A broken heart:

the health consequences of spouse bereavement

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Loss of a spouse or partner can cause heartbreak, both in symbolic terms and expressed as physical symptoms. Recognition of a spouse or partner's loss and provision of appropriate services can help adaptation and prevent major health problems. Although grief reactions are expected, symptoms suggestive of cardiac disease should be investigated immediately.

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The death of a loved one or life partner is recognised as one of life's greatest stressors requiring significant adjustment, sometimes lasting several weeks to years and, for some patients, leading to severe and chronic psychological distress. Substantial evidence from the past decade reveals increased mortality during the first six months of grief among surviving spouses of both genders, especially in the late middle age and retired age bands.[1,2]

It is difficult to separate the influence of companionship from other common factors (such as the genome, diet, exercise and nicotine) that affect heart function. We continue to use the phrase 'heartbroken' when no such diagnosis appears on death certificates.[3] Could lack of companionship exert a toxic influence on our cardiac health?

A NEW GENERATION MOVES INTO RETIREMENT

A significant majority of single people of future decades will be the baby boomers (born in the two decades after World War 2) who have become divorced or bereaved. There are several reasons why they might be more vulnerable than their antecedent generation, including their higher expectations of health and material wellbeing (see the box on page 56). In addition, their sadness and loneliness could be accentuated by the reduced incidence of smaller and fewer traditional families, resulting in

REASONS WHY THE BABY BOOMER GENERATION ARE MORE VULNERABLE TO COMPLICATED BEREAVEMENT[5]

- Aspirations to high self-efficacy
- Comfortable material well-being
- Greater flexibility to pursue own pursuits
- Self-fulfilment expectations while working
- Aspirations of many to work into eighth decade
- 'Visceral reaction' to getting old
- Longer lifespan
- Possibility of shorter relationships: seek choice

potential loss of support during the early decades of retirement.[4]

Baby boomers are the first large group to move into retirement with significantly different family circumstances to previous cohorts. A recent survey identified that this group are three times more worried about illness, their ability to pay for health care and 'winding up' in a nursing home rather than dying.[5]

The Census of Population and Housing in 2006 revealed that 937,000 adults were registered as widowed in Australia, with the great majority being over the age of 55 years.[6] Short-term morbidity has been studied at intervals since the 1950s. These reports have generally listed nonspecific complaints such as headaches, dizziness, indigestion, chest pain, vegetative symptoms (e.g. poor sleep and appetite), dysphoric mood and pain syndromes. Other symptoms such as yearning, restless behaviour and perceptual phenomena (seemingly tangible presence or mood-laden memory of the deceased) were more likely to be identified as uniquely grief-related.[1] However, there have been major limitations in much of the research because of lack of homogeneity in small sample sizes, lack of a theory of hypothesised illness complicating such severe distress, absence of established health outcomes and retrospectivity in design.[7]

Although there are some short-term studies on health outcomes after bereavement, no long-term studies appear to have been reported. This is surprising as the association between bereavement and increased health risk has been the subject of much discussion over the past 50 years.

RISKS FOR MENTAL HEALTH AND CARDIAC MORBIDITY

Short-term effects

In a study of the short-term effects of bereavement conducted in several Sydney metropolitan hospitals from 1975 to 1977, 89 spouses were followed up over a 12-month period following the death of their partner. They were matched for age, sex and race with a cohort of non-bereaved controls.[8] There was an elevation in dysphoric mood (depression, anxiety and grief-related symptoms) among the bereaved, both two weeks and six months after the loss of the partner, with those disturbed more likely to be of lower socio-economic status and to have a prior history of psychological disturbance.[9]

In addition, immunological function in a matched cohort of 26 bereaved subjects showed significant depression of T-cell responsiveness to mitogenic stimulation in the first eight weeks after bereavement.[8] These immunological findings have been replicated in other studies,[10,11] and evidence of significant mood disturbance also highlighted frequently in the international literature.[2]

