. As adverbs or adjectives, these concepts derive their meaning from the

verb or noun that they modify. It is not always the patient's disease itself that indicates how the patient is going to be treated; how the patient's disease arose may be considered, as well. The problem is that the disease and suffering per se is not the centre of focus, but more often the focus is on how the disease occurred. The consequences of this practice may lead to a situation where the patient who has a disease

with the most acceptable appearance gets the best treatment. As a consequence, an ethical dilemma arises when developing criteria to follow when prioritizing patients who will receive treatment. The authors of this article based their scientific point of view on caring science. We have found it interesting to examine the concept of 'critical' semantically to better understand how the meaning of the concept of critical influences the substance being framed. The concept of suffering and how to alleviate suffering is central within this paradigm. The concept critical is often used in connection with the seriousness of the disease/illness. When we speak about suffering, often speaks about endurable unendurable suffering. The term critical is not very often used in connection with suffering. It may well be that the term critical can enhance our understanding of what unendurable suffering is like for humans.

Purpose

The purpose of this study was to examine the term critical on a universal level through concept analysis and from a caring science perspective interpret the consequences of critical conditions for the patients.

Methodology

Concepts are essential in science, and it is through concepts that reality is shaped (Eriksson, 2010, p.1). Concepts and language are closely connected. Gadamer (1989) stated that language constitutes how the world is joined together and an understanding of language is therefore of great importance in science. The methods for studying concepts and phenomena vary. In our study, we have chosen semantic analysis for the purpose of examining the term critical.

The methods for investigating concepts differ. Wilson (1963), Walker & Advant (2011), Morse (2000) and Koort (1975) have presented different methods by which concepts can be analysed. In this study, we chose Koort's (1975) method for concept analysis to explore the concept *critical*. By using a hypothetic deductive method, it could build a bridge to hermeneutics. The analysis of the data and the interpretation of the results are hermeneutical (Sivonen, Kasén & Eriksson, 2010).

The correct way of carrying out concept analysis is to use the native language of the researchers. The English and Norwegian words *critical/kritisk*

derive from both Latin and Ancient Greek. The term critical is a familiar word, but the etymology is not of Norwegian origin. The authors of this paper found the knowledge generated from a semantic analysis was of wider scientific and professional interest, and therefore, they chose to present it internationally. We have chosen to use the Norwegian word together with the English translation in italics, as shown in table 1 and figure 1, but not in the text. The translation of the words in table and the figure was performed by a government-authorized translator. For validation of the translation of the concepts, we also carried out the first stage of the method, which was the synonym table in English using English dictionaries.

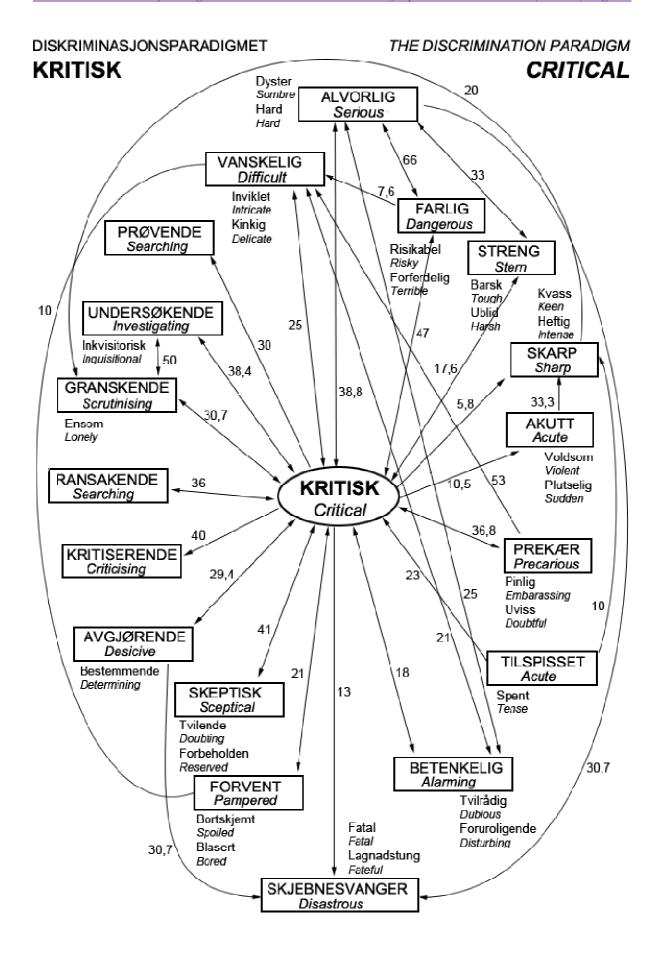
The semantic analysis developed by Koort (1975) consists of three phases. In the first phase, the matrix phase, the goal is to find synonyms from different dictionaries of the concept to be analysed (table 1). The dictionaries should each represent ten years in the actual language of the analysis. In the matrix phase, the researchers consulted ten Norwegian dictionaries and thirteen English dictionaries to create the final synonym table. The Norwegian dictionaries containing the term critical were from the period 1937 until 2005. These dictionaries were placed in the reference list under the heading Norwegian Dictionaries and details pertaining to them are listed in the references. The English dictionaries were chosen from the same period as that of the Norwegian dictionaries. These dictionaries were also placed in the reference list under the heading English Dictionaries and details pertaining to them are listed in the references.

