

RESEARCH NOTE

THREE CONFLICTS AS A RESULT OF CAUSAL ATTRIBUTIONS

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Abstract—There is a difference between the causal attributions of cancer (Ca)-patients and those of myocardial infarction (MI)-patients. MI-patients go through and *check* their autobiographies looking for the possible causes suggested by the medical world. Ca-patients on the contrary *search* for possible explanations. This is probably due to the lack of medical knowledge on the cause and course of their disease. They search through their autobiographies and the result is idiosyncratic, very personal attributions with which they create an explanation which is often not in accordance with the physicians' view. These attributions of Ca-patients are a source of conflicts, both within themselves (doubt), with their physicians and with their partners or other close relatives. Nevertheless they stick to their own explanations, although often secretly and with ambivalence, and despite the conflicts which they produce.

INTRODUCTION

People feel a need to explain events in their lives. This is especially true of negative or tragic events, as bankruptcy, failing an exam, the death of a close relative, divorce, etc. The search for causes is an attempt to make what has happened comprehensible and endurable. If people succeed in this then the world and their lives seem less chaotic. It gives them a grip on reality and they are able to re-orientate themselves; again there is a line running through their life-history, their autobiographies. It seems that the more anxiety an event brings, the more important this process becomes.

In former times, long before any body of knowledge of the natural sciences had been built up, epidemics and other disasters were accounted for by means of magic, religion and the metaphysical. The purpose of this was to guard people from new adversities and help them overcome the attendant anxieties. 'Knowing' why something happened gives an *illusion* of control over the future. Such illusions are beneficial to psychological adaptation [1].

As mentioned above, people try to bring order into the chaos in their lives by finding a cause for what has happened to them. A *causal attribution* forms the link between a certain event and one's own ideas of its cause. One of the main points of the attribution theory is the assumption that people spontaneously engage in attributional activities [2]. From the mid-sixties onwards, causal attributions have been an important research subject within the field of social and cognitive psychology, initially in experimental settings. Since the second half of the 1970s, interest in causal attributions has been focused on experiences of real life events such as severe accidents [3], life-

threatening diseases [4], rape [5] incest [6], divorce [7], etc.

The first articles on cancer (Ca)-patients' explanations for their illness, which were mostly written by (liaison-)psychiatrists were published in the fifties. The main topics were who, or what is responsible for getting cancer, and guilt feelings. In the absence of a truly adequate medical answer to the patients' urgent question: 'What caused my cancer?' a new and animistic question arises: 'Who is responsible for my cancer?' [18]. In a lot of cases the patient himself was represented as being the 'Who?' However most of the articles were not based on systematic research.

Abrams and Finesinger [9] found that feelings of guilt—blame and self-blame—were present in 95% of the Ca-patients they interviewed. Nearly half of the patients Bard and Dyk [10] interviewed, expressed more than one causal attribution. Although nearly every patient was a member of a religious group, only a small percentage of the Ca-patients interviewed expressed a cause with some religious content [9, 10]. Some authors discovered that the majority of the patients think that in some mysterious way they themselves are responsible for the fact that they have cancer [11]. Other writers concluded that self-blame was evident in a minority of cases [12]. Nevertheless, the 'earlier' authors were convinced that patients need to find a reason for their misfortune [13]. Thinking in terms of psychological morbidity [14] and using psycho-analytical concepts, they labelled the mental activities of Ca-patients irrational beliefs [10] and defense mechanisms, mainly projection, regression and denial [15]. Maximal awareness of the nature and malignancy of the illness appeared to be associated with more overt feelings of guilt, while lesser awareness led to blaming others [16].

These publications, written before 1977, expressed amazement that, despite the wide dissemination of the increasing medico-scientific knowledge, Ca-patients at both extremes of the educational scale had their own, idiosyncratic beliefs about the cause of their illness. The authors agreed that patients *must*

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establish such a belief, but they showed little further theoretical interest. Nor did they refer to patients' possible doubts or ambivalences concerning their explanatory beliefs; no trace of conflict within the patients, or between them and their doctors or close relatives as to blame and self-blame, was reported. This is the more remarkable because ambivalences and conflicts are key topics in psycho-analytical theory.

