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CANCER AND CAREGIVING: THE IMPACT ON THE CAREGIVER’S HEALTH

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SUMMARY

A diagnosis of cancer affects not only the patient but also their significant others, especially when a lot of care tasks are involved. Some caregivers perceive the care as a burden, while others consider it a challenge. In this article, findings concerning the impact of cancer caregiving on informal caregivers will be described. No consistent results are reported, and little is known about patterns of caregiving changes in relation to the course of the patient’s illness. Attention will be given to factors which have been identified as influencing the course and consequences of caregiving. These factors form the basis of a conceptual research model for caregivers of cancer patients. As cancer progresses, care tasks are generated, which can be perceived by the caregiver as either negative (i.e. burden) or positive. Furthermore, these caregiver experiences may lead to negative as well as positive effects on the caregiver’s health and these relationships can be assumed to be bidirectional. © 1998 John Wiley & Sons, Ltd.

INTRODUCTION

Recent health policy is shifting its focus from professional to informal care. An escalating trend is the early discharge of hospital patients. With a high and still growing percentage of elderly, and an increasing prevalence of chronic diseases, family members form a substantial part of the care system. Studies have shown that informal caregivers already provide an average of 55% of the care needed (SCP, 1994).

Cancer is a major disorder which affects many people, directly or indirectly. According to the 1993 report of the American Cancer Society, it was estimated that one in three people living in the USA will be diagnosed with cancer at some point in his or her lifetime, and one in five deaths will be attributable to this disease (American Cancer Society, 1993). Nearly half of all the newly diagnosed cancer patients will survive longer than 5 years. The course of cancer is shifting from an acute disease with a prompt outcome, usually death, to a chronic disease with long-term treatment often implemented in home settings with a continuing need for care. Health policy, demographic trends and medical-technological developments will lead to an expansive involvement of the informal care system of cancer patients.

A diagnosis such as cancer influences not only the patient but also the significant others in many respects. Several studies have shown that patients and their partners reported higher levels of psychological distress as compared to the general population, and that patients and their partners did not differ significantly in their levels of distress (Northouse and Stetz, 1989; Oberst et al., 1989). Not only the diagnosis itself, but also the subsequent course of the illness may influence the current level of health. Cancer includes multiple physical needs, intense psychological distress
manifested by pain, anxiety and depression and restrictions in social and sexual functioning. Alterations in a patient’s functional ability, bodily functions, appearance, employment status, sexual functioning, family and social role have a direct impact on the caregiver. Informal caregivers may face existential concerns that force them to re-evaluate their future, which may lead to changes in life goals. Cancer patients are a group in which care needs can be expected to increase over time, and as a consequence, problems raised by giving care as experienced by caregivers may change as the disease progresses (Northouse, 1984). Additional stress can be experienced by having to ‘stand by’ and observe the disease progress while being unable to alter or manage the illness (Stetz, 1987). It can be questioned to what extent caregiving to cancer patients is burdensome or may lead subsequently to feelings of depression.

Most research in the field of caregiving concerns family members of patients of frail elderly, or patients with mental disorders, such as dementia, or schizophrenia (Zarit and Toseland, 1986; Leff et al., 1986; Baumgarten, 1989; Pot and van Dyck, 1995; Schulz et al., 1995). In general, caregivers are defined as ‘primary care providers’, often referring to network members, such as the partner, parent, sibling or child. This article addresses available studies on the caregiving situation, with specific focus being placed on caregivers of cancer patients. Studies are traced by literature databases (PSYCHINFO and MEDLINE) for the period 1980–1996. At first, the main key words ‘caregiving’ and ‘burden’ were entered to select studies. Later the key word ‘cancer’ was included. Although this article does not claim to be exhaustive, it certainly includes the most important findings in the field of caregiving. Since research on caregiving to cancer patients is sparse, gerontological research will also be discussed to present the overall consequences of caregiving.