In the *second phase* of the method, one finds synonyms for the synonyms. The synonyms are placed in relation to each other and the method uses a formula to discriminate between the concepts to find the degree to which they are related, which is the number of bindings x 100 divided by the number of possible bindings. We have chosen to present only the results that are shown in the discriminatory paradigm in this article.

The last and *third phase* is the interpretation phase. The semantic analysis, according to Koort, is an investigation of the linguistic expressions or meaning of symbols (Koort, 1975, p.27). He views semantics as a science of interpretation.

Table 1: Synonym table of Critical

KRITISK												
Critical		riksmålsordbok. 1937-	Norsk synonymordbok. 1964	Fremmedordbok 1978	∞,	Rettskrivningsordbok med synonymer, 1985			Store Norske Ordbok, 1991	k.		
Cittical		. 15	r. 1	k 19	Norsk Ordbok 1978- 2005	Rettskrivningsordbok med synonymer, 1985	r.	Riksmålsordboken. 1982	rdb	Tanums store Rettskrivingsordbok. 1996		
		ok	bok	bol	k 1	gso	Bokmålsordboka. 1986	bok	Ō	e sorc	k – 5	
		rdb	ordl	ord	lbo	ling nyr	rd.	ord	ske	Tanums store Rettskrivingso 1996	Norsk ordbok bokmål. 2005	
		lso	'mc	ed	Orc	ivi	ilso	ålsc	Vor	ivi	ord 1. 2	
	sk	må	sk ony	μu	sk 5	skı I sy	må 6	smi 2	e N	um skr 6	sk må	all
	Norsk	iks	Norsk synony	rer	Vor	Rett ned	Bokm 1986	Riksn 1982	Store 1991	Tanur Rettsk 1996	vor ok	Antall
		ľ		Ī			1 1	F 1		T F 1	<u> </u>	
Undersøkende			X		X	X			X			4
Investigating												
Avgjørende			X				X	X	X			4
Desicive	<u> </u>											
Kritiserende					X			X	X	X		4
Criticising	<u> </u>											
Granskende			X					X	X		X	4
Scrutinising												_
Ransakende			X	X			X					3
Searching												
Prøvende			X		X				X			3
Searching												
Farlig			X	X		X			X		X	5
Dangerous												
Vanskelig						X			X	X		3
Difficult												
Tilspisset			X						X			2
Acute												
Skjebnesvanger	X			X								2
Disastrous												
Prekær			X			X			X			3
Precarious												
Streng	X						X					2
Stern			**	**				**				2
Betenkelig			X	X				X				3
Alarming												
Alvorlig			X			X			X			3
Serious	 		V		-		V		N/			
Skeptisk			X				X		X			3
Sceptical					-	37	-					1
Skarp						X						1
Sharp			37		-	37	-					
Forvent			X			X						2
Pampered			X		-		-		V			2
Akutt			X						X			2
Acute	<u></u>											



