

The effect of parental cancer on children

Sarah Dakin

6th Year Medical Student
School of Medicine
University of Auckland

Sarah is a final year medical student at the University of Auckland and will be based at Gisborne Hospital for her PGY1 year. She is interested in emergency medicine and general practice. Her a cappella group recently came first in the division at the 2016 Pan Pacific Youth Harmony Championships.

ABSTRACT

The effect of cancer on a patient is widely appreciated and studied, while the effect on the rest of the family unit is often overlooked. As children develop, a number of challenges may threaten the attainment of developmental goals. Parental cancer has the potential to disrupt the appropriate development of children and lead to psychosocial impairment. Evidence suggests an increased prevalence in negative internalising behaviours in children with parental cancer; although differences are seen between primary aged children and adolescents, as well as males and females. Understanding the potential negative impact parental cancer can have on children, and recognising modifiable factors that may precipitate these effects, will allow for the development of targeted interventions. Clinicians involved in the management of a parent with cancer should consider the needs of the family unit as a whole and facilitate open communication within these families.

BACKGROUND

Approximately 22.4% of cancer occurs in those aged between 21 and 55.¹ As these are key child-bearing years, a significant number of cancer victims have children.¹ Despite this, current treatment plans often fail to recognise the impact of cancer on the psychosocial wellbeing of the children involved. The family can be theorised as a system, in which an event in one family member's life can affect the behaviour and psychological function of other family members.^{2,3} This theory suggests that members of a family cannot be understood in isolation from each other.³ In accordance with these findings, literature in the last twenty years has become more focused on the challenges that cancer presents to other family members, and in particular, the children.⁴ This review aims to explore the impact parental cancer has on children, and the factors that are believed to influence the psychosocial adjustment of these children.

METHODS

A search of the literature was conducted in June 2014, using Medline and PsychInfo. Articles were limited from the year 2000–present. Search terms included "parental cancer", "child psychology", and "child behaviour". Inclusion criteria were publication in English, published from 2000–present, and on the subject of parental cancer and psychological adjustment. Abstracts were scanned to find articles that met these criteria. Included articles were mainly reviews. Studies were excluded if the full text was not available via the University of Auckland subscription, or the children had cancer. Studies were not required to meet a quality standard due to the narrow field of research.

DISCUSSION

The children of cancer patients need to adapt to changes in routines and family dynamics. Often they bear increased responsibility, and may experience role reversal.^{2,5} The reactions that children have to parents with cancer are varied, unpredictable and may be reflected in all developmental domains.¹ Children may experience depression, anxiety, low self-esteem, increased symptoms of stress, feelings of abandonment, fear of losing a parent, fear of developing cancer themselves, anger, withdrawal, difficulty at school, and increased somatic symptoms such as insomnia, abdominal pain and fatigue.^{6,7} The true occurrence of these symptoms, however, is difficult to determine, and estimates vary between quantitative and qualitative studies. Furthermore, significant differences exist in the prevalence reported by children as compared to that reported by parents. Although there is a lack of long-term quality studies, it is evident that at least some degree of psychological impairment occurs in many children of parents with cancer. This impairment, however, appears to rarely be severe.⁸

As adolescents and primary-aged children are at different stages of development, differences may be seen in their psychosocial adjustment to a parent with cancer. Primary school-aged children are typically more concerned with the consequences of parental cancer on their day-to-day activities and hobbies, and may have significant difficulty expressing their emotions.² In contrast, adolescents are more cognitively and emotionally mature with a deeper understanding of death, and an increased ability to empathise. During adolescence, there is a developmental push to become more independent, autonomous, and form significant relationships outside of the family.² Developmental pressures during this time act to alter the adolescent's relationship with their parents. The drive to distance oneself from family is antagonised by the restrictions the illness imposes on the adolescent.² This conflict may make adolescents more vulnerable to impaired psychosocial adjustment, and may have a negative impact on their sense of individuality and identity.²

Studies have generally found that somatic complaints are increased in all ages of children of parents with cancer; but younger children show less emotional problems as compared to adolescents.¹ Many quantitative studies show that primary school aged children have no significant increase in emotional symptoms.⁶ Conversely, qualitative studies show increased distress, fear and stress-response symptoms in primary school-aged children.⁶ Furthermore, Visser *et al.* found that parents reported an increase in internalising behaviours such as anxiety and depression in their primary aged sons. It is suggested that young boys compared to young girls have a higher risk of developing internalising problems, possibly due to less mature social-emotional functioning.⁷ Quantitative studies typically have not shown any difference in the behavioural development of

younger children as compared to controls, but the results of qualitative studies vary.⁶⁻⁸ For example, different qualitative studies have reported withdrawal of younger children, increased family conflict, and increased supportive behavior in these children.⁶ Due to the varied nature of these results, more research is required before conclusions about young children can be drawn.

