

The prevalence of multiple losses experienced by children from birth to 18 years in the National District Hospital in Bloemfontein

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Background: Multiple losses experienced by children is a topic on which little research has previously been completed. Therefore, a specific definition of multiple losses is unavailable. Multiple losses are traumatic for children and result in the need for intervention and support with respect to grief, loss and bereavement issues. The main goal of this study was to determine the prevalence of multiple losses children who had experienced this from birth to 18 years of age in the National District Hospital in Bloemfontein.

Method: A literature search was carried out to define the concept of multiple losses experienced by children appropriate to the South African context. Thereafter, a descriptive study with an analytical component was used to gather information on multiple losses. Structured interviews with the parents or caretakers of the children at the National District Hospital were conducted by the researchers by means of a questionnaire. The interviews were conducted in English or Afrikaans.

Results: A total of 62 interviews were performed with the parents or caregivers. Multiple losses, defined here as the loss of three or more personal, interpersonal or environmental assets, were experienced by 69% of these children (95% confidence interval: 57–79%). The majority of losses experienced occurred in the interpersonal (87%) and environmental (82%) categories. The death of a family member took place in 61% of cases. Unemployment of a parent, with its consequences, was reported in 63% of cases.

Conclusion: The criteria used to define multiple losses in this study were adequate and appropriate for this study population. The prevalence of multiple losses in children in the National District Hospital in Bloemfontein was 69.4%. This figure warrants the need for support and bereavement counselling for children to prevent long-term problems with relationships and adaptation within society.

Keywords: bereavement, children, grief, multiple losses

Introduction

The study of multiple losses experienced by children is a topic on which little research has previously been completed. Therefore, a specific definition of multiple losses is unavailable. However, a variety of definitions of multiple losses have been identified in various studies.

The term “multiple losses” has been defined in previous studies as the multiple deaths of the caretakers, siblings, grandparents or parents of a child.¹ Loss of parents could also result from divorce, and residential and military mobility.² Other definitions of multiple losses include a combination of poverty, an unsafe environment, substance abuse, domestic violence, poor nutrition and limited access to preventative or ongoing medical care,³ as well as chronic neglect and illness.²

It was found that the bereavement experienced by a child is not the same as that experienced by an adult in a study that determined the relationship between the loss and intensity of grief experienced by a child.⁴

Multiple losses can be categorised as either physical or emotional,^{3,4} and either tangible or intangible.^{5–7} Any loss or loss of a relationship (even of pets), either permanent or temporary, falls in this category.⁴

Difficulties were encountered in previously conducted studies with regard to bereavement as a result of multiple losses owing to an inadequate number of literature studies being carried out on the topic of multiple losses.¹ The effect of multiple losses

is dependent on the child's age, previous losses, the management thereof and relationships affected by the loss.¹

It was found that bereavement experienced by a child is not the same as that experienced by an adult in a study that determined the relationship between the loss and intensity of grief experienced by a child.⁴ Studies have shown that multiple losses are traumatic for both children and adults, and result in the need for intervention and support with respect to grief, loss and bereavement issues.³ They may also result in low self-esteem, narcissistic injury and a sense of degradation.² Resolution of this grief is critical to prevent unresolved childhood grief and vulnerability to loss, which may result in impaired adult relationships and increased adult pathology.⁴ The findings with respect to an adult study population showed that social support is a critical factor in the facilitation of the bereavement process.⁸ Thus, if a child experiences multiple losses in the absence of an adequate social support network, long-term negative effects are likely to occur.²

It was found in a study carried out on post-traumatic stress responses that after a traumatic event, the need for counselling was overlooked. The importance of intervention services may lead to an improvement in the long-term outcome.⁹

The aim of the study reported on here was to determine the prevalence of multiple losses experienced by children from birth to 18 years of age in the National District Hospital in Bloemfontein.