The aim of this paper is to develop a conceptual framework, which is meant to provide a guideline for examining the caregiving process. Special attention will be given to the definitions and operationalisations of two main concepts which play a central role within the caregiving situation, namely care tasks and caregiver experiences (i.e. burden and positive aspects).

IMPACT OF CAREGIVING: CARE TASKS AND CAREGIVER BURDEN

Both objective and subjective components of the care situation can be distinguished (Montgomery et al., 1985), with the former reflecting (changes in) care tasks and the latter reflecting the experience of (changes of) this situation (i.e. caregiver burden). Terms such as ‘care involvement’, ‘care demands’ and ‘objective care activities’ are used to refer to all different types of care tasks (Stetz, 1987; Given et al., 1993). These tasks can be categorized into amount, frequency, duration and/or different types of care. Most frequently, types of care tasks are divided into: assistance with self-care, mobility, and symptom management of the patient, financial management and/or conducting medical care tasks. Emotional care tasks, such as providing social support, assistance with decision-making, and providing and seeking information, are seldom defined as a specific type of care task. ‘Caregiver burden’, ‘strain’, or ‘role strain’ are generally used to refer to the physical, psychological, social and/or financial reactions that can be experienced in giving care (Zarit et al., 1980; Cantor, 1983; Robinson, 1983; Poulshock and Deimling, 1984; Given et al., 1992). A multi-dimensional construct measuring this perceived impact of caregiving is most frequently used.

Findings suggest that the type of help provided may be a more salient predictor of burden than the total number of tasks or the care task hours. The more confining the care tasks are (i.e. the less time-flexible and the more disruptive they are to the caregivers’ schedule), the more they create burden (Given et al., 1990). Personal tasks (e.g. feeding and washing the patient) seem to be perceived as more difficult and burdensome than nonpersonal tasks (e.g. doing the groceries) (Horowitz, 1985). Specific care tasks may also have differential effects on burden. For example, providing emotional support to the patient proved to be the most time-consuming and difficult task to perform, and therefore this kind of task did receive the highest burden score in a study among family members of cancer patients receiving chemotherapy (Carey et al., 1991).
NEGATIVE AND POSITIVE ASPECTS OF CAREGIVING

Implicitly, the term ‘burden’ reflects a negative approach towards experiences of caregiving. Although most research has focused on negative experiences of giving care, more and more studies also report on the beneficial effects (Kinney and Stephens, 1989; Lawton et al., 1989; Motenko, 1989). There are several reasons to believe that experiences of caregiving can also be positive and that it might be worthwhile to investigate their effects on health. Firstly, recognition of positive experiences, in terms of love, affection, rewards, challenge, meaning, commitment, purpose in life or joyful events (Horowitz, 1985; Oberst et al., 1989; Carey et al., 1991; Folkman et al., 1995), may increase the caregivers feelings of pride in their ability to meet challenges and improve their sense of self-worth (Motenko, 1989). Secondly, caregiving may also define identity and involvement to one’s society and thereby maintain well-being. Furthermore, understanding positive aspects and identifying predictors of positive outcomes may provide information to enhance theories, and clues as to how enhance or increase positive aspects or may identify caregivers who are less likely to need intervention.

The operationalisation of aspects of caregiving that are experienced as positive vary enormously. At first, positive aspects were part of more global burden scales (Zarit et al., 1980; Poulshock and Deimling, 1984). In more recent studies, positive aspects were more explicitly defined and measured, such as uplifts (Kinney and Stephens, 1989), gratification (Motenko, 1989), caregiver self-esteem (Given et al., 1992), appraisal, satisfaction, mastery and ideology (Lawton et al., 1991). As yet, whether these positive experiences of caregiving lead to more positive or to less negative health effects is inconclusive. Kinney and Stephens (1989) argued that caregivers, who were most intensely involved in caregiving, might have greater opportunity to derive satisfaction from caregiving. Folkman et al. (1995) reported that caregiving may improve the quality of relationships between caregivers and care recipients, and this may contribute to self-esteem. They also showed that most caregivers are unlikely to experience positive and negative experiences at the same moment, but in many individual caregivers a shift in the direction of their feelings, reactions and consequences of caregiving occurred. Lawton et al. (1989) reported that caregiver satisfaction was not strongly related to burden. However, as mentioned before, research concerning positive aspects of cancer caregiving is in its infancy. It is plausible that some positive aspects may decrease feelings of being burdened, and subsequently lead to a positive effect on health outcomes.

