

Length of widowhood and stress on life satisfaction of older Nigerian widows

¹Chinonso Akudo Okoro, ²Chinonye Stella Ojobor, ³Joy Uche Nzenweaku,

⁴Irene C. Kekeocha-Christopher and ⁵Vivian C. Ishiwu,

¹Psychology Department/Social Science Unit, SGS, UNN

^{2,3}Department of Psychology, University of Nigeria, Nsukka.

^{4,5}Social Science Unit, SGS/Social Works, University of Nigeria, Nsukka.

Corresponding author: chinonso.okoro@unn.edu.ng

ARTICLE INFORMATION

Article history

Received 30 September 2021

Revised 26 November 2021

Accepted 03 December 2021

Published Online 30 December 2021

Abstract

Widowhood is a stressful event for women, often coinciding with health, financial, and relationship losses, thus impacting the life satisfaction of individuals. The present study examined the length of widowhood and stress on life satisfaction of older Nigerian widows. A sample of one hundred and fifty-five ($N = 155$) widows (mean age = 57 years) were drawn from the Nsukka metropolis using convenient sampling. Participants completed self-report measures of life satisfaction and perceived stress including demographic data. The regression analysis showed that stress had no significant relationship with life satisfaction. Length of widowhood negatively predicted life satisfaction ($\beta = -.19$, $t = -2.41^*$, $p < .05$); indicating that the longer people stay in widowhood, the less satisfied they become. The interaction of stress and length of widowhood did not significantly predict life satisfaction ($\beta = .31$, $t = 1.74$, $p = .08$); which means that when the length of widowhood and stressful experiences of widows are high, life satisfaction tends to be reduced. The R^2 for the model was .05 indicating that 5% of the variation in life satisfaction was explained on account of stress and length of widowhood. The findings underscore the importance of providing the older widows with an adequate network with the children and significant others as this has a beneficial effect on psychological health and helps to enhance life satisfaction.

Keywords: Length of Widowhood, Life Satisfaction, Nigerian, Older Widows, Stress.

Introduction

The loss of a spouse is among the most stressful life events, while grief and mourning vary across cultures (Nakagawa & Hulus, 2021). Widowhood is a period of increased stress for many individuals since the intimacy built by one's spouse tends to be withdrawn thus leaving the individual in a vulnerable state. It marks the undeniable end of intimate attachment and support provided by the spouse (Ben-Zur, 2012; Pinguart, 2003). According to Wilcox, et al. (2003), the death of a spouse is one of the most stressful life events experienced by humans because it constitutes many social, economic, emotional, and psychological problems. Moreover, it is believed that the stress associated with widowhood is brought about by factors such as the unique husband-wife relationship, some cases where the woman is victimized and accused of having a hand in her husband's death, negative attitudes of in-laws towards her, and issues relating to taking up the sole responsibility of providing for the family upkeep and training the children, etc. Expectancy of human beings increases as they grow older, but they are likely to experience reduced physical capacity (Auais et al., 2019). The challenges involved in carrying out these responsibilities alone, tend to impact negatively on the wellbeing of widows. The death of a spouse is a significant life event for older adults due to the associated changes in roles, income, identity, housing, social contacts, as well as physical and emotional health status; though the change in marital status is accepted as a normal life experience (Hooyman & Kiyak, 2015). Older widows in this study are those who have stayed long as widows without remarriage (i.e. ten years and above). At this stage, it is anticipated that these women have adjusted in their situation since they have spent many years in widowhood, but some of them tend to experience loneliness and depression may be due to reduced social networks. Some of these widows for example: live alone or with a young child as a result of the fact that their children are grown,

married, or working in other states; and even those in their neighborhood tend to be distant from them. This situation tends to take them back to the realities of life events and the need to be mentally strong to adjust to the challenges of the new stage of life. Carr, Nesse, and Wortman (2006) posit that widowhood is associated with poor mental health outcomes like increased grief and depressive symptoms; as well as mental health problems like depression and anxiety disorders (Kristiansen et al., 2019a; Kristiansen et al., 2019b).