Research articles employing Koort's (1975) method have been published in healthcare, peerreviewed periodicals (ref. inserted accepted; Matesson-Lidsle & Lindström, 2001; Nåden & Eriksson, 2002; Edlund et al., 2013; Hilli & Eriksson, 2017; Honkavuo et al., 2018; Lorentsen, Nåden & Sæteren, 2019). In Eriksson's model (2010) the semantic analysis of concepts belongs to the ontological level of determining concepts. The universal meaning of concepts provides an opportunity to view the different concepts in relation to each other with a view of reaching a more comprehensive understanding of the content than of the content being used in common daily expressions.

Analysis of the discriminatory paradigm Preliminary findings

presented through The results are the discriminatory paradigm (figure paradigm is the last phase in the method and is therefore the main figure showing the findings of the semantic analysis. The discriminatory paradigm (figure 1) shows three major findings that are grouped in three clusters. The term critical has synonyms suggesting how to judge or make decisions in different situations. The Norwegian discriminatory paradigm translations includes expressions such as criticizing, searching, determining, definite, scrutinizing and investigating. These concepts show how important it is to be definite and decisive in making assessments. The concept does not say anything about what the truth is (criteria), but it shows how to make the correct decisions.

Expressions from English dictionaries show that the meaning of the term critical is very frequently understood or connected to how one judges a situation. Expressions such as "judge the exam", "engaged in pertaining nice and exact criticism", "fault-finding", "skilful decision" or "to judge hazardous" are all expressions that have been used several times. It is interesting to see that both the adverbs 'to judge nicely' 'hazardous' are used as expressions of how to examine a situation. It seems important when one must judge an exam or a situation that the work is done exactly and competently. The expressions 'judge the exam nicely', 'exact' and 'hazardous' appear to be antonyms, but they are all necessary for understating the complexity of the subject matter. The second group of synonyms indicates concepts that reveal what is truly on the edge

when something is critical and can lead to serious consequences. These synonyms are: stern, acute, difficult, precarious, alarming, disastrous, sceptical, pampered and sharp. The term precarious expresses something very difficult. Critical has a 10,5 percent degree to the term acute, but on the other hand, the term acute does not have any bindings to the term critical. The meanings of these words emphasize how to be aware of the situations that might seem to be not risky at first glance but might develop and become more serious if one does not monitor the situations appropriately. The situation that allows things to get out of control should be clear, so it is possible to prevent any escalation of the situation. The third group comprises synonyms representing the consequences of having had an insecure situation over time. When one loses control, the result might be dangerous and serious. A severe situation can be risky, sincere and terrible.

The words dangerous and serious are concepts with the greatest bindings (47 and 38) to the term critical. The binding between the word serious and the word dangerous is 66.6, and this shows great familiarity between these two concepts. Expressions in dictionaries of what actually occurs when one faces a 'dangerous' situation include 'solid material is changing to liquid' and 'the C-point in the ski jump'. When the dangerous situation progresses to a new stage of severity, the result might be death or an alteration of the situation that is not changeable anymore.

Hermeneutical interpretation of the findings

The relation between the phenomena disease, illness and suffering is described as an alienation of oneself at a universal level (ref. inserted when accepted). How this alienation manifests itself in contexts may be nuanced depending on whether it is caused by a disease or an experience of suffering.

Further, we aimed to interpret the term critical from two different perspectives by presenting two examples of situations. The examples are human experiences of 'falling ill' (ref. inserted when accepted) and 'human suffering' (Eriksson, 2006). The term critical helps with interpreting the situation of people undergoing traumatic situations of all kinds. The concept is used more often when judging life-threatening situations; for example, when someone is becoming ill from myocardial infarction rather than in assessing, for example, young people being victimized. The

two different situations show how the ontological (or universal) meaning of the concept critical can be of help in interpreting different situations or experiences.