Long-term effects

In a longer-term follow-up study on 176 subjects (bereaved and their controls) who had taken part in the original study in the mid-1970s,[8] mental health morbidity increased over a ten-year follow-up period among bereaved relatives compared with controls, ranging from a 61% increase (according to self-reports) to a 92% rise (among medical record reports).[7]

Similarly, circulatory system disorders (ischaemic heart disease and hypertension) were more frequent in bereaved subjects, being described in 66% of those subjects by medical record reports compared with 100% by self-reports. There was no evidence of an elevation in illnesses with a principal immunological component, nor a significant difference in mortality rates in this small cohort.[7]

CARBER study

The Cardiovascular Health in Bereavement (CARBER) study commenced in 2005 at the Northern Sydney and Central Coast Area Health Service with the aim of identifying psychological, behavioural and physiological changes in acute bereavement that may contribute to cardiovascular risk. To our knowledge, this is the first such prospective study in the first two weeks of bereavement to focus on factors previously associated with cardiovascular risk. Eighty bereaved spouses and parents were recruited within the first two weeks of bereavement and compared with a nonbereaved cohort of 80 family members of discharged patients.[1,12,13]

The CARBER study's findings reported so far include significantly higher levels of depression, anxiety and anger symptoms in the bereaved during the early grief phase compared with the nonbereaved, and also higher scores on the depression questionnaire associated with being unprepared for the death, decreased sleep duration and younger age.[1] Additionally, decreased satisfaction with social support was associated with reduced sleep time in the early phase of bereavement.

Increased morning cortisol levels in the bereaved were reported in this study over the initial six months of bereavement, suggesting that a hypothalamic–pituitary–adrenal (HPA) axis stress reaction may contribute to the known increased health risk, as increased cortisol levels have been previously associated with effects on body mass, blood pressure, coronary stenosis and reduced quality of life.[2] Indeed, there was significant elevation in blood pressure and heart rate

VULNERABILITY FACTORS FOR THE BEREAVED[16]

- High degree of dependency
- Spirit of ambivalence about the lost relationship
- Unexpected or traumatic death
- Absence of inadequate social support, or perception of it
- Multiple stressors at time of bereavement
- Previous losses in childhood
- Poorly resolved past losses
- Socioeconomic disadvantage
- Housing difficulties
- Poor functioning of the family system (internal disharmony)
- Inflexibility of roles and ineffective sharing in conjugal bonding

in the bereaved sample compared with non-bereaved subjects and, although the heart rate lowered at six months, blood pressure remained elevated. Cortisol levels responded similarly.[13]

Additional physiological effects

Other findings, presented at a Cardiac Society of Australia and New Zealand meeting in 2009 and the American Heart Association meeting in 2010, suggest that bereavement results in an array of complex physiological responses, as noted above, but also including changes to prothrombotic factor levels and heart rate variability, all of which are associated with increased cardiovascular risk.[14] Although these findings do not establish causality, they are consistent with evidence for psychosocial 'triggering' of cardiovascular events and suggest the need for further investigation of the potential for acute risk prevention.[15]

MANAGEMENT ISSUES

The health professional should approach grief, when possible, as a 'natural' process of loss of a loved one. GPs who are counselling even the most secure individual, in what appears to be a 'normal' grief process, should use their experience and communication skills as best they can.

Grief can be complicated because of certain individual qualities, lack of ongoing family or professional support, or coexistent stressors. Unresolved grief may then become obvious in the first 12 months, possibly by enduring sadness, worsening irritability and other symptoms of grief sometimes leading to major depression or anxiety disorders, or by awareness of the deceased individual's poor integration into activities of daily living. Patients should be encouraged to act on cardiac symptoms by seeking immediate medical advice. Any chest pain, palpitations or dyspnoea may need to trigger a review by a cardiologist with some urgency, rather than be considered simply an atypical bereavement response.