The first objective was to define multiple losses in the context of children in South Africa, based on the existing literature. Another specific objective was to identify the most common losses experienced by children and possible associations between multiple losses and other variables, such as age and gender.

Method

Objective

A literature search of the limited literature on the definition of multiple losses experienced by children was carried out to compile a definition thereof. The definitions used were in line with those employed by Child Gauge 2012 to ensure that they were appropriate to South African circumstances.¹²

For the purpose of this particular study, inclusion criteria for multiple losses included personal, interpersonal and environmental losses:¹⁻⁷

Personal

Personal losses included:

- Sexual assault.
- Chronic pain or illness.
- Disability.
- Amputation.
- Terminal illness.
- Abortion and miscarriage.
- Malnutrition.

Interpersonal

Interpersonal losses included:

- Parental divorce.
- Parental separation.
- Domestic violence.
- Parental substance abuse.
- The death of a parent, sibling, family member, close friend or pet.

Environmental

Environmental losses included:

- Unemployment.
- An unsafe environment.
- Being a victim of xenophobia.
- Being deprived of education.
- Poverty.
- An insufficient social support system.
- Residential mobility.
- Homelessness.

If three or more of the abovementioned criteria were present, the child was categorised as having experienced multiple losses.

Study design

A descriptive study design with an analytical component was used.

Study population and sampling

The target population was the parents or caretakers of children aged birth to 18 years being treated at the National District Hospital in Bloemfontein, both as inpatients and outpatients. Ward 3, the paediatric inpatient ward with a healthcare clinic area and waiting room, was used to recruit the caregivers. A convenience sample of the available caregivers was utilised when the researchers were able to conduct interviews.

Inclusion criteria

Inclusion criteria were the parents or caretakers of children aged birth to 18 years presenting for primary medical care in the National District Hospital, regardless of gender, language, culture, race, socio-economic background and beliefs.

Exclusion criteria

The exclusion criteria were emergency consultations in cases where the respondents did not provide consent and if information could not be obtained by any other means.

Measurements

Individual structured interviews (of approximately 15 minutes' duration) were conducted by the researchers by means of a questionnaire. The questionnaire included the baseline characteristics of the caregiver and the child, as well as losses experienced by the latter. The questionnaires were available in Afrikaans, English and Sesotho. Interviews were conducted in English or Afrikaans. A Sesotho translator (a nurse) was used when necessary.

To ensure that respondents were not interviewed more than once, patients' files were marked in the left top corner by the researchers. The desired objectives of the researchers recording the information were to remain emotionally uninvolved and to remain professional at all times.

Pilot study

A pilot study was carried out on seven respondents within the study population one month before the data collection commenced. These respondents were not included in the main study. The pilot study was used to determine whether or not the questionnaire was understandable, effective and logical. Feedback was used to make final corrections to the questionnaire. The researchers found that the order of the questions with respect to the losses was constructed in such a manner that the sensitive questions were asked first, resulting in less accurate information being obtained. Therefore the order was changed so that the sensitive questions were placed last. A question to determine the human immunodeficiency virus (HIV) status of the child was added because it was identified as a loss during the pilot study. Other minor changes were made to the questionnaire to ensure more accurate data collection.

Data management and analysis

Data entry and analysis were performed by the Department of Biostatistics at the University of the Free State, South Africa. Data cleaning and security enforcement were carried out by researchers during the data collection and by the Department of Biostatistics during data entry and analysis. The results were summarised by frequencies and percentages (categorical variables) and means, standard deviations or percentiles (numerical variables).

Ethical and legal considerations

The protocol and questionnaire were approved by the Ethics Committee of the Faculty of Health Sciences, University of the Free State. A letter of permission was obtained from National District Hospital for parents and caretakers to be interviewed. A consent form, available in Afrikaans, English and Sesotho, had to be signed by the parents or caregivers before they could participate in the study. The consent forms were kept separately from the questionnaire. Therefore, there was no correlation between the consent form and the information obtained in the questionnaire. The data were reported anonymously and the interviews were conducted confidentially. A counsellor was

made available to provide help in the event of anyone experiencing distress or requiring assistance during the interview.