Becoming ill: When a person suffers acute myocardial infarction, it is a life-threatening situation. However, the patients themselves may not be surprised when they get ill because they may have felt signs of not being themselves over some time. In a study of patients with acute myocardial infarction (ref. inserted accepted), the patients did not understand how seriously ill they were, and they were not able to assess their own situation correctly until after they had the AMI (ref. inserted when accepted). The patients enjoyed a great deal of responsibility in their jobs and families. They looked at themselves as persons who were able to cope. To these patients, it was legitimate to be relieved from that responsibility and to receive help after they had struggled somewhat with the problems on their own. Obvious 'nervous' behaviour was most often a result of the feeling of not being in control, rather than the fear of what could happen because of their AMI. They were more focused on having control of the situation than listening to the symptoms that indicated a bad condition. When they looked back after having gone through their stay in intensive care units, they realized that they had felt ill for quite some time before they had the AMI, but they did not perceive the signal as an alarm. It had been important for them to have control of the situation and they did not react before the situation became dangerous. When they knew they were ill, it was much easier to ask for help compared to telling their family and physicians about their symptoms when they felt it was just a foreboding sign.

The meaning of the term critical points to the importance of assessing a bad health situation before the situation becomes serious. It is often to determine whether symptoms are serious or not. The term critical puts great emphasis on being able to judge the situation and interpret the symptoms. The people who felt strange or alienated were not comfortable with exaggerating their situation. They felt it was much easier to complain after they had received their diagnosis. The ability to judge a situation before it becomes serious is necessary not only for doctors and nurses but also for people who develop a disease in order to prevent the situation from escalating.

Human suffering: When people are victimised in school, the environment for learning deteriorates, and our common standard for how to treat people is violated. Teachers, parents and school leaders are all responsible for how people experience everyday life in school. If problems are discovered in school, we presuppose that the problems are taken care of and the bad situation is dealt with properly.

The media often present situations in which the consequences for people experiencing suffering social problems are harmful. Often consequences of the situations have been much more dramatic than one could anticipate considering little or no interference from the responsible people. Discussions in the media often focus on the people who are responsible for escalating a situation and who are to blame for the bad results. Often the consequences of many years of being victimized may end in tragic outcomes. When victimized persons suddenly become seriously ill or even die, such situations are often discussed as if they suddenly came into existence. We might ask why such situations were not dealt with appropriately the first time they arose.

When leaders are confronted with the fact that persons are being victimized, it seems that they initially react very little and are content with merely being briefed on incidents. When the situation escalates, the same people often tend to look at the situation as a new situation and are not able to relate it to the previous incident. Responsible people do not seem to view situations as dangerous. It is often unclear which perspectives have been chosen when dealing with problem situations. The solution seems to be that one can only wait and see how the situation develops.

What does one take into account when one is informed that a young person is being victimized? The semantic understanding of the term critical puts great emphasis on the task of assessing a situation. It is therefore necessary to be aware of the responsibility one has when one assesses difficult situations.

If the situations get out of control further, it is important that those who are formally responsible are able to see the connection between the situation when it first appeared and its current state. They have to be aware of the critical phase the person is undergoing when they judge the situation again. The decisions have to be made

precisely and decisively. To assess situations appropriately means being able to foresee the consequences. When one foresees the consequences of situations, there is a basis for action to prevent situations from escalating. If situations escalate, the consequences may easily be unendurable suffering or death.

When situations become dangerous and serious, it is mostly because there has been no appropriate intervention. There is a connection between the opportunity to assess situations correctly and the opportunity to prevent situations from getting out of control. Nevertheless, there are situations in which we must accept that there is nothing more to be done. In such cases, the responsible people should be able to explain the reason for it because it is unusual that a situation becomes dangerous without any warning.