Stress is a state of mental or emotional strain or tension resulting from adverse or demanding circumstances which could be negative (distress) or positive (eustress). Positive stress is necessary for survival whereas negative stress or distress slows down the daily functioning of a person experiencing it. Stress as defined by Njoku and Omeire (2016) is a dynamic condition in which an individual is confronted with an opportunity, constraint, or demand related to what he desires and for which the outcome is perceived to be both uncertain and important. According to Oniye (2000), stress is the state of being, manifested by an individual (especially widows), due to a perceived inability to cope with demands of living or other life situations following the death of a spouse. Stressful situations are those life occurrences that impede individuals daily functioning including positive events (e.g., marriage, the birth of a child, new job or promotion, retirement, relocation, etc) and/or negative life events (e.g., death of a loved one, friend, parent or child, loss of job, sickness, accident, etc). Some sudden life changes are stressful whether positive or negative; and evidence shows that bereavement-induced stress varies depending on individuals' personality traits (Clark & Georgellis, 2013; Pudrovska & Carr, 2008). For instance, the situation where a woman lost the husband mysteriously and is being accused and maltreated for having a hand in the husbands' death, constitutes stress to her. According to Asai *et al.* (2009), out of all the deaths of a loved

one, the most stressful life event may be conjugal bereavement which tends to increase levels of depression, anxiety disorder, complicated grief, and suicidal ideation. However, Oniye (2001) in his study on the adjustment strategies of Nigerian widows as they strive to overcome the stress characteristic of our society's widowhood practice, using 865 purposeful sampled widows from the major ethnic groups in Nigeria (Igbo, Hausa, and Yoruba); found out that widowhood affects more women than men financially, socially and psychologically. The result of the investigation revealed that the majority of Nigerian widows (59.9%) reported experiencing stress at medium levels, (29.85%) experienced stress at low levels, and (10.35%) experienced stress at high levels. Thus, Nigerian widows differ significantly in their stress level and adjustment strategies based on selected personality variables.

Life Satisfaction according to Gilman and Huebner (2003) is viewed as an essential construct in positive psychology which means the positive evaluation of life as a whole and not a specific aspect. Individuals' definition of life satisfaction is dependent on their perceptions. For example, some people view it as a fulfillment of basic life needs of food, water, shelter, and clothing, while others view it beyond material needs. Research by Gomez, Grob, and Orth, (2013) indicated that older adults' life satisfaction tends to decrease with age and decrease after spousal loss. According to Hamarat, *et al.* (2001), older adults' self-perceptions of their coping resources are associated with more life satisfaction; thus indicating that the availability of resources tends to give better life satisfaction to individuals. Moreover, some scholars regard life satisfaction as a top-down process where it is determined by personality factors while others regard life satisfaction as a bottom-up process where it depends upon basic human needs. Satisfaction with life has been considered as a global/general indicator of wellbeing (Diener,

2006); and a reciprocal relationship has been found between wellbeing and physical health (Steptoe, Deaton & Stone, 2014). Wellbeing is defined to include life satisfaction, interests, and engagement, as well as emotional reactions to events in life *e.g.*, joy and sadness (Diener, 2006). It also encompasses overall satisfaction with life (i.e., life evaluation), everyday feelings or mood, such as happiness, anger, or stress (i.e., hedonic wellbeing) as well as meaning and purpose in life (i.e., eudemonic wellbeing) Steptoe, Deaton, & Stone, (2014).

Researchers have shown that bereaved individuals usually experience more depressive symptoms, higher rates of loneliness, lower life satisfaction, fewer positive emotions, higher global stress, and poorer subjective health compared to their married peers (Ong, Fuller-Rowell, & Bonanno, 2010; Stroebe, Schutt, & Stroebe, 2007). Research has shown that bereaved individuals who rated their marriage as less satisfying and more conflictual, reported lower rates of depression (Bonanno, *et al.*, 2002), and experienced less decline in positive emotions after spousal loss (Ong, Fuller-Rowell, & Bonanno, 2010). Studies have also shown that older bereaved adults experience less intense and fewer lasting negative consequences than younger ones (Bennett & Soulsby, 2012; Bonanno, Wortman, & Nesse, 2004).

Statement of the problem

Globally and Nigeria in particular, widows pass through numerous ugly experiences following the demise of their spouse, and hence there's a need to adjust mentally, financially, and socially within the socio-economic structure. Widows need love, care, moral support, and financial aid from children, friends, and significant others; but some of the negative attitudes of most cultures in the Nigerian communities towards widows, do not fit into present-day realities and thereby constitute psychological stress for the widows.

