# The role of defense mechanisms nursing essay

Health & Medicine, Nursing



### **Abstract**

Background: Identification of the risk factors and psychological correlates of prolonged grief disorder is vital to health promotions for relatives of person who died by cancer. The aims of this research were to investigate the role of defense mechanisms, character dimension of personality and demographical factors on complicated grief following death by cancer among family members. Methods: A number of 226 persons following death by cancer among family members selected by compliance sampling and they completed the Inventory of complicated Grief-Revised (ICG-R), The Defense Styles Questionnaire (DSQ), The Character dimension of Temperament and Character Inventory (TCI), and The Demographical questionnaire. Data analyzed by stepwise multiple regression analysis. Results: findings revealed that neurotic defense style had significantly positive predictive role on complicated grief and cooperativeness, age of deceased person, selftranscendence and mature defense style had negatively significant predictive role on complicated grief (p < 0.001). Conclusion: These results pointed out that two character dimensions (Low cooperativeness and selftranscendence), high neurotic defense style and low age of deceased person are engaged in the psychopathological course of complicated and prolonged grief. It concluded that personality characteristics of bereaved persons and demographics of deceased person should be addressed in designing of tailored interventions for complicated grief. Keywords: Grief, Character, Demographic, Cancer

# Introduction

Bereavement is a worldwide event to which majority of persons suitably adjust. However, various researches have revealed that individuals experiencing prolonged bereavement have elevated disturbances and are at heightened risk for death. 1, 2 The demand has been to recognize susceptible bereaved persons so that treatments could diminish their risk of unfavorable Consequences. Argument regarding the role of personality traits in comprehending and predicting states of psychopathology existing for the long time and among the personal risk factors for psychopathological phenomena, personality assumedly continues as a fundamental agent. 3 Character and coping strategies including defense styles are the most prominent personal risk factors for complicated and prolonged grief. 4, 5Complicated grief disorder (CGD) or prolonged grief disorder is the appearance of particular emotional, cognitive and behavioral symptoms for at the lowest 6 months following the death of a dear person including confusion concerning one's responsibility and roles, lack of ability for confidence to others inasmuch the death, difficulty in accepting the loss, extreme unpleasantness regarding to the loss, disinterest to the others, mental or physical discomfort about life, absence of sentiment since the death, experience of life meaningless and feeling stunned by the loss. 6 Despite of importance the study in this field, very little investigations has examined agents of complicated and prolonged grief pre- and post-loss. Moreover, these little investigations have not concentrated on the factors that anticipate complicated grief. 7Multicultural and multiple factors in integrated manner were predicted psychosocial stress, grief and mourning

among family caregivers of Childs and adults patients with cancer. 8-10 Some factors including personality traits and social background had proven that effects on 5-year post-bereavement after death from cancer. 11Little study performed on the influences of defense mechanisms on intensity of grief and more studies performed about coping strategies instead of defense mechanisms to handle loss because of the defense mechanisms are a enduring tendency, mainly unconscious, and so often resistant to change. 12 However, it is matter to study the effects of defense styles on complicated grief, As such, interventions and therapeutic tactics could be applied to change this maladaptive traits of personality that place underneath the psychopathological states. 3A character be composed of three dimensions encompassing self-directedness (SD) pertain to responsibility, selfacceptance and the inclination to settle on one's action to one's aims, Cooperativeness (C) ascribe to the capacity to recognize along with and to admire other people and Self-transcendence (ST) shows a inclination to have a opinions and value system and sense part of natural world. 13 The character concept became extremely influential and greatly carried out to numerous prominent subject of psychopathology, nonetheless, but, there is little studies that has carried out the Cloninger's model of personality to severity of grief. 14, 15 Bridging this gap is the one purpose of this research in Iran. Beside defense mechanisms and character socio-demographical factors also has important role in incidence of prolonged and complicated grief after death by cancer. For example, Ball concluded that style of death and age predicted the intensity of grief in widows whose husbands died of illness or accident six to nine months proceeding to the research. 16 In this

study, age was significant predictor of grief intensity as compared to style of death. Without consideration for the style of death, the younger widow experienced extreme grief as compared to middle or older widows. In one related study, demographical and clinical factors were predicted the preparatory grief in advanced cancer patients. 17Thus, regarding to importance of designing the appropriate interventions for bereaved caregivers of cancer patients, 18, 19 the aim of this research was to clarify the relationships between defense styles, character dimension of Cloninger's psychobiological model of personality structure and complicated grief.