The second period, from 1977 up until today, is characterized by a greater interest in the development of theory, especially by researchers concerned with the attribution theory. Research is done into causal attributions and their functions for the cognitive and emotional adjustment to illness. Timko and Janoff-Bulman [17] found that breast Ca-patients who blamed their own behaviour were more likely to believe that they could have avoided the cancer. This behavioural attribution was associated with good adjustment. Taylor *et al.* [18] came to a different conclusion. They found that self-blame was neither adaptive nor maladaptive; no particular attribution gives better adjustment, only the illusion of control is important. Cook Gotay [19], however, concluded that an absence of causal attributions may be adaptive for Ca-patients.

None of these 'recent' authors reported patients' ambivalences with regard to their causal attributions. This is not surprising, for they—except Taylor *et al.*—used structured instruments which were not sophisticated enough to register the patient's doubt. Cook Gotay, the only author who interviewed patients as well as mates, found that mates do not blame patients for the illness. So, when a Ca-patient blames himself, there should be a disagreement, a conflict between the belief of patient and mate. Cook Gotay did not mention such conflicts, nor did the other authors. Only Taylor [1] mentioned the medical disconfirmation of idiosyncratic attributions, which we interpret as a conflict between patient and physician.

In conclusion, the search for causes seems to be one of the strategies Ca-patients use to establish a feeling of control. Psychiatrists and social psychologists have reported this phenomenon as if Ca-patients either have or do not have causes for their illness. However, most of these scientists ignored the possible internal conflicts (doubt), or conflicts with others, patients have about the veracity of their attributions.

PILOT STUDY AND FURTHER QUESTIONS

In 1983 a pilot study was launched. The main question asked was: Do Dutch Ca-patients also devise explanations for their disease, and if so, what are these like? Twenty-five patients of the Clinic for Radiotherapy were asked to participate. They had recently finished the last radiation treatment and were in fair condition. Seventeen patients were willing to see the interviewer at home. The interview-in-depth was unstructured. There was only one compulsory question: 'Could you tell me, what is, according to you, the cause of your illness?' Fifteen out of the 17 patients gave a concrete answer and had an idea about the cause and origin of their disease [20].

The most striking finding was that 10 patients had more than one story by which they tried to describe and explain the cause and course of their illness. On the one hand, they related a formal medical account full of detached findings which they had heard from their physicians. Within the terms of this account they can accept that the disease followed primarily a completely blind biological course of events and was not the consequence of anybody's intentions, or of conscious or unconscious motives of any kind [21]. On the other hand, they gave idiosyncratic and informal accounts in which they expressed their need for causality, which is also a need to apportion blame and self-blame. The elements of this account came from their autobiographies.

The discovery of these two kinds of stories evoked the following questions:

- How do the different accounts correlate with each other? Are they in harmony or do they conflict?
- What do we know about the causal attributions of other chronic patients, especially myocardial infarction (MI) patients? Have they too got their own explanations about what causes their disease? Does this also provide them with two different kinds of accounts and if so, how are these related to each other?

These questions form part of the subject matter of a broader research project.

METHOD

The research material consists of 33 interviews with Ca-patients and 14 interviews with MI-patients. All of them had recently finished treatment and the interviews were recorded in their homes: the Ca-patients were interviewed 2 months after the last radiation, the MI-patients just after the rehabilitation programme. None of the 47 patients were in a bad condition; according to their radiotherapists, the life-expectancy of these Ca-patients was at least 2 years. The interviews mostly took longer than 2 hr. All those interviewed were given the opportunity to tell as much as possible about their thoughts and feelings concerning their illness. The patients determined the content and direction of the conversation to a large extent themselves. The interviewer ensured, however, that the following eight topics came up: medical history, causal attributions, biographical data, life-style changes since diagnosis, social comparison, information gathering, anxiety, future.

The information gathered on these eight topics was written down, and then classified into different sub-topics by two independent judges. If there was disagreement, judgement was made on the basis of intersubjective compromise.

The patients' doubts about their causal attributions and about the medical explanations for their illness were analysed. The interviews, therefore, have been screened for expressions of doubt: words and passages as 'may be', 'could be', 'perhaps', 'my physician told me . . . but . . .', etc. For example, a 57-year-old peasant with a carcinoma of the vocal cords was convinced that tobacco chewing was the most important factor. Although his laryngologist

told him about the relationship between smoking and the disease, the patient only reduced the amount he smoked but stopped chewing altogether. So he attached most importance to his own explanation, but did not totally reject his physician's view.

During the interview, the patients were asked if they talked about their ideas about the cause of the illness with others, and what kind of reactions they received. These reactions were scrutinized for information about possible conflicts with others.