Purpose of the study

The study generally seeks to examine the length of widowhood and stress on life satisfaction of older Nigerian widows. Specifically, the objectives of the study are as follows: to determine whether:

- (1) There will be significant positive relationship between the length of widowhood and life satisfaction among older Nigerian widows.
- (2) There will be significant positive relationship between stress and life satisfaction among older Nigerian widows.
- (3) There will be significant positive relationship between the interaction of length of widowhood and stress on life satisfaction of older Nigerian widows.

Theoretical review

Continuity theory (Atchley, 1989) believes that individuals seek to maintain role stability throughout the life time. It also suggests that the activities that an Individual engages in should be reflective of past experiences, learning, etc; and also states that people tend to sustain the same core values, interests, and behaviors during older years. However, in widowhood, the most successful widow(er) would be the individual who is most effective in maintaining the lifestyle he or she developed earlier in life; and this goes a long way in determining how she/he adjusts to difficult life challenges especially spousal loss.

Empirical review

Length of widowhood and stress on life satisfaction of older Nigerian widows.

Srivastava, Debnath, Shri, *et al.*, (2021) investigated the risk of depression among older adults in India, considering the effect of factors such as socio-economic conditions and other

health problems. Data was collected from nationally representative Longitudinal Ageing Study in India (LASI: 2017–18), with sample size of 30,639 older adults aged 60 years and above. Binary logistic regression analysis was conducted to study the association between marital status and living arrangement on depression among older adults in India. Thus, about nine percent (9%) of the older adults suffered from depression, 10.3% of the widowed (currently married 7.8%) and 13.6% of the older adults who were living alone suffered from depression. Moreover, 8.4% of the respondents who were co-residing with someone suffered from depression. Widowed older adults were 34% more likely to be depressed than currently married counterparts (AOR: 1.34, CI 1.2–1.49). Older adults who were widowed and living alone were 56% more likely to suffer from depression (AOR: 1.56; CI 1.28, 1.91) than older adults who were currently married and co-residing. The study shows vulnerability of widowed older adults who are living alone and among those who had lack of socio-economic resources and had poor health status. The study can be used for outreach programs and service delivery for the older adults who are living alone or widowed and suffering from depression.

Findings of a study conducted by Umaru, (2012) using 2000 widows from Rivers state show that a woman who loses her husband was denied access to the husband's inheritance since she is being accused of being responsible for her husband's demise. As a result, she is made to go through agonizing rituals, economic deprivations or distress, physical and other forms of abuse, dehumanizing physiological and mental torture just to prove her innocence. Following their husbands' death, widows tend to suffer loss which has serious psychological, socioeconomic, and health implications on the woman. The woman would go through the stress of taking care of the children, providing all their needs, and other family responsibilities meant for two people.

More so, Kayode, (2011) conducted a study using 108 widows in the Ilorin metropolis and found that the concern of the extended family of the widow after burial is on how to share the landed property and other properties of the deceased husband without considering the outcome of such actions on the well being of the widow and children. This is so because some of these women are being accused of having a hand in their husbands' death and in some cases, the widow is frustrated out of her matrimonial home which can result in stress, depression, and loneliness. Moreover, the extent to which a person experiences satisfaction or dissatisfaction with life depends on the events he/she encounters in life which exerts some influences on the persons functioning.

. Suleiman (2010) sampled literate widows in three senatorial districts of Kwara state to study the problems encountered by widows and the adjustment needs of widows on bereavement period, religion, type of family, type of job, and highest educational qualification. The findings of the study showed that widows are mostly confronted by psychological problems which involved the feeling of sadness about their late husbands, financial problems, social and health problems. Findings also show that widows need adjustment in all areas of their lives (i.e., social, health, financial, and psychological issues); and significant differences were found based on age when married, type of family, type of job, and highest educational qualifications. Nevertheless, no significant difference was found in the problems encountered by widows based on length of bereavement and religion.

Nakagawa and Hukur, (2021) examined the role of resources available during spousal bereavement and changes therein for trajectories of well-being in an Eastern society, Japan. Data were obtained from a nationally representative panel survey of Japanese older adults aged 60 years and above. They were 481 married participants who experienced spousal loss during the

19-year follow-up period. Well-being was indexed as life satisfaction and the result revealed that life satisfaction typically deteriorated surrounding spousal loss and remained stable 1 year after the event. Compared with individuals co-residing with a child before and after loss, those who did not continuously co-reside with a child showed lower levels of post loss life satisfaction, but better recovery. The results also show that on the average, spousal bereavement has an initial negative impact on well-being with substantial individual differences in recovery 1 year later. However, it is important to consider the bereaved individual's cultural background and resources when designing interventions to promote adaptation after spousal loss.