### **Materials and Methods**

This cross-sectional study was carried out in the family members of cancer patients whose they already died in cancer institute at the Tehran University of Medical Science between Mar 2012 to July 2012. Throughout the 5-month study period, 226 persons following death by cancer among family members on age average 2. 89 (SD= 1. 83) prior to onset of study selected by compliance sampling. Death by cancer at least 6 months ago among family members (parents or siblings), needlessness for present medical care, interest for study participation and full Completion of self-report instruments are including criteria., in addition, all persons with severe psychopathological disorders whose diagnosed by psychiatrist, surgical inpatients or outpatients, medical patients who were clearly moribund or in a coma after events such as cardiac arrest (n= 22) were excluded in the final analysis. Given the no interventional nature of this cross-sectional study and in agreement with ethics committee demands at the inset of the research, informed consent was earned from the participants. Participants completed the Inventory of

complicated Grief-Revised (ICG-R), The Defense Styles Questionnaire (DSQ), and The Character dimension of Temperament and Character Inventory (TCI), and The Demographical questionnaire. Inventory of complicated Grief-Revised (ICG-R) is an adjusted and brief version of the primary Inventory of Complicated Grief (ICG), which is composed of 19 items. 20 The ICG-R was created to evaluate maladaptive manifestations of loss and includes all symptoms suggested for the Prolonged Grief Disorder diagnosis. 21 Indeed, the ICG-R is established upon 15 questions has a practical criterion and a time criterion of 6 months that scoring at a Likert-scale (five-point). Because of the duration criterion of 6 months, the ICG-R was executed at 6 months as the initial evaluating point. The ICG-R that had been utilized in a previous Danish study, had verified generously reliability with a highly mean interitem correlation (0. 52) and Cronbach's > 0. 94. 22 Also, ICG-R contained the gold standard with appropriate cut off point for differentiation the normal grief from prolonged grief as at first proposed by the constructors of the scale. 20 Utilizing this procedure the cut off point for ICG-R in the Danish sample was a score of 43 and above. The ICG a properly validated scale ( $\alpha$ = 0. 92- 0. 94; test-retest reliability= 0. 80. 20 Threshold level of complicated grief manifestations was specified as a score ≥25. 23 This scale with proper psychometric features is useful for measuring the severity of prolonged and complicated grief. 24Defense Styles Questionnaire (DSQ) contained 40 items about a broad diversity of defense mechanisms, which are organized into three extensive defense styles: mature (8 items), immature (8 items), and neurotic (24 items). 25 This scale is a self-report instrument in which participants respond by a nine-point Likert scale extending from one

(strongly disagree) to nine (strongly agree). Thus, elated scores point out higher utilization of the target defense style. Andrews et al stated alpha coefficient amounts of the Defense Styles Questionnaire scales extending from . 58 (neurotic style) to . 80 (immature style). 25 Cronbach's alpha estimates for study by Gana and K'Delant were . 65, . 66 and . 83 for mature, neurotic, and immature styles respectively. 3 Factor analysis of Defense Styles Questionnaire (DSQ-40) in Iranian nonclinical sample revealed the excellent validity of this scale. Moreover, reliability coefficients of Cronbach's alpha for mature style, neurotic style and immature style was  $\alpha = 0.75$ ,  $\alpha =$ 0. 73 and  $\alpha$ = 0. 74 respectively that pointed out the suitable reliability. 26The Temperament and Character Inventory (TCI) is force-choice and truefalse self-report instrument to evaluate individual distinctions in the fundamental dimensions of biosocial model of personality according to the Cloninger theory. 27, 28 The TCI comprised 226-item to appraise seven dimensions reflecting about two major components of temperament and character of personality that formulated to assess seven dimensions. Dimensions of temperament were included harm avoidance (HA), novelty seeking (NS), reward dependence (RD) and persistence (P). Dimensions of character were included self-directedness (SD), cooperativeness (C) and selftranscendence (ST). In this study, dimensions of character were used. In both normal and abnormal personality patterns the one version of the TCI was used. Coefficients of internal consistency for the TCI Scales by the using of Kuder-Richardson formula (K-R20) are more high than 0. 70. 28 TCI were stable with Intraclass coefficients from 0. 66 to 0. 82 (P-0. 001) and its reliability coefficients with Cronbach were above. 75. 29 The psychometric

characteristics of the TCI were affirmed by its reliability values and validity properties. 29 The Temperament and Character Inventory (TCI) has appropriate psychometric features in Iranian population. 30Demographical questionnaire also used for gathering data about age, gender, socioeconomic status, marital status, literacy, relation to deceased person, location of usual residence, trauma history, and Age of deceased person. Finally, A multiple regression analysis with stepwise procedure was used to reveal which of the factors included in this model were signicantly predict the complicated grief. This data analysis was performed using the PASW version 18. Multiple regression analysis is best statistic for investigation in predictive relationships among set of predictors and continuous criterion variables. 31