RESULTS

Doubt and internal conflict

All the interviewed Ca-patients, as well as MI-patients, had thought about the cause of their illness. Most of them found at least one cause: 31 out of the 34 Ca-patients and 12 out of the 14 MI-patients. Their accounts of the origin of their illness were examined for expressions of doubt (Table 1).

On the basis of these findings, one can presume that Ca-patients do not differ from MI-patients in doubting their explanations. There was a striking difference, however, in the way in which the 43 participants expressed their doubt. Twenty-three out of the 31 Ca-patients had two kinds of explanations: a medical account as well as an idiosyncratic one, based on their autobiography. Eleven out of the 12 MI-patients had only one story; that is to say, an informal story based on medical stereotypes.

Ca-patients more often hesitate between two different causal attributions. For instance, a 45-year-old woman suffering from breast cancer expressed her attributions in a way which appears very characteristic for Ca-patients:

"As a biologist, married to a biochemist, I know something about cancer processes . . . more than most people anyway. But that doesn't mean I know everything about it . . . I don't have a proper explanation for my own illness, although . . . I've been through so many things. In 1979 something awful happened: my father died. Of course, a lot of fathers died that year. But that doesn't mean to say that . . . although it is possible, isn't it? It must have quickened the process anyway."

She considers this so-called life event (father's death) as one of the most important causes of her breast cancer. But thinking about the death of other fathers whose daughters did not get breast cancer brings doubt. Her knowledge of statistical probabilities undermines her own theory. Nevertheless, she decides that the death of her father really did contribute to her cancer. It is striking that she expressed belief as well as disbelief in her causal attributions in two consecutive sentences. This is an indication of an internal conflict.

The nine MI-patients who showed doubts about their causal attributions, gave us an account which

Table 1. Expressions of doubt in patients' causal attributions

	Ca-patients	MI-patients
Doubt	22	9
No doubt	9	3
Total	31	12

corresponded with the story of a 57-year-old inspector of an insurance company. His ideas about the origin of the infarction were:

" . . . my fatness could have been the cause of my infarction. I also had trouble with high blood pressure. . . "

He mentioned two causes within one account. Together they could have caused his infarction.

Conflicts with others

When our participants described the causes they attributed to their illness, they were asked if they had discussed these cognitions with anyone else. Table 2 shows the answers to this question. Pronouncedly more Ca-patients (13 out of 31) than MI-patients (2 out of 12) felt free to talk about their explanation for the genesis of their illness for the first time.

Reactions of the physicians. Ten out of the 13 Ca-patients who did talk about their explanations with others also discussed the causes with a physician. In nine cases the physicians dismissed the causes they—the patients—suggested, or said they should not think and worry like that. A 30-year-old man suffering from Hodgkin's disease told his medical specialist that according to him eating the wrong food in his entire life had been the cause of his illness. He had read a booklet on the so-called Moerman therapy* and now asked his physician for advice. He wished to follow the diet as part of his therapy. "The physician laughed, and said: you'd be better off eating a nice steak." The patient told us that at that moment he had had a strong feeling that he was not being taken seriously.

Only one out of the 10 patients had been satisfied with the reaction of her physician. Although this physician did not share the patient's beliefs in psychological causes, he showed respect for them and even helped her to find a psychotherapist.

The three patients who had not told their physicians about their attributions said they did so because they feared a lack of understanding from their physicians. (While many patients experience dissatisfaction with this aspect of the doctor-patient relationship, this does not mean that they are also dissatisfied with their physicians in general.)

Six out of the 10 MI-patients, who had mentioned their explanations to others, had also discussed it with their physicians. In none of these six cases did

Table 2. Did the patient discuss his ideas with others?

	Ca-patients	MI-patients
No	13	2
Yes	13	10
No material for this question	5	0
Total	31	12

*Dr C. Moerman, a Dutch physician, supposes that cancer cannot develop in a body which is functioning optimally. The following materials are necessary for optimum health: iodine, citric acid, iron, sulphur, and the vitamins A, B-complex, C and E. On the basis of these materials a strictly vegetarian diet has been developed for cancer: the so-called Moerman diet.

we discover a conflict. For the most part they derived their explanation from their physicians, whose questions during the anamnesis inferred possible explanations. So the MI-patients built up their own *informal*, medical story based on medical insights. To illustrate this, part of an interview with a 47-year-old technician is given:

MI-patient: "I suffered from a high pulse rate and high blood pressure; my cholesterol level was also a bit too high. And I'm a hyperactive person. But no one would know. My adrenal gland works too hard and produces too much adrenalin. That triggers an immune response and that means more cholesterol."