CAREGIVING AND HEALTH

Since specific care tasks may have differential effects on burden, it is likely that specific care tasks may also have differential effects on health. Questions such as at what moment and to what extent (changes in) different types of care tasks relate to the caregiver’s overall health outcome are an interesting topic of research. Although it seems evident that patient dependency is directly related to care tasks, the effect of (different types of) care tasks on caregiver health is less clear. Studies among the frail elderly have consistently shown that, as the level of functional and mental impairment of the care receiver increases, so does the amount of assistance provided by the caregiver (Horowitz, 1985). However, the majority of studies demonstrated that neither severity of patient impairment, nor type of illness, patient’s symptoms, nor duration of caregiving are significantly related to negative effects on the caregiver’s health (Stetz, 1987; Cattanach and Tebes, 1991; Wright et al., 1993). For example, in the study of Gilhooly (1984) among persons caring for a demented relative, it was found that (1) level of patient’s impairment was not associated with the caregiver’s health and (2) the longer the duration of caregiving, the better the caregiver’s health. The need to examine the role of conditioning or intervening variables is justified by the absence of consistent relationships between independent variables such as patient impairment (e.g. ability to perform tasks) and caregiver health. In this sense, the perception of care tasks, in terms of caregiver burden or positive aspects, may be worthwhile studying in order to explain overall health outcome in the caregiving situation.

Although, George and Gwyther (1986) argued that burden and health are actually the opposite sides of the same coin, current studies agree that it is important to make a distinction between the concepts of burden and health concerning the
Impact of caregiving (Stull et al., 1994; Stuckey et al., 1996). Burden seems to represent a unique domain of the caregiving situation and is considered to be sensitive to caregiving specific demands, whereas health is considered to be an overall outcome, which can be viewed as the end result of the caregiving process. Evidently, the factors of burden and health are related to each other (Stuckey et al., 1996). Whether the impact of caregiving burden leads to an effect on health or whether health leads to an effect on burden is unclear. Viewing the conceptual models which have been used to guide caregiving research, burden is generally stated as a predictor of health and likely to have an adverse impact on an caregiver’s future (Lazarus and Folkman, 1984; Pearlin et al., 1990). However, in the study of Stommel et al. (1990) among families of the demented elderly, no effect of burden on health was observed, but health, in terms of depression, was found to predict burden. This was also reported by Pruchno et al. (1990) in their study among spouses caring for the demented elderly. In the field of oncology, longitudinal studies on the caregiving situation concerning causal relations are scarce.

In studies on caregiving outcomes, two general dimensions of health are distinguished, namely psychological and physical health. Studies focusing on psychological health effects in caregivers show increases in psychological symptoms, such as depression, anxiety and emotional distress (Oberst and James, 1985; Schulz et al., 1987; Holland, 1989; Northouse and Stetz, 1989; Given et al., 1993). Schulz et al. (1990) reviewed the literature on the psychiatric and physical morbidity effects of caregiving. Their review indicated a higher level of psychiatric symptomology and illness in caregivers when compared to population norms. In a study among cancer patients receiving chemotherapy, it was found that a patient’s level of dependence and depression were related to the caregiver’s daily schedule and depression. No relationship was found with the caregiver’s physical health (Given et al., 1993). Studies of the physical health effects of caregiving are less conclusive but suggest increased vulnerability. Generalized fatigue (Jensen and Given, 1991), and a wide variety of physical problems have been reported by partners of cancer patients, such as food intolerance, exacerbation of medical conditions, exhaustion and indigestion (Oberst et al., 1989).

