



The Psychosocial Impact of Stillbirth on the Parents

Samar Ahmed (1)*, Salma Gerais (2), Enas Abdelraheem (3), Abdelmagid Gaboura (4), Salah Khairy (5)

(1) Registrar of Obstetrics & Gynaecology, Sligo University Hospital, Sligo, Ireland.

(2) Registrar of Obstetrics & Gynaecology, Our Lady of Lourdes Hospital, Drogheda, Ireland.

(3) Sudan Medical Specialisation Board, Khartoum, Sudan.

(4) Specialist Registrar of Obstetrics & Gynaecology, University Hospital Crosshouse, Crosshouse, Scotland, UK.

(5) Consultant of Obstetrics & Gynaecology, Omdurman Maternity Hospital, Omdurman, Sudan.

***Correspondence to:** Samar Ahmed, MD, MRCPI. Registrar of Obstetrics & Gynaecology, Sligo University Hospital, Sligo, Ireland.

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Abstract

Background: *The experience of stillbirth is complex. It affects the parents and the whole family, affecting their confidence and hesitation about having another baby.*

Objective: *To study the psychosocial impact of stillbirth on the mother and father.*

Methods: *This is a descriptive, cross-sectional, hospital-based prospective study conducted at Elturky Teaching Hospital from March to September 2019. The study sample consisted of 120 women. Data was collected using a questionnaire and analysed using SPSS.*

Results: *anxiety (mild, moderate and severe) was reported in 55(45.8%), 36(30%) and 29(24.2%) of the mothers, respectively, while among fathers these levels were reported in 9(7.5%), 105(87.5%), and 5(5%) respectively. This indicates significant differences with higher severity among mothers than fathers (P value < 0.05). Severe, moderate and mild depression were reported in 66(55%), 45(37.5%) and 9(7.5%) of the mothers, respectively, while among fathers, these levels were reported in 9(7.5%), 21(17.5%), and 90(75%) respectively. This indicates significant differences with higher severity among mothers than husbands (P value < 0.05).*

Conclusion: *stillbirth affects both mother and father, with severe anxiety and depression among mothers than fathers. The level of anxiety and depression was affected by the demographic characteristics.*

Introduction and Background

Stillbirth is a very distressing experience of bereavement, with a long-lasting impact on bereaved parents, healthcare professionals and society at large [[1]] [[2]] [[3]].

Stillbirth is the birth of a baby at or after 24 weeks of gestation without any signs of life. Approximately 2.6 million stillbirths occur annually worldwide, with 98% of them occurring in developing countries, while more than half of them are due to preventable causes [[4]].

The Global Every Newborn Action Plan (ENAP) was launched in June 2014 to develop a Global Strategy for the health of Women and Children. The ENAP visions a world without neonatal deaths and stillbirths [[5]].

Stillbirth is not featured in the Sustainable Development Goals [[6]]. The Lancet published a stillbirth series

in January 2016[[7]]. One of the major problems of stillbirths is its significant association with psychosocial morbidity for the mother and the family [[7]]. In settings like India, with a large section of the population living in lower socioeconomic conditions, the psychosocial impact of stillbirth is unique [[8]]. The psychosocial consequences are have sought to heighten public awareness of stillbirth as a societal issue[[9]]. The psychosocial impact can be measured by a scale called HADS (Hospital Anxiety and Depression Scale), which is a commonly used scale by doctors to measure the levels and symptoms of anxiety and depression.

Stillbirth

Stillbirth is a traumatic event for both women and their partners, yet much of the available literature has focused on predictors of mental health and well-being for women only [[10]]. Partners usually experience feelings of grief, anxiety following stillbirth [[11]]. Although rates are lower than those reported for mothers, qualitative studies have shown distress, grief and mental health issues [[12]]. Contemplations have indicated further challenges in relationship following stillbirth.[[13]]In addition to highlighting the importance of care during this critical time[[14]].

Evidence-based interventions and clinical guidelines for care after stillbirth have needed more studies on the impact of care practices, particularly for partners [[15]] [[16]].

Prevalence of stillbirths

The WHO-ICD 10 defines *perinatal death* as a stillbirth (SB) from 22 completed weeks of gestational age (birth weight equivalent to 500 g) or death of a live born infant during the first week of life (early neonatal death, END) [[17]] [[18]]. Worldwide, perinatal mortality is about 47/1000 births, ranging from 10 in most developed countries to more than 60 in least developed countries. Africa has the highest estimated perinatal rate of 62/1000 births despite a high number of unregistered stillbirths and early neonatal deaths [[19]] [[20]].