Towards a deeper understanding of falling ill and of human suffering

These two situations seem quite different at first glance. It is much easier to see the danger in a situation when the physical parameters define the risk. The problems when young people are being victimized derive more from 'everyday' problems that all of us face. The solution in the situation is often not to exaggerate the problems but simply to take a break and remain calm. This way of relating to the problem may also become part of the problem; persons who experience the problems may interpret a calm attitude as being indifferent. The people with an AMI have to decide for themselves if they are seriously ill or not. The consequences of their disease appear much sooner than for the victimised persons and the responsible others if they are not taken seriously. In both situations, it is the persons themselves who decide how bad it is at first and whether it is necessary to seek help. Very seldom do people with AMI refuse help by professionals, in contrast to the cases of victimised people. The consequences for the AMI patient can get out of control quickly. For young victimised people, it may take years before the consequences become life-threatening. The consequences of losing dignity of life are indeed serious for humans and the experience of indifference from responsible people and of not being heard can easily lead to unendurable suffering.

It is the perspective of the respective disciplines that determines how the subject matter is interpreted. Our perspective is from the theory of caritative caring (Lindtröm, Lindholm & Zetterlund, 2006). In caring science, the understanding of human dignity is central. Edlund (2002) has interpreted dignity in human relations as both an absolute and a relative dignity. The author further stated:

The absolute dignity of human beings is their holiness with a divine spark of indestructibility, immerse responsibility and inner freedom to relate themselves to their situation. Relative dignity is experienced by the individual when she in a given meaning context experiences a harmony between her own ability, knowledge and the demands she personally or the environment makes as a condition for searching the highest value of the value hierarchy. (Edlund, 2002, p.29)

Like all other human beings, victimized persons have absolute dignity in just being humans and have the right to exist. The absolute dignity gives them right to exist whether they develop their own potential or not. When a person is victimized, his/her dignity is violated. Victimized persons may feel their very existence threatened. It might be unbearable for a person to have their relative dignity reduced. Responsible authorities may not view situations as being as dramatic as they are. The ontological meaning of the term critical helps to better understand alarming and precarious situations in clinical contexts, which might become out of control if they are not handled in a responsible way.

In intensive care units, doctors and nurses use criteria for discovering critical and dangerous situations involving patients. Often, the criteria of physically abnormal states have priority, but the patients in intensive care units may also lose their dignity in their struggle for life involving suffering that may be unendurable.

For some years, dignity has been an important word used in political documents in Nordic countries and elsewhere (Nåden et al., 2013). Dignity regulation guarantees are used in caring for the elderly and as instructions for how to organize children's childhood environments. It seems that dignity guarantees do not provide the necessary implementation to ensure that individuals experience dignity in their daily life.

Philosophical concepts, such as dignity and respect, are employed as positive words to express important values in society. These concepts are important, although this study showed that humiliation occurs in people in

vulnerable situations. If the understanding of dignity is combined with the universal understanding of the term critical, then the consequences of humans not being treated in an appropriate and competent manner in a critical healthcare or social context might be better visualized and thus prevent deprivation of human dignity. In the introduction section of this paper, we problematized the use of concepts such as acute and critical in framing the substance and, in clinical practice, becoming more important than the substance they frame. In the cases of bearable and unbearable suffering, we point to the possibility of reaching greater clarity in understanding patient suffering when we use a concept such as critical.

Conclusion

Life itself can easily be threatened for many reasons. Often, it may not be possible to decide whether there is a disease or suffering that is the cause of the threat. It may not make sense to find the exact reasons for the threats. The complexity of life itself does not fit into one or the other context. When life is threatened, it is important to know whether the threat is serious or not. What may be the consequences? The term critical may therefore be an important concept that can frame such a threat to life even before one conceptualizes the situation. If human dignity is threatened, then there is much at risk. It is important to judge these consequences for life itself before one reduces life to either physical, psychic or social areas. At the universal level, it is easier to see what is at risk for humans. It might be easier to grasp whether a person's life is threatened by the collapse of either physical factors or by unbearable/unendurable suffering if the person's problems are looked at from a whole perspective. We have found the term critical capable of being more broadly used than in the stricter sense in which the word is normally used.

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