Interviewer: "So you literally eat yourself up from the inside?"

Patient: "Yes, in every way. I can't turn a blind eye to other people's faults, even when I'm fond of them. Still I'm always frightened to say something about them, frightened I'll hurt them."

So he keeps his mouth shut, and feels psychological stress afterwards. The elements of this explanation are partly derived from his physicians, and partly from searching in a public library. With these elements he built his own informal medical explanation.

It seems that the four MI-patients, who did not discuss their causal attributions with their physicians, did so because they felt no need to. They had derived these attributions from their physicians and therefore already knew what the latter were thinking about it.

Reactions of close relatives. Out of the 13 Ca-patients and 10 MI-patients who had discussed the cause of their illness with others, respectively 11 and eight had talked about it with their partners or some close relative. The partners of these eight MI-patients shared their views. In the case of the Ca-patients four of them had an overt conflict with their partner about the origin of the cancer. For example the breast cancer patient, who is a biologist by profession and who attributed her cancer to her father's death, had such a conflict. Her husband absolutely disagreed with her; he strongly rejected her psychological attribution and called it a fairy tale. She, however, had no intention of changing her opinion. They argued with each other about the origin of her disease.

DISCUSSION

Substantial differences were discovered between the causal attributions of Ca-patients and MI-patients. Most of the Ca-patients have two kinds of accounts by which they try to understand and accept their illness: a formal, medical story and an informal, idiosyncratic one. The MI-patients formed only one: an informal, medical explanation. How can we explain this difference and what does it mean?

First of all, there are many myths and rumours going around about the aetiologies of the diseases called cancer. The word cancer refers to more than just the disease. Cancer is "anything that frets, corrodes, corrupts, or consumes slowly and secretly" says the Oxford English Dictionary. The metaphorical meanings and associations of cancer are so bad that it can be fundamentally health destroying [22].

Negative associations are never evoked by diseases of the heart. In popular as well as in scientific literature Ca-patients are often represented as victims

of their disease. This victimization does not exist for MI-patients. On the contrary, MI-patients talked to us about hard work and the psychological stress it causes. Unhealthy life habits are counterbalanced by pride for the same behaviour. This may be one reason why the explanatory accounts of cancer patients and MI-patients differ fundamentally.

Another reason may be the lack of scientific knowledge about the cause and course of most types of cancer. Doctors cannot give Ca-patients a satisfactory explanation for their illness. The formal medical story, therefore, is insufficient. Ca-patients are thrown back upon common-sense models and their own imagination, which force them to *search in their autobiographies* for a reason why. This cognitive activity often provides them with very personal and idiosyncratic stories to which they hold on in addition to the formal, medical one.

The creating of causal attributions by MI-patients proceeds in a different way. Their physicians hand them the possible causes of the disease in the very questions they ask them during the medical examination. These questions refer to eating, smoking, drinking and other habits which, in the physician's opinion, form the greatest risks for an infarction. Out of all the possible causes offered during this examination, we suspect that MI-patients *check* what fits *in with their autobiographies* and construct an informal, medical explanation based on these cognitions.

Ca-patients and MI-patients have to turn to different sources (resp. autobiography and physician's questions) and, therefore, end up with different kinds of causal attributions. This may be the reason why Ca-patients experience the three conflicts uncovered by our research material.

Doubt and the internal conflict

Ca-patients as well as MI-patients have doubts about their causal attributions. MI-patients doubt whether the known risk factors for an infarction hold in their own case. Some of these factors will be considered as possible causes. Ca-patients have two kinds of explanation for the origin of their illness; a formal medical one and an idiosyncratic one. These two versions fill them with ambivalence. They are caught between belief and disbelief and therefore subject to an internal conflict.

Conflict with the physician

Whereas Ca-patients have to search in their autobiographies to find a reason for their illness, MI-patients can confine themselves to checking the questions of their physicians. It is not surprising that the idiosyncratic belief of Ca-patients are in conflict with the unsure aetiological belief of their physicians. It is striking that so many Ca-patients (13 out of 31) have never talked about their causal attributions with anyone else. They probably anticipate this conflict and wish to avoid it.