Psychological impacts of stillbirth

Besides being an unfortunate event for the family, it is a source of grief for the couple. This initiates many emotional responses having psychological sequelae [[21]]. It is associated with a loss of hope and potential for fulfilling dreams related to childbearing [[22]]. Studies have proven it to be one of the significant stress-inducing phenomena associated with post-traumatic stress disorder (PTSD), and prolonged psychological problems are expected if no psychological support provided [[23],[24]]. Some parents are pressed to prove their reproductive capabilities as soon as possible, and as such, the desire of having another baby could be

overwhelming. Few want to delay the subsequent pregnancy due to fear of recurrence of stillbirth [[25]]. Stillbirth can also have intergenerational consequences, such as an adverse impact on siblings and complicated attachment for parents, in case of a surviving twin and subsequent children, including the next child-replacement child syndrome vulnerable child syndrome[[26]]. There is a paucity of literature focusing on the needs and perceptions of women with stillborn babies. Most of the conclusions come from smaller studies in the West [[27]].

The period after stillbirth has extensive consequences for parents and their families. Much of the effect is nonmonetary, resulting from the adverse effects of grief, anxiety, fear, and suffering. These emotional factors have been described as additional costs [[28]]. Almost all parents report some negative psychological symptoms after a stillbirth. In the Listening to Parents study[[29] in the UK, 68% of mothers and 44% of fathers confirmed four or more symptoms of anxiety and depression at 10 days, reducing to 35% of mothers and 13% of fathers at 9 months. This situation is over three times greater than after a live birth when only 8–13% of mothers and 3% of fathers report anxiety and depression symptoms at around nine months after the birth of their baby[[30]].

In the TEARS cohort in the USA, the mean Family Assessment Device score of respondents was 3.2 (range 0.5–4.0), in which a score of 4 indicates dysfunction in family relationships. Verily, this tension might result in relationship collapse. Some research report it as more frequent in parents who have a stillborn child in comparison with a live birth [[31]]. The percentage of families that divorce is unchanged, but perceived relationship quality changed between married either improving or deteriorating [[32]].

Anxious and depressive symptoms

In Nigeria, mothers who experienced stillbirth, 37% scored in the moderate to severe level of depressive symptoms compared to 6% of women who had a loss prior to 20 weeks. Two factors were significant predictors of high levels of depressive symptoms: loss after 20 weeks gestation and having no living children [[33]]. In another study, the factors associated with depressive symptoms three years later included no contact with the baby for as long as they had wished, which resulted in a nearly seven-fold increased risk of depressive symptoms [[34]].

Objectives

The study's primary objectives were to:

1. Assess anxiety and depression levels among parents after stillbirth.

2. Examine the association between sociodemographic factors and the psychological impacts on parents.
3. Investigate the influence of obstetric history on anxiety and depression levels after stillbirth.

Methodology

The study applied a cross-sectional design involving 120 women who experienced stillbirth at Elturky Teaching Hospital, Khartoum, Sudan. The study covered mothers aged 15-45 and fathers of any age group. Those ladies with a personal or family history of Psychological conditions were excluded. The dependent variables included a history of anxiety, depression and social phobia, while the independent variables included age, education level, and occupation. Data collection was facilitated through structured questionnaires (subjective), which included sections on demographic information and the Hospital Anxiety and Depression Scale (HADS) used for evaluating symptoms of anxiety and depression in clinical settings. Data was analysed using SPSS, with statistical significance determined at $p < 0.05$.

Results

Anxiety and depression: The study's findings revealed substantial differences in the psychosocial impact on mothers and fathers who had stillborn babies. Severe anxiety was reported in 45.8% of mothers compared to only 7.5% of fathers. Depression was similarly skewed, with 55% of mothers displaying severe depression versus 7.5% of fathers. **Sociodemographic Influences:** Women aged 15–25, those with limited educational backgrounds, and women with lower economic status were more likely to experience high levels of anxiety and depression.

Table (1) Distribution of the women delivered stillbirths according to correlation between anxiety and obstetric factors

Factors	Anxiety						P value
	0 - 7 Normal		8 – 10 border line abnormal		11 - 21 abnormal		
Parity	N	%	N	%	N	%	
PG (n=24)	6	25.0	6	25.0	12	50.0	0.011
Multipara (n=75)	18	24.0	23	30.7	34	45.3	
Grandmultipara (n=21)	12	57.1	0	0.0	9	42.9	
Mode of delivery							
NVD (n=106)	30	28.3	24	22.6	52	49.1	0.014

C/S (n=12)	6	50.0	4	33.3	2	16.7	
Instrumental (n=2)	0	0.0	1	50.0	1	50.0	
Past history of losses							
Yes (n=19)	5	26.3	4	21.1	10	52.6	0.01
No (n=101)	31	30.7	25	24.8	45	44.6	
Family history of losses							
Yes (n=16)	7	43.8	2	12.5	7	43.8	0.011
No (n=104)	29	27.9	27	26.0	48	46.2	
Counseling							
Yes (n=36)	24	66.7	9	25.0	3	8.3	0.001
No (n=84)	12	14.3	20	23.8	52	61.9	

Discussion

The study confirmed that mothers are more susceptible to psychological distress following stillbirth, possibly due to cultural expectations in Sudan, where women are often more expressive of grief.