This study therefore seeks to examine the length of widowhood and stress on life satisfaction of older Nigerian widows; thus we hypothesize that:

- (1) There will be no significant positive relationship between the length of widowhood and life satisfaction among older Nigerian widows.
- (2) There will be no significant positive relationship between stress and life satisfaction among older Nigerian widows.
- (3) There will be no significant positive relationship between the interaction of length of widowhood and stress on life satisfaction of older Nigerian widows.

Participants

The participants for the study were one hundred and fifty-five (155) widows of mean age 57 years, who were selected by convenient sampling. Some of these participants are in civil service and business while some are retired from active service. The inclusion criteria are: must be literate enough to respond to test items, have spent ten years and above in widowhood, willing to participate in the study.

Instruments

The *Perceived Stress Scale* (Cohen, Kamarck, & Mermelstein, 1983): A 4-item shorter version of PSS scored on a 5-point Likert-type scale ranging from (1) never to (5) always, was used to assess stressful experiences. The scores are gotten by summing all the scores for each participant, with higher scores indicating greater stress. Sample items (e.g., “How often in the past month have you felt (1) that you were unable to control the important things in your life” etc.

The *Life Satisfaction Scale* (Diener, Emmons, Larsen, & Griffin, 1985), a 5-items scale was used to assess overall life satisfaction. The items include: the conditions of my life are excellent; so far, I have gotten the important things I want in my life, etc. Participants rate how satisfied they are with life on a 5- point Likert-type scale ranging from (1) “strongly disagree” (5) to “strongly agree”. The five items were summed and a higher score is an indication of greater satisfaction with life. Length of widowhood, education, and age were included in the demographic section. We considered that those who have stayed 10 years and above as widows, would have greater life satisfaction.

Procedure

The data for the study was collected from one hundred and fifty-five (155) widows of mean age 57 years, who were selected by convenient sampling. Approval for the research was granted by the Psychology Research Ethics Committee, University of Nigeria, Nsukka. Permission to carry out the study was also obtained from the leaders of these widows at their point of meeting and informed consent was obtained from the widows who were qualified and volunteered to participate in the study. With the help of research assistants, the nature of the study was

explained to the participants, and what they were required to do. Participants were informed that they would be free to withdraw at any stage of the study, without prejudice, and that their personal information would remain confidential. They were encouraged to follow the instructions on the questionnaires and honestly complete the items as they applied to them. The properly completed questionnaires were analyzed with the aid of Statistical Package for the Social Sciences (SPSS version 23).

Design and Statistics

This is descriptive survey research and Pearson Correlation was used to ascertain the bivariate associations between demographic variables (age, educational qualification, number of children, occupation, and length of widowhood); stress and life satisfaction. Multiple regressions, using the step-wise method, were conducted to test the hypotheses whereas the data were analyzed with Statistical Package for the Social Sciences (SPSS) version 23.

Results

Table 1: Mean, Standard Deviation, and correlation among the study variables.

<i>Variables</i>	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. Age	57.59	5.93	-						
2. Education	-	-	.04	-					
3. No of children	4.05	1.60	-.10	.02	-				
4. Occupation	-	-	.51**	.07					
5. Widowhood	13.13	5.63	.10	.11	-.12	.07	-		
6. Stress	9.30	3.45	.02	.16*	-.09	.04	.20*	-	
7. Life satisfaction	13.28	5.02	-.04	-.08	.10	-.00	-.20*	.00	-

Note: * = $p \leq .05$, ** = $p \leq .01$, *M*= Mean age, *SD*= Standard deviation

The result in Table 1 indicated that among the demographic variables, age had positive no significant relationship with education, widowhood and stress; positive significant relationship with occupation ($r=.51, p<.01$); and negative no significant relationship with number of children and life satisfaction. Education had positive no significant relationship with number of children and length of widowhood; negative no significant relationship with life satisfaction; and a significant positive relationship with stress ($r = .16, p<.05$). Occupation had positive no significant relationship with number of children, length of widowhood and stress; negative no significant relationship with life satisfaction. Widowhood had significant positive relationship with stress ($r = .20^*, P \leq .05$); and significant negative relationship with life satisfaction ($r = -.20^*, P \leq .05$).