It is important for GPs to take note of vulnerability factors for the bereaved (see the box on this page)[16] Important factors to consider in interactions with the bereaved and the family are listed in the box on this page.[17]

Key communication skills

The first step is to establish a relationship with the bereaved person or family. GPs can help their patients communicate freely by carrying out the following:[16]

- listening to the patients you are supporting and the problems or concerns they have
- acknowledging their concerns (feedback); this may simply involve your recognising that they are having some difficulty
- telling them what you are able to do and whether you will be seeking further specialist opinion; give them options so they can be partners in the coping process
- encouraging them with a positive comment, or reassuring them about possible emotional and natural reactions to grief and its management.

IMPORTANT POINTS FOR GPS TO CONSIDER WHEN INTERACTING WITH THE BEREAVED[17]

- Explore the loss with the patient: its circumstances, the psychological trauma associated with it
- Review the lost relationship with the patient: the gradual undoing of the bonds to the lost person, how the relationship started, plus its course, its vicissitudes, and its rewarding and painful aspects
- Assess the background of the bereaved: losses of an acute or chronic nature, family and cultural issues
- Provide support to the patient to encourage social interaction (e.g. community and sporting clubs, hobbies, University of the Third Age activities), which will encourage resolution of mourning and assist the bereaved in dealing with any feelings of dependency and redundancy
- Plan for help for the family through the mediation of social work or psychology services
- Evaluate the process during the course of counselling and at its completion
- Prescription of medication is rarely needed except for brief periods of respite. Depressive symptoms (especially melancholia) are another matter: psychiatric assistance may be needed

Some possible issues for GP to raise when talking to bereaved patients are listed in the box on this page.

The period of six to eight weeks after the death is frequently a critical time in social terms. Ideally, patients' recovery will feature the following phases in the period after bereavement:

- resolution of the symptoms of loss (six to 12 months)
- satisfactory adjustment and

RESOURCES ON BEREAVEMENT FOR PRACTITIONERS

Book

An excellent resource for health practitioners is the book by Diane and Mal McKissock called *Bereavement Counselling*: Guidelines for Practitioners, published by the Bereavement CARE Centre.[18]

Online resources

- Bereavement Care Centre
  www.bereavementcare.com.au
- The National Centre for Childhood Grief
  www.childhoodgrief.org.au
- Sids and Kids
  www.sidsandkids.org
- Cancer Council
  www.cancercouncil.com.au
- Lifeline
  www.lifeline.org.au
  phone: 13 11 14

reintegration into life (six to 12 months)
- new and satisfying attachments (one to two years)
- exploration of relaxing and creative pursuits (one to two years).

If counselling seems to be proving difficult to achieve efficacious outcomes for the bereaved, several important skilled practitioners and community groups are available as resources. Such recommended resources for health practitioners are listed in the box on this page.[18]

Psychological support

Collateral information such as how 'close' a bereaved man or woman was to his or her spouse or partner, and what percentage of time was spent exclusively in each others company, will be crucial to fully understanding the impact of spouse bereavement. Some patients may be at risk of psychiatric ill health and possibly of other medical illness when left alone and, potentially, lonely.

If there is evidence of inhibition of feelings, impairment in adjustment and lack of reintegration into activities of daily living, then the assistance of an experienced psychologist under the Medicare-funded scheme, or even intervention by a psychiatrist, may be necessary. Goals may be achieved in as few as one or two sessions, or up to 10 or more sessions.

CONCLUSION

Although the focus before bereavement is naturally directed to the ill or dying person, the health and welfare of bereaved survivors should be of great concern to health care professionals, family and friends. If GPs suspect a risk of self-harm, an assessment via the Mental Health Helpline, the local community health centre or the emergency department of the local hospital could be indicated.

The key message, however, is one of hope for a satisfactory passage through what is, after all, a natural process and one that we will all have to navigate. MT

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