The study supports findings from previous literature, emphasizing that stillbirth is a psychologically taxing experience with severe, gendered impacts on mental health. The higher rates of anxiety and depression in mothers align with global studies showing that mothers are more likely to internalize grief, experience guilt, and face social isolation. Fathers, though affected, may experience grief differently, often less visibly, which can contribute to differences in psychological assessment outcomes. Comparative studies have demonstrated similar psychosocial impacts in culturally diverse settings, underscoring that stillbirth is universally distressing. However, the intensity and expression of grief may vary according to cultural norms and available support systems.

Conclusion

The study confirms that stillbirth significantly affects both parents but mothers are more profoundly affected by anxiety and depression. Sociodemographic factors, notably age, education, and economic status, are crucial in determining psychological outcomes. A lack of counselling is a significant gap in healthcare support, contributing to the prolonged distress seen in mothers after stillbirth.

References

- [1]. Nuzum D, Meaney S, O'Donoghue K. The impact of stillbirth on bereaved parents: A qualitative study.

PLoS One. 2018 Jan 24;13(1):e0191635. doi: 10.1371/journal.pone.0191635. PMID: 29364937; PMCID: PMC5783401.

- [2]. Erlandsson K, Saflund K, Wredling R, Rådestad I. Support After Stillbirth and Its Effect on Parental Grief Over Time. *Journal of Social Work in End-of-Life & Palliative Care*. 2011; 7(2/3):139–52.
- [3]. Badenhorst W, Hughes P. Psychological aspects of perinatal loss. *Best Practice & Research Clinical Obstetrics & Gynaecology*. 2007; 21(2):249–59.
- [4]. Lawn JE, Blencowe H, Waiswa P, Amouzou A, Mathers C, Hogan D, et al. Stillbirths: rates, risk factors, and acceleration towards 2030. *Lancet*. 2016; 387:587–603.
- [5]. World Health Organization. Every newborn 1. 2014;1–55. Available from: <http://www.who.int>.
- [6]. de Bernis L, Kinney MV, Stones W, Ten Hoope-Bender P, Vivio D, Leisher SH, et al. Stillbirths: ending preventable deaths by 2030. *Lancet*. 2016; 387(10019):703–16.
- [7]. Heazell AEP, Siassakos D, Blencowe H, Burden C, Bhutta ZA, Cacciatore J, et al. Ending preventable stillbirths 3 Stillbirths: economic and psychosocial consequences; 2016. p. 387.
- [8]. Burden C, Bradley S, Storey C, Ellis A, Heazell AEP, Downe S, et al. From grief, guilt pain and stigma to hope and pride – a systematic review and meta-analysis of mixed-method research of the psychosocial impact of stillbirth. *BMC Pregnancy Childbirth*. 2016:1–12.
- [9]. Froen JF, Friberg IK, Lawn JE, Bhutta ZA, Pattinson RC, Allanson ER, et al. Stillbirths: progress and unfinished business. *Lancet*. 2016;387(10018):574–86.
- [10]. Homer, C. S., Malata, A., & ten Hoope-Bender, P. Supporting Women, families, and care providers after stillbirths. *Lancet*, 2016; 387(10018), 516–517.
- [11]. Erlandsson, K., Warland, J., Cacciatore, J., & Radestad, I. Seeing and holding a stillborn baby: Mothers' feelings in relation to how their babies were presented to them after birth – Findings from an online questionnaire. *Midwifery*, 2013; 29(3), 246–250.
- [12]. Avelin, P., Rådestad, I., Säflund, K., Wredling, R., & Erlandsson, K. Parental grief and relationships after the loss of a stillborn baby. *Midwifery*, 2013; 29(6), 668–673.
- [13]. Gold, K. J., Sen, A., & Hayward, R. A. Marriage and cohabitation outcomes after pregnancy loss. *Pediatrics*, 2012; 125(5), e1202–e1207.
- [14]. Ellis, A., Chebsey, C., Storey, C., Bradley, S., Jackson, S., Flenady, V., ... Siassakos, D. Systematic review to understand and improve care after stillbirth: A review of parents' and healthcare professionals' experiences. *BMC Pregnancy Childbirth*, 2016; 16, 1386.
- [15]. Cunningham, K. A. Holding a stillborn baby: Does the existing evidence help us provide guidance? The

Medical Journal of Australia, 2012; 196(9), 558–560.