More studies are needed to examine the separate relations between the different type of tasks, caregiver experiences (i.e. burden and positive aspects) and health dimensions. We suggest that these should include both the physical and the psychological dimensions of health.

CONTEXTUAL FACTORS IN THE CAREGIVING PROCESS

Numerous correlates and effects of caregiving have been reported (see for reviews Baumgarten, 1989; Wright et al., 1993; Schulz et al., 1995), which hampers drawing overall conclusions. Most studies include sociodemographic characteristics and social support within the caregiving situation, while a smaller group of studies has identified factors, such as patients’ and partners’ health prior to the care situation (Stommel et al., 1990), quality of the relationship (e.g. marital satisfaction (Fuller and Swendsen, 1992) and personality factors, such as mastery (Pearlin et al., 1990), optimism and neuroticism (Hooker et al., 1992).

Sociodemographic characteristics include variables like age, gender, living situation, type of relationship, and socioeconomic status of both the care recipient and caregiver. Relatively consistent findings were reported regarding gender (Zarit and Toseland, 1986; Barusch and Spaid, 1989; Miller and Cafasso, 1992), age (Mor et al., 1994), co-residence and the type of relationship between the care recipient and caregiver (Horowitz, 1985; George and Gwyther, 1986; Young and Kahana, 1989). Women, especially those at a younger age, tend to perceive caregiving as more negative than (older) men and report higher levels of psychological distress (Zarit et al., 1989; Blood et al., 1994), even if the amount of care provided and/or the level of patient’s health is controlled (Horowitz, 1985). Compared to other informal caregivers, female caregivers and partners are identified as the most vulnerable group of caregivers. Moreover, partners are stated to provide the most extensive and comprehensive care (Horowitz, 1985) and are less likely to receive assistance. These caregivers often feel ultimately responsible for coordinating the care and make minimal use of professional services (Oberst et al., 1989). Partners, as compared to other caregivers, are likely to experience more strain (Cantor, 1983), they may become ill themselves (Schulz et al., 1987) and they may experience higher levels of psychiatric symptoms (George and Gwyther, 1986).
Caregivers with a relatively low socioeconomic status are assumed to report a higher burden, and subsequently a poorer health (Montgomery et al., 1985). A negative relationship between income and caregiver outcomes has been observed for only certain types of caregivers (i.e. partners), whereas other types of caregivers report no relation (George and Gwyther, 1986). Biegel et al. (1994) did not find any relationship between socioeconomic characteristics and caregiver burden. For examining the role of socioeconomic status, the costs for providing care (Stommel et al., 1993), time for job performance and time available for caregiving also need to be considered. Stommel et al. (1993) stressed that the costs for providing care are usually underestimated.

Attention to the role of social support within the caregiving process is growing extensively. In general, research shows that social support can have a positive effect on health (De Ridder and Scheurs, 1994). Studies revealed that the impact of support is related to its timing, its source (Ros, 1989; Hileman et al., 1992), its type (Thompson et al., 1993) and its perception (Dakof and Taylor, 1990). In particular, the support provided by the partner plays a major role in the patient’s adjustment to cancer (De Ruiter, 1995). Likewise, support from the patient towards the partner may be assumed to play an important role too. Several authors stress the point of unhelpful support, especially within a marital relationship (Siegel et al., 1991; Buunk and Hoorens, 1992). In studies of spouses of mastectomy patients, men were found to be deeply emotionally engaged, but they were hiding it, and were playing a protective, reassuring, minimizing role (Sabo et al., 1986). These men assumed this to be the most supportive behaviour, but their wives interpreted this as rejection and insensitiveness. Well intended support from partners’ attempts often fail to such a degree, that they actually increase health problems (Rait and Lederberg, 1990). However, the relationship between social support and health is not clear and it is likely that poor health and the perception of social support influence each other reciprocally. The role of social support within the caregiving process in particular is even more ambiguous. Caregiving can be very time-consuming and caregivers frequently lack the time to develop supportive relationships. If caregiving responsibilities lead to social isolation (Siegel et al., 1991), caregivers will depend mainly on their care recipients for support (DesRosier et al., 1992).