Table 2: Hierarchical Multiple Regression predicting life satisfaction by length of widowhood and stress with age and number of children as covariates.

<i>Variables</i>	<i>Step1</i>			<i>Step 2</i>			<i>Step3</i>		
	<i>B</i>	β	<i>t</i>	<i>B</i>	β	<i>t</i>	<i>B</i>	β	<i>t</i>
<i>Age</i>	-.02	-.03	-.34	-.01	-.01	-.12	-.01	-.01	-.11
<i>Numberof children</i>	.30	.10	1.20	.24	.08	.95	.25	.08	.99
<i>Lengthof Widowhood</i>				-.17	-.19	-.24*	-.18	-.02	-2.48*
<i>Stress</i>							.08	.05	.64
<i>R²</i>		.01			.05			.05	
<i>R²Δ</i>		.01			.04			.00	
<i>F</i>		2(152)	.83		3(151)	2.50		4(150)	1.97
<i>FΔ</i>		2(152)	.83		1(151)	5.80		1(150)	.40

Note: * $p < .05, R^2\Delta = .05$

Table 2: indicated that age ($\beta = -.03$) and number of children ($\beta = .10$) did not significantly predict life satisfaction in step 1 of the regression model. Note that the demographic variables were included in the table as covariates. The R^2 Showed that 1% of the variance in life

satisfaction was contributed by the demographic factors in step 1 and the F statistics was not significant $F(2,152) = .83$.

In step 2, length of widowhood negatively predicted life satisfaction ($\beta = -.19, p < .05$).

The B indicated that for each one unit increase in length of widowhood, life satisfaction decreases by (-.17 units). The variance in life satisfaction explained on account of length of widowhood was 4% ($R^2\Delta = .04$). The F statistics was significant $F\Delta(1, 151) = 5.80, p < .05$.

Stress did not significantly predict life satisfaction in step 3 ($\beta = .05$). The B indicated that for each one unit rise in stress experience, life satisfaction increased by .08 units. Stress accounted for 0% variance in life satisfaction ($R^2\Delta = .00$). The F statistics was not significant $F(1,150) = .40$.

All the variables accounted for 5% of the variance in life satisfaction ($R^2\Delta = .05$).

Table showing the interaction of stress and widowhood on life satisfaction

<i>Variables</i>	<i>β</i>	<i>SE</i>	<i>t</i>	<i>P</i>	<i>LLCI</i>	<i>ULCI</i>
<i>Stress</i>	-.34	.26	-1.30	.20	-.85,	.18
Widowhood	-.50	.19	-2.61*	.01	-.88,	-.12
<i>S X W</i>	.31	.02	1.74	.08	-.004	.07

Note: * $p < .05$, LLCI & ULCI= Lower and Upper Limit Confidence Interval

Result in table 3 show that stress had negative no significant relationship with life satisfaction ($\beta = -.34, t = -1.30, p = .20$). Length of widowhood negatively predicted life satisfaction ($\beta = -.50, t = -2.61^*, p < .05$); indicating that the longer people stay in widowhood/as widows, the less satisfied they become. The interaction of stress and length of widowhood did not significantly predict life satisfaction ($\beta = .31, t = 1.74, p = .08$).

Discussion

The study examined the length of widowhood and stress on life satisfaction of older Nigerian widows. The contributions of the length of widowhood and stress on life satisfaction were investigated. Findings of the current study showing correlation among variables revealed that widowhood had a significant positive relationship with stress ($r = .20^*$, $P \leq .05$).

The findings of the study reveal that length of widowhood was negatively related to life satisfaction, thus supporting the first hypothesis which stated that there will be no significant positive relationship between the length of widowhood and life satisfaction among older Nigerian widows. Previous studies have shown that bereaved individuals who rated their marriage as less satisfying and more conflictual reported lower rates of depression (Bonanno, *et al.*, 2002), and experienced less decline in positive emotions after spousal loss (Ong *et al.*, 2010). Studies have also shown that older bereaved adults experience less intense and fewer lasting negative consequences than younger ones (Bennett & Soulsby, 2012; Bonanno, Wortman, & Nesse, 2004), possibly due to the fact, that bereavement is a more expected event in older than in younger age. This result implies that the length of time people stay in widowhood is not a determinant of their satisfaction level since other factors can contribute.