Conflict with the partner or close relatives

The 13 Ca-patients who had not discussed their causal attributions with someone else, also withheld it from their nearest relations. Sometimes this is quite understandable, for partners and close relatives often play a role in the stories about the cause of the illness;

they can be blamed in the explanations. For example, a 48-year-old breast cancer patient told the interviewer about a habit of her son when he was only a small boy. He always wanted to sit on her lap, and then, while he was humming, he bumped his head rhythmically against the breast which was amputated 15 years later. By never talking about her attribution she keeps off an overt accusation and a possible conflict with her close relatives. There may be another reason why these Ca-patients did not talk about their causal attributions. They think their relatives will be on the physician's side. They expect them to support the formal medical view and to reject their idiosyncratic belief.

In spite of these three conflicts, the Ca-patients keep to their own stories, be it often secretly and with ambivalence. Apparently they are very important to them.

Until now no research has been done on the ambivalences Ca-patients experience with regard to their causal attributions. It is recommended that this subject is researched in the future.

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REFERENCES

1. Taylor S. E. Adjustment to threatening events: a theory of cognitive adaptation. *Am. Psychol.* **38**, 1161-1183, 1983.
2. Wong P. T. P. and Weiner B. When people ask "why" questions, and the heuristics of attributional research. *J. Person. soc. Psychol.* **40**, 650-663, 1981.
3. Bulman R. J. and Wortman C. B. Attributions of blame and coping with the "real world": severe accident victims react to their lot. *J. Person. soc. Psychol.* **35**, 351-363, 1987.
4. Koslowsky M., Croog S. H. and Lavoie L. Perception of the etiology of illness: causal attributions in a heart patient population. *Percept. Motor Skills* **47**, 475-485, 1978.
5. Janoff-Bulman R. Behavioral versus characterological self-blame: inquiries into depression and rape. *J. Person. soc. Psychol.* **37**, 1798-1810, 1979.
6. Silver R. L., Boon C. and Stones M. H. Searching for meaning in misfortune: making sense of incest. *J. Soc. Issues* **39**, 81-102, 1983.
7. Bout van den J. *Verliesgebeurtenissen in Attributietheoretisch Perspectief*. Eburon, Delft, 1986.
8. Shands H. C., Finesinger J. E., Cobb S. and Abrams R. D. Psychological mechanisms in patients with cancer. *Cancer* **4**, 1159-1170, 1951.
9. Abrams R. D. and Finesinger J. E. Guilt reactions in patients with cancer. *Cancer* **6**, 474-482, 1953.
10. Bard M. and Dyk R. B. The psychodynamic significance of beliefs regarding the cause of serious illness. *Psychoanalyt. Rev.* **43**, 146-164, 1956.
11. Klein R. A crisis to grow on. *Cancer* **28**, 1660-1665, 1971.
12. Dempsey G. M., Buchsbaum H. J. and Morrison J. Psychological adjustment to pelvic exenteration. *Gynaecol. Oncol.* **3**, 325-334, 1975.
13. Mastrovito R. C. Cancer: awareness and denial. *Clin. Bull.* 1974.
14. Asken M. J. Psycho-emotional aspects of mastectomy: a review of recent literature. *Am. J. Psychiat.* **132**, 56-59, 1975.
15. Peck A. Emotional reactions to having cancer. *Am. J. Roentgen.* **114**, 591-599, 1972.
16. Moses R. and Cividali M. Differential levels of awareness of illness: their relation to some salient features in cancer patients. *Ann. N.Y. Acad. Sci.* **125**, 984-994, 1966.
17. Timko C. and Janoff-Bulman R. Attributions, vulnerability and psychological adjustment: the case of breast cancer. *Health Psychol.* **4**, 521-544, 1985.
18. Taylor S. E., Lichtman R. R. and Wood J. V. Attributions, beliefs about control and adjustment to breast cancer. *J. Person. soc. Psychol.* **46**, 489-502, 1984.
19. Cook Gotay C. Why me? Attributions and adjustments by cancer patients and their mates at two stages in the disease. *Soc. Sci. Med.* **20**, 825-831, 1985.
20. Kroode H. ten. De oorzaken van de ziekte: gedachten van kankerpatiënten. *Metamedica* **66**, 428-440, 1987.
21. Elias N. Problems of involvement and detachment. *Br. J. Sociol.* **7**, 226-252, 1956.
22. Nancarrow Clarke J. *It's Cancer*. IPI, Toronto, 1985.