Results

A total of 62 parents or caregivers were interviewed. These interviews took place over 15 sessions. The number of people interviewed per session varied between two and nine.

Baseline characteristics of the children assessed for multiple losses

The baseline characteristics of the children are provided (Figure 1). Sixty-one per cent of the children were girls and the majority were aged 1–9 years.

Baseline characteristics of the parents or caregivers

The ages of the parents and caregivers varied from 16–69 years (a median of 28 years). Females comprised 94% of the total respondents. Only one interviewed person was not a relative. The majority (92%) were parents and 8% caregivers.

Assessment of different losses

The different losses were categorised as personal, interpersonal and environmental. The percentages of the different losses are provided (Figure 2). Personal losses occurred in 42%, interpersonal losses in 87%, and environmental losses in 82%, of the children.

Three children experienced no loss.

Malnutrition was most prevalent (29%) in the personal loss category, death (69%) in the interpersonal group and the unemployment of a parent in 63% of cases in the environmental group.

A combination of three or more losses (multiple losses) were experienced by 69% of the children (95% confidence interval: 57–79%).

Most of the respondents (74%) indicated that their children were HIV-negative. Eight per cent said that their children were HIV-positive, and 18% that the child’s HIV status was unknown. HIV disease was included in the chronic illness and/or pain category.

The majority of the children experienced the death of at least one person who they considered to be important. The majority (61%) had lost a family member due to death. The percentage of deaths per category is highlighted in Figure 3.