In a sample of frail elderly, the availability of social support and social contacts was found to be an important determinant of caregiver’s well-being (Schulz et al., 1987). In a study among family caregivers of frail elders the relationships between six different types of social support and five measures of caregiving burden was assessed (Thompson et al., 1993). Not all types of social support were found to be equally associated with burden. Intimate interaction and confiding, positive feedback, as well as tangible assistance were observed to be unrelated with burden, while engaging in social interaction for fun and recreation appeared to be the most important in diminishing the burden of caregiving.

**CAREGIVING PATTERNS OVER TIME**

Several studies show that caregiving is a dynamic, ongoing process, for which there may be several trajectories (Oberst and James, 1985; Schulz and Williamson, 1991; McCorkle et al., 1993). Care tasks, caregiver burden and caregiver’s health may fluctuate in response to changes in the patient’s health. Caregiving-related health problems may steadily and uniformly increase, i.e. caregiver’s physical and psychological stamina will be depleted along with the exposure to multiple and long-term stressors (Pearlin et al., 1990). This basic idea has been described as the **downward trajectory** or **wear-and-tear model** in a model of Williamson and Schulz (1993) (see Figure 1). This might suggest that personal and social resources are insufficient to maintain prior levels of the caregivers’ health.

Alternately, it is possible that the gradual initial decrement in caregiver’s health is followed by recovery to prior levels (**gradual decline and recovery**). This might be the case if caregivers are able to acquire skills and resources to cope effectively with demands of caregiving. Also, negative health effects may be high when cancer is diagnosed, and subsequently decrease and stabilize with time (**decline and stability**). These **adaptational trajectories** were found in correlation studies among persons caring for a demented relative, in which higher levels of caregivers’ psychological health were associated with longer durations of caregiving (Zarit et al., 1980; Gilhooley, 1984). Also probable is the situation in which the caregiver’s health improves during the course of the patient’s illness (**gradual**
improvement). This can be a reflection of the positive effects of caregiving or an increased availability of social-support resources. Moreover, it could be assumed that caregivers who were coping poorly had their relatives institutionalized and only the ‘best copers’ persisted as primary caregivers. This pattern can be described as the upward trajectory. Most studies among caregivers of elderly or cognitively impaired persons showed no changes in caregivers’ health at all (stability) (Pruchno and Resch, 1989; Schulz and Williamson, 1991).

Research on the responses of and consequences for caregivers of cancer patients reveals that health effects have to be examined in relation to the stage of illness the patient is going through (De Ruiter, 1995). Northouse and Stetz (1989) suggested that the course of cancer can be divided into three stages, the initial phase, the treatment phase and the adaptational phase. Although all three phases lead to considerable anxiety and pressure for significant others (Blood et al., 1994), the treatment phase is stated as the most stressful phase (Northouse, 1984). Directly after a diagnosis like cancer, emotional and informational support may be needed most. During periods of active treatment, assistance with patient’s self-care, transportation, procedures, medication and symptom management seems to be needed (Given et al., 1993). More and more researchers emphasize the importance of including the early phases of the illness in studying caregiver’s health (Zarit and Toseland, 1986; Northouse, 1988; Given and Given, 1991; McCorkle et al., 1993). Moreover, Schulz and Williamson (1991) stated that it would be ideal to obtain data from caregivers in advance to taking on the caregiving role, so that the effects on health of becoming a caregiver can be established. The moment of taking on the role as caregiver or in occupying other roles is not well-defined, and therefore hard to study. In the case of cancer, patients may be in need of care long

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Figure 1. Patterns of partners’ health in relation to the demands of caregiving (Source: Schulz et al., 1990).
before diagnosed. Although not necessarily, in most studies the time-frame of the caregiving situation is usually fixed at the moment the diagnosis is made, and the primary caregiver also maintains their role during the process of cancer.