# Results

Preliminary analyses were carried out to certain no violation of the statistical assumptions of linearity, collinearity and multicollinearity, normality and homoscedasticity. Initially, bivariate correlations with pearson calculation between whole of variables used in the study were presented in Table 1. In this associations, the correlation coefficients among age of deceased person, mature defense style, immature defense style, neurotic defense style, cooperativeness, self- directedness and self- transcendence with complicated grief was (r=-. 57, P=. 001), (r=-. 59, P=. 001), (r=-. 54, P=. 001), (r=-. 71, P=. 001), (r=-. 66, P=. 001), (r=-. 60, P=. 001), (r=-. 54, P=. 001) in respectively.

# **Location for Table 1**

Also, biserial correlation between categorical predictor of gender and severity of complicated grief with R=.21 is statistically significant (P < .01). Significant predictors entered to the regression model in the five steps. Neurotic defense style was entered at Step 1, explaining 50% of the variance in complicated grief (F1, 224 = 229. 70, P < 0. 001). In the step 2, neurotic defense style and cooperativeness were entered that explaining 64% of the variance in complicated grief (F2, 223 = 206.55, P < 0.001). In the step 3, neurotic defense style, cooperativeness and age of deceased person were entered that together explaining 69% of the variance in complicated grief (F3, 222 = 170. 68, P < 0. 001). Neurotic defense style, cooperativeness, age of deceased person and self- transcendence were entered in the step 4 that together explaining 72% of the variance in complicated grief as a whole (F4, 221= 146. 64, P < 0. 001). After entry of all significant predictors (Neurotic defense style, cooperativeness, age of deceased person, self- transcendence and mature defense style) at step 5, the total variance in complicated grief explained by this model as a whole was 73%, F5, 220= 122. 73, P <. 001, R squared change (R2)=. 01, F change 5, 220= 8. 138, P <. 001.

# **Location for Table 2**

Among all predictors (eight variables) that entering the model, the five predictive variables of Neurotic Defense Style, Cooperativeness, Age of deceased person, . Self- transcendence and Mature Defense Style respectively by enter this model significantly predict the complicated grief. F value for step 5 (final model) was 122. 73 (5, 220), p <. 0001. In this regression model using the stepwise method, R2 was . 50, . 64, . 69, . 72,

and . 73 for Steps 1, 2, 3, 4 and 5 respectively. In this model three variables of gender, immature defense style and self- directedness are excluded variables and didn't significant role in prediction of complicated grief (P>. 05).

### **Discussion**

This study was intended to appraise the role of defense mechanisms, character of personality and socio-demographical factors on complicated grief following death by cancer among family members. The influence of personality traits in comprehending grief complications, and psychological intervention of complicated grief requires to be moreover explored. In here summarize the main results of our study. Firstly, according to the outputs of multiple regression analysis at final model, that neurotic defense style had significant positive influences on complicated grief and cooperativeness, age of deceased person, self- transcendence and mature defense style had negatively significant effects on complicated grief. Neurotic defense mechanisms are maladaptive strategies for dealing with adverse realities. Watson by using the Brief Symptom Inventory (BSI) concludes that immature and neurotic defense styles were main predictors of the studied symptomatology. 32 In line with prior studies we can claim that maladaptive defense style such as neurotic defense mechanisms comprise susceptibility factors that rise emerge of the complicated grief. 33, 3 On the other hand, formation of mature defense style associated with lower tendency for experience of complicated grief. In this multiple regression analysis, age of deceased person and the two character dimensions (cooperativeness and self transcendence) were the other predictors of complicated grief.

Therefore, as anticipated, death by cancer in younger age is risk factor to prolonged grief. This result is consistent with previous literature in this field. 34, 35The age of the deceased person negatively predicted complicated grief. This indicates that the younger age of the deceased person associated with the more severity of the grief. This is apparent that it is more troublesome to admire the dying of a youths and offspring, also, death in young person sometimes interpreted as a massive unfairness of fortune. Anyway, understanding of age is relative and personal. In the personality dimensions, cooperativeness had a significantly negative effect on complicated grief. Cooperativeness refers to empathy, compassion, social acceptance, Kindliness and usefulness. Thus, existence of a high level of cooperativeness is associated with adoptive personality traits and existence of a lower level of cooperativeness is indicator for immaturity of character. 36 Because of grief psychopathology takes places when emotions are not regulated in a successful manner by a mature and full-grown character. 3Moreover, self-transcendence was negative predictor for complicated grief. This result requires some interpretation. Truly, self- transcendence pertaining to traits including judiciousness, faithful and spirituality and these attributes seem to defend against grief maintaining, due to these traits are beneficial when experiencing the negative life events. 37According our results; gender, immature defense style and self-directedness don't were significantly predicted the prolonged grief. In opposing results, a study by Gana and K'Delant revealed that gender, immature defense style and selfdirectedness were predominant predictors of prolonged grief. 3 In accord with bulk of researches, gender, immature defense style and self-