The second hypothesis states that there will be no significant positive relationship between stress and life satisfaction. The findings of the study reveal that stress did not significantly predict life satisfaction. However, the result of the study is inconsistent with Oniye, (2001) in his study on the adjustment strategies of Nigerian widows as they strive to overcome the stress characteristic of our society widowhood practices, using 865 widows sampled purposefully from the major ethnic groups in Nigeria (Igbo, Hausa, and Yoruba). The result of the investigation revealed that the majority of Nigerian widows (59.9%) reported experiencing stress at medium levels, (29.85%) experienced stress at low levels, and (10.35%) experienced

stress at high levels. It was anticipated that the longer people stay in widowhood, the less the stress since the children may have grown and become more independent to care for their widowed mother peradventure, they were younger during the demise.

The third hypothesis which states that there will be no significant positive correlation between the interaction of length of widowhood and stress on life satisfaction was also supported by the result of the study. According to Hamarat, et al. (2001), older adults' self-perceptions of their coping resources are associated with more life satisfaction; thus indicating that the availability of resources tends to give better life satisfaction to individuals. This suggests that the available resources ought to reduce stress for the widows especially at this stage when individuals have stayed long as widows. But the result of the study, however, implies that the length of time spent in widowhood does not guarantee less stress for the widow since other life situations and challenges can constitute stress for individual widows. For example, widows tend to be disconnected from their friends who are still married and other social events that involve married couples; hence this can also constitute stress and subsequent withdrawal from other social events.

Limitation

The limitations of this study include: the homogeneity of the sample (155 widows) which may not allow for generalizability of the findings to the larger population of widows. Another limiting factor is the rigorous nature of using self-report measures (questionnaire) and the fatigue resulting from several items of the questionnaire being completed by the participants.

The researcher suggests that future studies should use larger sample of the population for better generalization, can include widowers, do a comparative study and also involve other methods of data collection like interviews and qualitative method.

Implications of the study

The following are the implications of the present research study:

1. This result implies that the length of time people stay in widowhood is not a determinant of their satisfaction level since other factors can contribute. The findings of this research could help us gain insight about the critical nature of what widows are passing through in our society and the need for urgent intervention in order for them to enjoy better satisfaction in life.
2. It was anticipated that the longer people stay in widowhood, the less the stress since the children may have grown and become more independent to care for their widowed mother. Peradventure, they were younger during the demise. Widowhood is a stressful life event that creates a vacuum and transfers responsibilities to one person. The result implies that the level of stress that widows experience after years of widowhood does not determine their extent of life satisfaction; thus it calls for the government and society to give them the needed support and enabling environment that will help them to thrive better in life.
3. The result of the study, however, implies that the length of time spent in widowhood does not guarantee less stress for the widow since other life situations and challenges can constitute stress for individual widows.

Recommendations

The present study investigated the length of widowhood and stress on the life satisfaction of older Nigerian widows. The study, therefore, recommends that the society, government, counselors and other social welfare practitioners should organize awareness programs/seminars at the various communities to educate the people and also introduce intervention strategies aimed

at abolishing injurious cultural widowhood practices, legislation against oppressive mourning, and widowhood rites which tend to constitute stress for the widow. Also, rehabilitation counseling is needed to restructure the widows' cognition about their present state of being and the stress associated with it. The aim is to restore the total personal well-being of the widows and maximize their potentials for optimal utilization in the larger society.

Conclusion

Every stage in human life is associated with its level of stress and this study revealed that length of widowhood is correlated with a high level of stress; and that how long one has stayed as a widow, does not guarantee how satisfied with life they can be since other factors including individual differences; availability of resources, etc can play a role. However, awareness of the necessities of life that would make widowhood less stressful and more satisfying is the key.

References

Atchley R. C., (1989). The continuity theory of normal aging. *The Gerontologist* 29:183-190.

Asai M., Fujimori M., Akizuki N., Inagaki M., Yutaka M and Uchitomi Y. (2010). "Psychological states and coping strategies after bereavement among the spouses of cancer patients: a qualitative study." *Psycho-Oncology*, 19(1): 38-45.