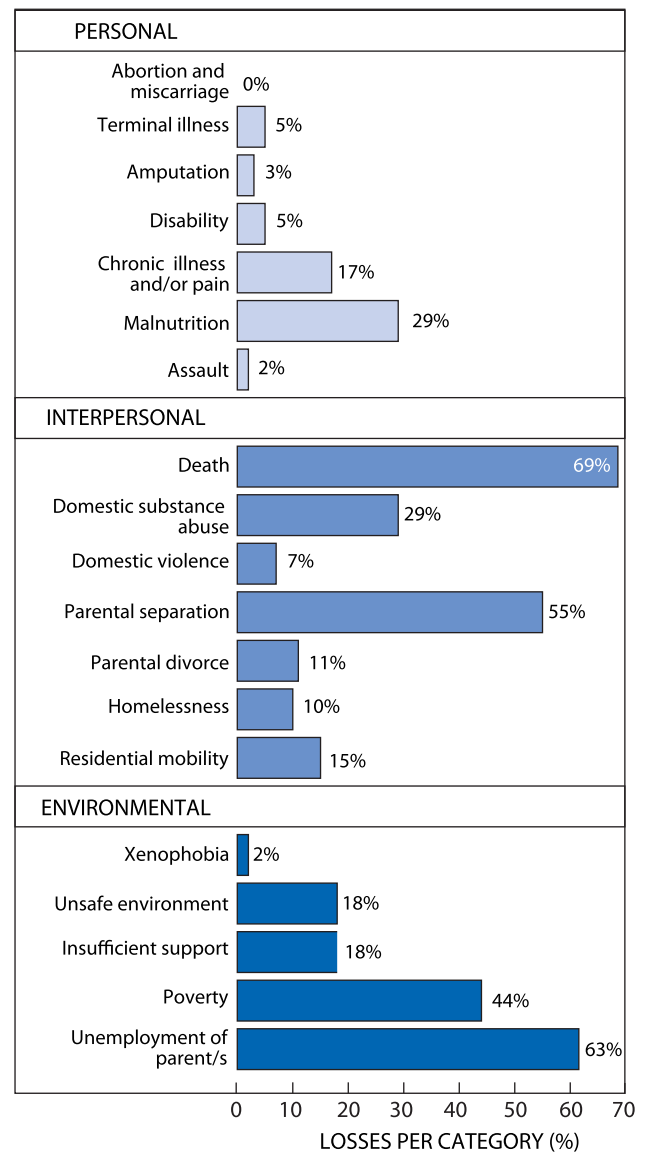


Figure 2: Percentage of specific losses per category

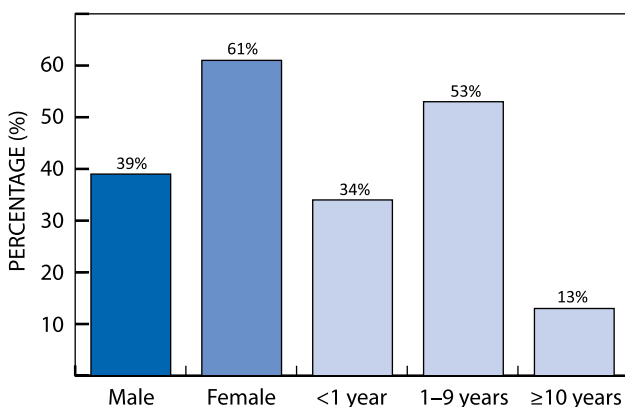


Figure 1: Gender and age distribution of the children included in the study

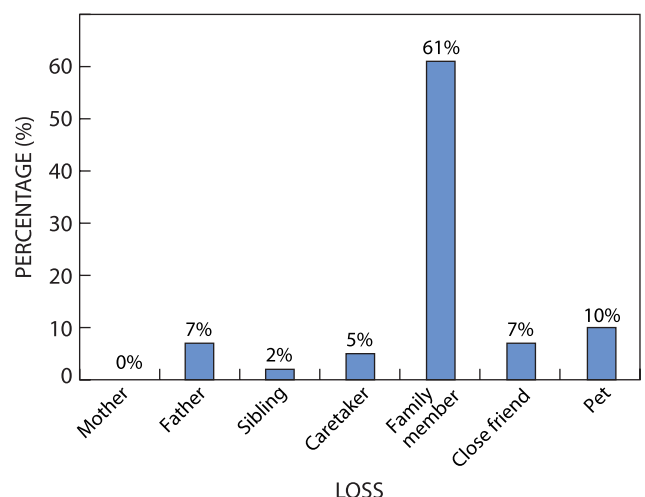


Figure 3: Percentage of deaths per category

Table 1: Number of family members lost compared to the number of children experiencing the loss

Number of children (%)	Loss due to death
19 (30)	None
3 (5)	A pet
27 (44)	A family member
2 (3)	A family member and a pet
2 (3)	A family member and a close friend
1 (2)	A family member, a close friend and a pet
1 (2)	A caretaker
2 (3)	A caretaker and a family member
1 (2)	A sister and a family member
1 (2)	A father
2 (3)	A father and a family member
1 (2)	A father, a family member and a close friend

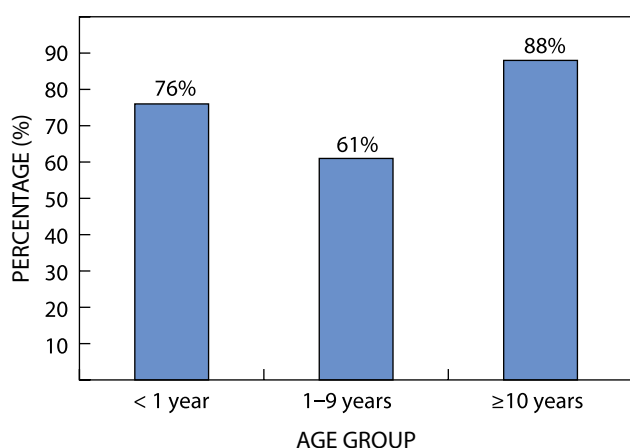


Figure 4: Percentage of multiple losses in the different age groups

The different combinations of losses due to death are shown in Table 1.