A systematic review published by Osborn indicated an increase in self-reported and parent-reported internalising problems such as anxiety and depression in adolescents of parents with cancer.³ This is supported by Huizinga *et al.* who indicated that adolescents aged 12–18 suffer from more emotional problems, symptoms of stress response and more somatic complaints than controls.⁸ Visser *et al.* also reported increased emotional symptoms in adolescents.⁶ A number of studies have suggested that adolescent daughters are more affected by parental cancer, especially with regards to psychosomatic and mood disturbances.^{3,6,7} Caution, however, needs to be taken in interpreting this, as many studies had a predominance of mothers as the affected parent. It has been suggested by Visser *et al.* that this finding may be due to daughters experiencing increased responsibility for care taking and household chores during a parent's illness.⁷ Another thought is that daughters, as compared to sons, tend to have stronger emotional connections with their mothers, and consequently take their mother's emotional burden on themselves.⁷ Interestingly, Osborn found that methodologically strong studies show no significant differences in self-reported or parent-reported externalising problems such as aggression in adolescents as compared to controls.³ This is supported by Visser *et al.* who indicate no difference in social and behavioural functioning in these adolescents.⁶ Visser *et al.* conclude that parental cancer is more likely to cause internalising problems rather than externalising problems in affected children of all ages.⁷

The literature supports gender and age as key factors that can influence a child's psychosocial adaption to parental cancer; but other factors are less well understood.⁸ There is little support for a relationship between the stage and severity of the cancer and the level of psychosocial impairment. Contrary to this, the intensity of the treatment regimen, such as the time between treatments and the necessity for chemotherapy may have some impact on a child's psychosocial function.^{3,8} The time since diagnosis of cancer is apparently unrelated.^{3,6} Osborn's systematic review indicates that poorer family cohesion, poorer communication and the child's role in the family prior to cancer onset may impact the prevalence of internalising emotional problems.³ Visser *et al.* emphasised the benefit of open communication in a family to child adjustment when a parent is affected by cancer.⁶ In general, adolescents appear to be well informed, whilst younger children are often misinformed or have false impressions of the illness.⁶ This may be because parents lack guidance on how to talk to their child, want to protect their children from the reality of their diagnosis, or believe their child is too young to understand.^{6,8} Studies, however, reveal the importance of communication to decrease stress and other psychological complications in children of all ages.^{6,8} Although studies on other chronic illnesses indicate a relationship between parental depression and child function, little evidence exists for cancer. Osborn found that mothers who reported depression in themselves, reported more total problems in their children, though this may be due to differences in detection.³ Visser *et al.* also suggest a positive correlation between parent and child psychological function.⁶

Understanding the relevant factors is key to identifying children at a high risk of psychosocial impairment, and may allow for the development of targeted interventions. Studies looking at child-centered interventions in parental cancer are mainly qualitative and have small sample sizes, therefore, larger and longer-term studies are required to further elucidate the effect of such interventions. These studies will not be reviewed formally in this article, however, are worth mentioning briefly. A systematic review by Niemela *et al.* summarised the current literature in this field.⁴ Child-centered interventions allow children to share their feelings openly and develop a full understanding of the illness, whilst also teaching coping strategies and improving family communication.⁴ Niemela *et al.* showed that children report positive experiences, less concerns and had lower depression scores with these interventions, although showed no change in the prevalence of depressive symptoms.⁴ Parents and counselors reported children were less angry and more able to express their feelings.⁴ The lack of studies and practices in this area may be a reflection of the limited evidence. In New Zealand, there is little specific support for the children of parents with cancer. The Waikato Hospice, and Leukemia and Blood Cancer New Zealand provide targeted support on their websites, but these services are limited. There is a current need in New Zealand to provide consistent support to children

affected by parental cancer nationwide. At the most basic level, New Zealand health care providers must recognise that parental cancer has an impact on all family members, and consider the children when managing a patient with cancer. This is supported by UK's National Institute of Clinical Excellence (NICE) which calls for the evaluation of a family's needs as a whole and the provision of psychological care services where appropriate when managing cancer.³

CONCLUSION

This review describes the current understanding of the effect that parental cancer has on children of different ages. The high number of children with parents with cancer constitutes a major reason for investigating these effects further. Although the evidence is derived from small sample numbers and in parts is quite variable, it is becoming increasingly apparent that the psychosocial development of children of cancer patients is threatened by the diagnosis. Despite this, authors such as Visser *et al.* have concluded that there is an increase in negative emotional internalising behaviours in adolescents affected by parental cancer.³ As the effect parental cancer has on children becomes clearer the clinicians must reflect this in their practice. The clinicians should consider the needs of the family as a whole by supporting open communication and promoting child wellness. Further research is required to determine significant risk factors for psychological impairment, to enable the identification of high-risk individuals and the development of targeted interventions. Despite significant need, New Zealand currently does not have standardised guidelines for family support resulting in heterogeneous and suboptimal results for families and children.

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