Auais, M., Ahmed, T., Alvarado, B., Phillips, S. P., Rosendaal, N., Curcio, C. L., et al. (2019). Gender differences in four-year incidence of self-reported and performance-based functional disability: *the international mobility in aging study*. *Arch. Gerontol. Geriatr.* 82, 266–272. doi: 10.1016/j.archger.2019.03.002

Bennett, K. M., & Soulsby, L. K. (2012). Wellbeing in bereavement and widowhood. *Illness, Crisis and Loss*, 20(4), 321-337.

Bennett, K., Hughes, G. & Smith, P. (2005). Psychological Response to Later Life Widowhood: Coping and the Effects of Sex, *OMEGA*, 51(1), 33-52. Psychological Response to Later Life Widowhood: Coping and the Effects of Sex, *OMEGA*, 51(1), 33–52.

- Ben-Zur H. (2012). Loneliness, optimism, and well-being among married, divorced, and Widowed individuals. *The Journal of Psychology, 146*, 23–36. 10.1080/00223980.2010.548414.
- Bonanno, G. A., Wortman, C. B., Lehman, D. R., Tweed, R. G., Haring, M., & Sonnega, J., et al., (2002). Resilience to Loss and Chronic Grief: A Prospective Study From *Psychological adaptation to spousal bereavement* 18 Preloss to 18-Months Postloss. *Journal of Personality & Social Psychology, 83*(5), 1150-1164.
- Bonanno, G. A., Wortman, C. B., & Nesse, R. M. (2004). Prospective patterns of resilience and maladjustment during widowhood. *Psychology & Aging, 19*(2), 260-271.
- Carr D., Nesse, & Wortman C., (Eds.). (2006). Spousal bereavement in late life. New York: Springer Publishing Company.
- Clark, A. E., & Georgellis, Y. (2013). Back to Baseline in Britain: Adaptation in the British Household Panel Survey. *Economica, 80*(319), 496-512.
- Diener, E. (2006). Guidelines for national indicators of subjective well-being and ill-being. *Applied Research in Quality of Life, 1*(2), 151-157.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment, 49*(1), 71-75.
- Einiö, E., & Martikainen, P. (2019). Risk of hospitalization for cancer, musculoskeletal disorders, injuries or poisonings surrounding widowhood. *American Journal of Epidemiology, 188*(1), 110–118. <https://doi.org/10.1093/aje/kwy184> [Crossref], [Web of Science ®], [Google Scholar]
- Fuller-Iglesias, H. (2015). Social ties and psychological well-being in late life: The mediating role of relationship satisfaction. *Aging & Mental Health, 19*(12), 113–1112.
- Gomez, V., Grob, A., & Orth, U. (2013). The adaptive power of the present: Perceptions of past, present, and future life satisfaction across the life span. *Journal of Research in Personality, 47*, 626–633.
- Hamarat E, Tompson D, Zabrocky D., Matheny K., & Aysan F., (2001). Perceived Stress and Coping Resources Availability as Predictors of Life Satisfaction in Young, Middle-Aged, and Older Adults. *Experimental Ageing Research. 2001;27*(2):181–196.
- Hooyman, N. R., & Kiyak, H. A. (2015). *Social gerontology: Multidisciplinary perspective*. London, England: Pearson Education, New York (NY).
- Kayode, B. (2011). Problems associated with widowhood as expressed by widows in Ilorin metropolis. Masters Dissertation, Ilorin University Nigeria.
- Knight, B., & Silverstein, M. (2014). Editors' preface to the special issue on widowhood and

bereavement. *The Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, 69B (1), 1. <http://dx.doi.org/10.1093/geronb/gbt115>

Kohout, F. J., Berkman, L. F., Evans, D., & Cornoni-Huntley, J. (1993). Two shorter forms of the CES-D Depression Symptoms Index. *Journal of Aging and Health*, 5, 179 –193. <http://dx.doi.org/10.1177/089826439300500202>

Kristiansen, C. B., Kjær, J. N., Hjorth, P., Andersen, K., & Prina, A. M. (2019a). Prevalence of common mental disorders in widowhood: A systematic review and meta-analysis. *Journal of Affective Disorders*, 15245), 1016–1023. <https://doi.org/10.1016/j.jad.2018.11.088> [Crossref], [Web of Science ®], [Google Scholar]

Kristiansen, C. B., Kjaer, J. N., Hjorth, P., Andersen, K., & Prina, A. M. (2019b). The association of time since spousal loss and depression in widowhood: A systematic review and meta-analysis. *Social Psychiatry and Psychiatric Epidemiology*, 54(7), 781–792. <https://doi.org/10.1007/s00127-019-01680-3> [Crossref], [Web of Science ®], [Google Scholar]

Pudrovskaya, T., & Carr, D. (2008). Psychological adjustment to divorce and widowhood in mid and later life: Do coping strategies and personality protect against psychological distress? *Advances in Life Course Research*, 13, 283-317.