The present research on the consequences of cancer caregiving to caregivers is suggestive, rather than conclusive. In a review, Laizner and colleagues reported that at 3 months following the hospital discharge of cancer patients, 68% of the caregivers felt that they had to be available to patients for 24 h a day (Laizner et al., 1993). In a study among laryngeal cancer patients and their partners, it was found that caregiver burden decreased as time since diagnosis increased. Changes in caregivers' health were not reported, and burden was found to be unrelated to caregivers' health (Blood et al., 1994). In a study among terminally ill cancer patients and family members, no significant effects of the duration of caregiving were found on outcomes of caregiving (Yang and Kirshling, 1992). In a sample of patients who underwent surgery for either colon or bladder cancer, partners showed significantly higher levels of anxiety than patients. These emotional problems peaked 60 days after discharge and remained a problem for most partners up to 6 months after discharge (Oberst and James, 1985). In a similar patient population, it was found that the incidence of partners' somatic complaints, such as fatigue, aches and pains began to rise between 30 and 60 days after the patient returned home (Oberst and Scott, 1988). Baider and Kaplan De-Nour (1984) also noticed an increasing burden in spouse caregivers over time in addition to treatment. However, McCorkle et al. (1993) reported that even though patients improved in time, their caregivers continued to report similar levels of burden. Patients' health was strongly related to caregivers' financial impact, impact on schedule, and physical caregiving tasks.

As yet, there is no evidence to validate the precise effects of caregiving for cancer patients on caregivers over time. Primarily, it can be expected that giving care to patients with cancer depends on the phase of the disease and the needs of the individual patient. A possible assumption is that, immediately and shortly after diagnosis, caregivers may predominantly experience psychological symptoms, while in the long run (e.g. at 6 months) physical consequences of caregiving may also appear.

A CONCEPTUAL FRAMEWORK OF THE CAREGIVING PROCESS

The cognitive stress theory of Lazarus and Folkman (1984) is frequently used in caregiving research. According to this theory, contextual elements, as well as perceptions of the situation, play a major role within a stressful situation, such as the caregiving process. The extent of the experienced stressful situation does not depend solely on the demands of the situation or on the personal and social resources of the person, but rather on the relationship between demands and resources as perceived by the individual. The assumption underlining this theory is that the individual's unique perceptions of the illness-caregiving situation are more likely to explain outcomes than sociodemographic or patient-illness characteristics alone. This theoretical approach may guide interpretations of relations between caregiving aspects and overall outcomes of caregiver's health. Following Pearlin et al. (1990), three key components of the cognitive stress theory are said to be involved in the caregiving process, namely (1) stressors, (2) outcomes, and (3) potential mediators. Stressors refer to the patient's physical and psychological health, and associated care tasks. Outcomes refer to the caregiver's physical and psychological health. Social support can be stated as a potential mediator. Caregiver burden can be seen either as a stressor or a mediator. These five concepts may provide a useful framework for describing the caregiving process and for explaining outcome differences in caregivers' burden and health (see Figure 2). It can be assumed that as the course of cancer proceeds, the patient's health changes and subsequently care tasks are generated. Here, the perception of these tasks is conceptualized as caregiver experiences, i.e. caregiver burden and positive aspects. Furthermore, it can be assumed that caregiver experiences may lead to an effect on the caregiver's psychological health and physical health or vice versa.

CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

Cancer can increasingly be characterized as a chronic disease with considerable, continuing and fluctuating specific needs and problems for pa-
Figure 2. Conceptual framework of the caregiving process.

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