[16]. National Institute for Health and Clinical Excellence. Antenatal and postnatal mental health. Clinical management and service guidance (CG192). London: NICE Guidelines; 2014.

[17]. World Health Organization: International Statistical Classification of Disease and related health problems: Tenth revision World Health organization, 2004, volume 2(2nd edn. Geneva): 5.

[18]. Stanton C, Lawn JE, Rahman H, Wilczynska-Ketende K, Hill K: Stillbirth rates: delivering estimates in 190 countries. *Lancet* 2006, 367(9521):1487-1494.

[19]. World Health Organization: Neonatal and Perinatal mortality: Country, Regional and Global estimates 2004. WHO Publications Geneva: WHO 2007: 9.

[20]. Fawole AO, Shah A, Tongo O, Dara K, El-Ladan AM, Umezulike AC, Alu FE, Eniayewun AB, Fabanwo AO, Adewunmi AA et al: Determinants of perinatal mortality in Nigeria. *Int J Gynecol Obstet* 2011, 114(1):37-42.

[21]. WHO's independent Expert Review Group. Every woman, every child, every adolescent: achievements and prospects: the final report of the independent Expert Review Group on Information and Accountability for Women's and Children's health. Geneva: World Health Organization; 2015.

[22]. Bernis LD, Kinney MV, Stones W, et al. Ending preventable stillbirths. *Stillbirths: ending preventable deaths by 2030. The Lancet.* 2016;387(2):703–16.

[23]. Turton P, Evans C, Hughes P. Long-term psychosocial sequelae of stillbirth: phase II of a nested case-control cohort study. *Arch Women's Mental Health.* 2009;12(1):35–41.

[24]. Flenady V, Boyle F, Koopmans L, et al. Meeting the needs of parents after a stillbirth or neonatal death. *BJOG.* 2014;121(Suppl. 4):137–40.

[25]. Lawn JE, Blencowe H, Waiswa P, et al. Lancet Ending Preventable Stillbirths Series study group; Lancet Stillbirth Epidemiology investigator group. Stillbirths: rates, risk factors, and acceleration towards 2030. *Lancet.* 2016;387(10018):587–603.

[26]. Cacciatore J. Psychological effects of stillbirth. *Semin Fetal Neonatal Med.* 2013;18:76–82.

[27]. Human M, Green S, Groenewald C, et al. Psychosocial implications of stillbirth for the mother and her family: a crisis-support approach. *Soc Work Stellenbosch.* 2014. <https://doi.org/10.15270/50-4-39>.

[28]. Salt A, Redshaw M. Neurodevelopmental follow-up after preterm birth: follow up after two years. *Early human development.* 2006 Mar 1;82(3):185-97.

[29]. Redshaw M, Henderson J. Safely Delivered—A National Survey of Women's Experience of Maternity Care. National Perinatal Epidemiology Unit (NPEU).

- [30]. Evans J, Melotti R, Heron J, Ramchandani P, Wiles N, Murray L, Stein A. The timing of maternal depressive symptoms and child cognitive development: a longitudinal study. *Journal of child psychology and psychiatry*. 2012 Jun;53(6):632-40.
- [31]. Cacciatore J, Lacasse JR, Lietz CA, McPherson J. A parent's tears: primary results from the traumatic experiences and resiliency study. *Omega (Westport)*. 2013-2014;68(3):183-205. doi: 10.2190/om.68.3.a. PMID: 24834664.
- [32]. Ramchandani PG, Stein A, O'Connor TG, Heron J, Murray L, Evans J. Depression in men in the postnatal period and later child psychopathology: a population cohort study. *J Am Acad Child Adolesc Psychiatry*. 2008 Apr;47(4):390-398. doi: 10.1097/CHI.0b013e31816429c2. PMID: 18388761; PMCID: PMC2650418.
- [33]. Obi SN, Onah HE, Okafor II. Depression among Nigerian women following pregnancy loss. *Int J Gynaecol Obstet*. 2009 Apr;105(1):60-2. doi: 10.1016/j.ijgo.2008.11.036. Epub 2008 Dec 25. PMID: 19111302.
- [34]. Surkan PJ, Rådestad I, Cnattingius S, Steineck G, Dickman PW. Events after stillbirth in relation to maternal depressive symptoms: a brief report. *Birth*. 2008 Jun;35(2):153-7. doi: 10.1111/j.1523-536X.2008.00229.x. PMID: 18507587.



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