National Population Commission (2009). *2006 Population and Housing Census of the Federal Republic of Nigeria: Priorities Tables (Volume 1)*. Abuja: National Population Commission. Nigerian Population. (2018, September 17). Retrieved from <http://worldpopulationreview.com/countries/nigeria/>

Nakagawa, T & Hukur, G. (2021). Life satisfaction during transition to widowhood among Japanese older adult. *Journal of Gerontology, Behavioural Section*, 67(3) :338–349
<https://doi.org/10.1159/000512859>

Njoku, J. & Omeire, C. (2016). Analysis of the effect of stress on productivity of rural agricultural workers in Imo State, Nigeria. *The Nigerian Society for Psychosocial Research*, 6(1), 15-26.

Ong, Fuller-Rowell, & Bonanno, (2010). Prospective predictors of positive emotions following spousal loss. *Psychology and aging*, 25 (3), 653-660. <https://doi.org/10.1037/a0018870>

Oniye, A. O. (2000). *A cross ethnic study of stress levels support systems and adjustment strategies among widows in Nigeria*. Unpublished PhD. Thesis department of guidance and counselling, University of Ilorin, Ilorin.

Pinquart M., (2003). Loneliness in married, widowed, divorced, and never-married older adults. *Journal of Social and Personal Relationships*, 20, 31–53. [10.1177/0265407503020001186](https://doi.org/10.1177/0265407503020001186)

- Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1, 385–401.
<http://dx.doi.org/10.1177/014662167700100306>
- Srivastava, S., Debnath, P., Shri, N. *et al.* (2021). The association of widowhood and living alone with depression among older adults in India. *Sci Rep* 11, 21641 (2021).
<https://doi.org/10.1038/s41598-021-01238-x>
- Stephoe, A., Deaton, A., & Stone, A. A. (2014). Subjective wellbeing, health, and ageing. *The Lancet*, 385(9968), 640-648.
- Stroebe, M., Stroebe, W., Schut, H., & Boerner, K. (2017). Grief is not a disease but bereavement merits medical awareness. *Lancet*, 389(10067), 347–349. [https://doi.org/10.1016/S0140-6736\(17\)30189-7](https://doi.org/10.1016/S0140-6736(17)30189-7) [Crossref], [Web of Science ®], [Google Scholar]
- Stroebe, W. & Stroebe, M.S. (2007). *Bereavement and Health: The psychological and physical consequences of partner's loss*. Cambridge: England press.
- Suleiman, A. (2010). Problems and adjustment needs, of literate widows in Kwara State. Masters Dissertation Ilorin University Nigeria.
- Utz, R. L., Carr D., Nesse R., & Wortman C. B. (2002). The effect of widowhood on older adults' social participation: An evaluation of activity, disengagement, and continuity theories. *The Gerontologist*, 42, 522–533. 10.1093/geront/42.4.522.
- Van den Berg, G. J., Lindeboom, M., & Portrait, F. (2011). Conjugal bereavement effects on health and mortality at advanced ages. *Journal of Health Economics*, 30(4), 774–794. <https://doi.org/10.1016/j.jhealeco.2011.05.011> [Crossref], [Web of Science ®], [Google Scholar]
- Wilcox, S., Everson, K., Aragaki, A., Wassertheil-Smoller, S., Mouton, C. and Loevinger, B (2003). The Effects of Widowhood on Physical and Mental Health, Health Behaviors, and Health Outcomes: The Women's Health Initiative, *Health Psychology*, 22(5), 513–522.
- Zisook, S., & Kendler, K. S. (2007). Is bereavement-related depression different than non-bereavement-related depression? *Psychological Medicine*, 37, 779–794.
<http://dx.doi.org/10.1017/S0033291707009865>
- Zisook, S., & Shuchter, S. R. (1991). Depression through the first year after the death of a spouse. *The American Journal of Psychiatry*, 148, 1346–1352.