directedness had proven that determining factors in grief psychopathology. 38, 32, 3 Chiu and colleagues argued that gender and character dimension of personality along with other factors are determinants of prolonged and complicated grief in persons who provides care and nursing for patients suffering by terminal cancer. 39 It argued that these factors were nonsignificant predictors of complicated grief for this study unlike the other studies, because of cultural differences, lower sample size, different and self report instruments, distinctive study design, and diversity in methodology from the other studies. To the better comprehension of our results, the present research is the initially inquiry that attempt to inspect the associations between character dimension of personality and of complicated grief in an Iranian sample. Therefore, subsequent studies in this research line will reveal the greater realities. It is obvious that this research has some shortcomings. First, not just was our questionnaire extended and so a possible origin of bias as a result of fatigue, it was settled by self-report items whose answers may be polluted by factors such as social desirability. Secondly, the number of sample was entirely little. Thirdly, psychopathological comorbidity present psychotherapeutic intervention and drug treatment were not controlled. Therefore, a self-report scale in assessment of complicated grief requires to be complemented by a clinical measurement. Eventually, investigating the associations between character, defense mechanisms and complicated grief can assist profit deeper understanding in the direction of what personality characteristics underlie grief severity and extended grief. According to the results, character dimensions including low cooperativeness and self-transcendence, neurotic

defense style and lower age of deceased person had shared in appearance of the complicated/prolonged grief. Eventually, we can deduce that particular personality related elements with dysfunctional defense mechanisms might make persons more susceptible to experiencing a prolonged or complicated grief disorder in loss of someone by cancer. Thus, the character dimensions of personality for bereaved persons and demographical characteristics of deceased person should be addressed in designing of appropriate interventions for complicated grief.

# **Acknowledgments**

This study was conducted by means of assistance from family members of patients who died by cancer in Tehran cancer institute. Authors are grateful for the participants and persons which helped them in this study. Tables (2) tables presented on separate pages) Table 1. Bivariate correlations among the continuous variables in the study (N = 226). Measure 123456781. Age of deceased person2. Mature Defense Style037\*3. Immature Defense Style-. 32\*-. 71\*\*4. Neurotic Defense Style-. 42\*-. 54\*\*. 60\*\*5 Cooperativeness. 38\*. 49\*-. 45\*-. 46\*6. Self- directedness. 34\*. 44\*-. 37\*-. 40\*. 84\*\*7. . Selftranscendence029\*. 33\*-. 32\*-. 38\*. 41\*. 36\*8. Severity of Grief-. 57\*\*-. 59\*\*. 54\*\*. 71\*\*-. 66\*\*-. 60\*\*-. 54\*\*M(SD)42. 01(12. 91)28. 40(13. 34)34. 11(15. 19)98. 61(16. 32)42. 26(21. 00)42. 11(19. 42)36. 67(12. 89)33. 44(15. 17) Note. \*P <. 01, \*\*P < 0. 001 Table 2. Results of stepwise regression analysis for prediction of complicated grief (N = 226).

### SE

Step 1Constant12. 131. 57Neurotic Defense Style0. 197. 013. 71\*\*\*Step 2Constant31. 113. 33Neurotic Defense Style0. 142. 012.

51\*\*Cooperativeness-0. 309. 032-. 42\*\*Step 3Constant43. 813. 08Neurotic Defense Style0. 121. 012. 43\*\*Cooperativeness-0. 266. 031-. 368\*\*Age of deceased person-0. 292. 049-. 248\*Step 4Constant50. 733. 27Neurotic Defense Style0. 110. 012. 39\*\*Cooperativeness-0. 228. 031-. 31\*Age of deceased person-0. 267. 047-. 22\*Self- transcendence-0. 227. 047-. 19\*Step 5Constant54. 123. 43Neurotic Defense Style0. 098. 012.

35\*\*Cooperativeness-0. 204. 031-. 28\*Age of deceased person-0. 251. 047-. 21\*Self- transcendence-. 218. 046-. 18\*Mature Defense Style-0. 143. 050-. 12\*Note. R2=. 50 for Step 1; F(1, 224)= 229. 70, P <0. 001 and R2 =. 14, . 04, . 02, and . 01 for Step 2, 3, 4 and 5 respectively (p <. 05).\* p <. 05, \*\*p <. 01, \*\*\*p <. 001.