Multiple losses affected both genders equally. Seventy-one per cent of the boys and 68% of the girls experienced multiple losses. Multiple losses affected the older age group more (Figure 4).

Discussion

This study was carried out on 15 separate occasions over a 40-day period. The number of respondents differed every time. This could be explained by the time of the day during which the interview was conducted. More patients were available in the late mornings than in the afternoons and early mornings.

The fact that there was a large number of female children (61%) rather than male children in this study was interesting. This finding was assumed to be a coincidental occurrence as convenience sampling was used. It was found that male children were in the majority (60%) in studies that examined the gender distribution of admitted children in hospitals.^{10,11} Most of the children in this study were aged 1-9 years, and this was consistent with the profile of children seen and admitted to Ward 3 at the National District Hospital.

None of children had lost a mother, but four children had lost a father. According to Child Gauge 2012,¹² the percentage of children in the Free State who had lost a mother due to death was

4%, while 13% had lost a father, and 7% both parents, which is much higher than that reported in this study.

As many as 15% of the children did not have the stability of being raised in a single home and kept being moved to a different one. This was determined by making a comparison of the number of homes lived in by a child in relation to his or her age, according to the judgement of the researchers. It was then decided whether or not the child had suffered from constantly moving around.

It was found that more than 50% of the children were raised by a single parent, of whom only 11% were divorced. Divorce was considered to be a loss, and contributed to the loss of a parent as the child would then be raised by a single parent only. This is in line with figures for the Free State, indicating that 40% of children lived with a mother only.¹²

A number of the children did not live in safe environment. Some were homeless and others resided in homes in which domestic substance abuse and violence featured. However, there was no direct association between domestic substance abuse and domestic violence since the prevalence of domestic substance abuse was almost five times that of domestic violence.

Although having HIV was considered to be a form of loss, the information provided could have been unreliable as confirmation tests were not performed. The HIV status of 18% of the children was unknown. As informed, 74% of the children were HIVnegative. This was expected as the age groups included younger children who are more likely to obtain HIV through mother-to-child transmission during labour or breastfeeding, rather than through sexual transmission. Preventative and awareness programmes on mother-to-child transmission of HIV, and transmission of HIV through breastfeeding, could have contributed to the low positive HIV rate in the children.

Approximately two thirds of the children's parents or caretakers were unemployed, which may explain the 34% poverty rate. In 2010, in the Free State, nearly two thirds of children (60%) lived below the poverty line, and 33% lived in households in which none of the adults were employed.¹¹ Children who live with a single parent who is also unemployed are probably at greater risk of suffering from poverty. Even though the majority of the children had an education, an alarming 13% did not. This could lead to future unemployment and might have been the result of poverty. Poverty can also be a leading cause of the loss of proper nutrition, i.e. of malnutrition, from which 29% of the children suffered. It is important to keep in mind that malnutrition is a leading cause of infection and death in children.¹²

None of the children had experienced a miscarriage or abortion as these were not applicable because of the age of the majority. Information received with respect to sensitive questions, such as the HIV status of the child, domestic substance abuse, domestic violence, sexual assault, abortion and miscarriage, could have been inaccurate owing to the possibility of false information being provided. Most of the children were not severely affected by chronic pain or illness, disability, xenophobia, amputation, sexual assault or terminal illness. HIV was not classified as a terminal illness per se, and information regarding HIV was collected separately.

It was found that 69% of the children in this study had experienced multiple losses, a figure never previously recorded for children, or in the African context. The gender distribution of children with multiple losses was relatively equal, despite the

fact that more girls were included in the study. The majority of the interviewed respondents' children were aged 1–9 years. However, it was found that the greatest frequency of children with multiple losses was in the age group of ≥ 10 years (88%). A possible explanation for this is that children in this age group had been introduced to a greater number of opportunities with respect to experiencing loss. More than 50% of the children in each of the age groups (< 1 year, 1–9 and ≥ 10 years) were found to have experienced multiple losses.

Conclusion and recommendations

A definition of multiple losses experienced by children in the South African context was obtained from a review of the literature.

It was found that the prevalence of multiple losses experienced by children aged birth to 18 years in the National Hospital Bloemfontein was 69%, with an equal distribution between the two genders. There are no available studies with which to compare this figure.

The prevalence of multiple losses was higher with respect to children aged ≥ 10 years, i.e. 88%. The most common identified losses were death (69%), unemployment of a parent (63%) and the separation of a child's parents. Malnutrition (29%) was the most prevalent identified personal loss.

Recommendation

It has been indicated in different studies on children who have experienced loss that it is necessary to work through one loss process before the next can be managed.^{1,3,4,6} Therefore, it is important to identify losses and specifically, multiple losses, and to provide support and bereavement counselling to children to prevent long-term problems with relationships and adaptation within society. Although bereavement counselling is unable to impact upon environmental losses, the process of speaking about loss can nevertheless contribute to healing and resilience.⁵

The study could have been improved if the study population was larger. This might have been achieved by interviewing respondents from different subdivisions of the hospital, by interviewing respondents in different hospitals, or by increasing the number of interviews conducted. In order to improve the accuracy of the study, hospitals in different regions of the province or country could be included.

Ward 3 in the National District Hospital in the Free State is a paediatric ward in which patients over the age of 14 years are not usually admitted. Therefore, possibly, more accurate results could have been achieved if children aged 14 years and older were excluded, or if different subdivisions in the hospital, in which age restrictions were not applied, were included.

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References

1. Kaufman KR, Kaufman ND. Childhood mourning: prospective case analysis of multiple losses. *Death Stud.* 2005;29:237–49. <http://dx.doi.org/10.1080/07481180590916362>
2. James X. Therapeutic termination with the early adolescent who has experienced multiple losses. *Child Adolesc Social Work J.* 1999;16(3):177–87.
3. Csikai EL, Herrin C, Tang M, et al. Serious illness, injury and death in child protection and preparation for end-of-life situations among child welfare services workers. *Child Welfare.* 2008;87(6):49–69.
4. Kaufman KR, Kaufman ND. And then the dog died. *Death Studies.* 2006;30:61–76. <http://dx.doi.org/10.1080/07481180500348811>
5. Bloom SL. The grief that dare not speak its name. *Psychother Rev.* 2000;2:1–30.
6. Mishne J. The grieving child: manifest and hidden losses in childhood and adolescence. *Child Adolesc Social Work J.* 1992;9(6):471–90. <http://dx.doi.org/10.1007/BF00845409>
7. Neria Y. Coping with tangible and intangible traumatic losses. *Isr J Psychiatry Relat Sci.* 2001;38(3–4):216–25.
8. Cherney PM, Verhey MP. Grief among gay men associated with multiple losses from aids. *Death Studies.* 1996;2(2):115–32. <http://dx.doi.org/10.1080/07481189608252745>
9. Pfefferbaum B, Nixon SJ, Tucker PM, et al. Posttraumatic stress responses in bereaved children after the Oklahoma city bombing. *JAM Acad Child Adolesc Psychiatry.* 1999;38(11):1372–9
10. Kam-lun EE, Nelson AS. Gender disparity in paediatric hospital admissions. *Ann Acad Med Singapore.* 2006;35:882–8.
11. Shatin D, Levin R, Ireys HT, et al. Health care utilization by children with chronic illnesses: a comparison of medicaid and employer-insured managed care. *Pediatrics.* 1998;102(4):e44. <http://dx.doi.org/10.1542/peds.102.4.e44>
12. Hall K, Woolard I, Lake L, et al. SA child gauge 2012. University of Cape Town. Available from: www.ci.org.za

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