



## The Relation between the Caring Stress and the Caregivers' Anxiety in Cancer Patients' Family

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### **Abstract**

The purpose of this research was to ascertain the relationship between the caring stress and the caregivers' anxiety in cancer patients' family. The research method was correlation and the statistical population consisted of all family caregivers of cancer patients of Mahak Institute in 96 with the total number of 4400. By using the available sampling method, 384 people were sampled and evaluated by the care pressure questionnaire (CBI) and the God existential anxiety scale. The results of Toosi statistical analysis of correlation coefficient and regression represented that there is a relationship between caring stress and existential anxiety in family caregivers of cancer patients. So, patients' companions can become anxious because of caring for a long time.

**Keywords:** *Care Stress; Existential Anxiety; Family Caregivers of Cancer Patients*

### **Introduction**

Illness is one of the challenges many people face and detains them from their activities and daily life. Illness elimination is a special importance because of its influence on individual, social and economic dimensions (Sanaat et al.2019 & 2020). Among the illnesses, chronic diseases that have an increasing prevalence in the world, because of the spread treatment methods and as a result reducing attenuation with a long process, require patients to care, supervision and rehabilitation (Brooner, 2010).

Pressure increasing in caregivers will cause to consequences such as family isolation, despair of social support, disruption of family relationships and inadequate patient care, and ultimately abandonment. So that 70% of caregivers have two main problems consisting the problems that relate to

patient care and treatment and adaptation to the responsibilities of care. On the other hand, any change in human life, both pleasant and unpleasant, needs some kind of readjustment.

The application of system dynamics has attracted significant attention from healthcare researchers since 2013. To date, articles on system dynamics have focused on a variety of healthcare topics (Davahli et al., 2020). The most popular research areas among the reviewed papers included the topics of patient flow, obesity, workforce demand, and HIV/AIDS (Mohseni et al., 2016).

Care stress is a point that is really problematic for the patient and his family. They usually report a lots of health problems and usually because the stress of caring is not a disease and it has a hidden nature, both the patient and his caregiver are suffering, they are in dire need of social support and need to be understood (Abbasi, Shamsizadeh, Asayesh, Rahmani, Hosseini Talebi, 2013).

Caregiver, caring quality, the caregiver's mood and obstinacy, the level of resilience and other characters like mental health, resilience and care pressure which are all related to the type of care and quality of caregiver care can be considered as key points in the patient's recovery. Because the caregiver, as one of the main basis of the treatment process, spends lots of time with the patient, and therefore, addressing the mentioned components, that is, dealing with how the treatment is progressing. With the increasing responsibility of caregivers, there is an increasing awareness of the problems that caregivers experience for such patients to manage and maintain them (Afgheh et al., 2007). The role of patient care in the family poses great challenges for families. Existing resources, management of difficult and complicated patient behaviors and how to deal with guilt, confusion, sadness and emotional arousal are not sufficiently known (Solomon 2000). As a result, they face many disorders (Kakui et al., 2006). Difficulty living with these patients, family conflicts, financial problems, social isolation, lack of social support are common experiences among families with patients (Bartol and Littin, 1994).

Chronic illness and disability disrupt the life process and related adaptations, and because of the impact of the disease on the client and the family, the dynamics of the family often change. In a systemic view of the family, one problem for each family member will affect the other members of the family, and chronic illness will generally influence on the whole family. Due to the chronic nature and long-term treatment of cancer, changes in family functioning are inevitable (Potter and Perry, 2009).

Caregivers of these patients often spend a lot of time caring for these patients and suffer from a lot of fatigue and care pressure. Caregivers of cancer patients may feel a heavy burden because they have to play an important role in supporting these patients. These caregivers are usually family members or friends and relatives of the patient who should be in contact with the patient to care for him. It is estimated that in the UK 9 out of 10 people who care for patients with physical or mental disabilities, are their close relatives.

In a research done by Hacialioglu et al. (2010), about half of the family caregivers were the patients' children. Caregivers are the people who, during a period of illness and its treatment, have the most involvement in caring for the patient and helping them to adapt. They have chronic disease management and are interpreted as latent patients (Lubkin. 2011). Actually it is physical, psychological and social distress that enters the caregivers as a result of caring for chronic patients, and this issue may lead to lots of problems such as burnout, anxiety and depression for caregivers (Abbasi et al., 2010). The recreation of social interactions and the disability and illness of the caregiver can be the result of this caring pressure. Caregivers are especially vulnerable to stress because the patient's biological, social and psychological demands exceed their own needs. Increased pressure on caregivers and inattention on them will have consequences such as family isolation, despair of social support, disruption of family relationships and inadequate patient care, and ultimately abandonment. In fact, patient caregivers need to be supported and informed about the conditions of diagnosis. Get information from their patients and learn new skills and lifestyle changes. It is also important to better understand the emotional and physical needs of caregivers close to the patient and trying to improve their health (Lubkin, 2011).

Alnazly (2016) in research named care pressure in hemodialysis patients indicated that 76% of caregivers of these patients had excessive care pressure. Satkin et al. (2016) in a study called care pressure in patient caregivers showed that 86.9% of patient caregivers experienced moderate to severe care stress. Chimeh et al. (2016) in a study entitled "The amount of mental and objective stress in patients' caregivers showed that caregivers suffer equally from the objective and mental stresses." Also, Hardin et al. (2015) during a study as care pressure applied to nurses of cancer, dementia and brain trauma showed that the average score of care pressure in these nurses is higher than others.

In the last century, human beings have become particularly anxious due to mental illness (Shafiabadi et al., 2006). Anxiety is considered as a part of every human life, in all societies, as an appropriate and compatible response. Anxiety is considered to be a normal emotion that is experienced throughout life and has a protective role in people's daily lives. (Ghamkhar fard et.al. 2015). In this arc of industrial consequences, it should be noted that the lack of anxiety or pathological anxiety may make us many problems and dangers (Lashkaripour et al., 2006).

Anxiety in a balanced and constructive way forces us to try to do our things in a timely and appropriate manner, thus making our lives more sustainable and fruitful; That is, anxiety is a physiological and psychological state characterized by a variety of cognitive, physical, emotional and behavioral symptoms. In fact, it can be said that anxiety is a set of symptoms that is the result of incomplete adaptation of human beings to the stresses and strains of life. We may experience anxiety when we encounter important events, or pain and danger; (Rector.et al., 2005, Bushnell, 1998.)

Anxiety becomes a clinical problem when it gets such a level that interferes with the ability to function in daily life, so that the person develops maladaptive state characterized by severe physical and psychological reactions (Soleimanifar et al., 2015 & 2016). In general, it can be said that anxiety disorders cover a set of disorders in which anxiety is one of the main symptoms. The common feature of these disorders is psychological suffering and especially anxiety, which is manifested only with other symptoms (Dadsetan, 2008: 56).

Pathological fear and anxiety comparing to normal symptoms, are recognizable conditions, when they cause significant distress as well as impairment of function (Keeley and Storch, 2009). Lots of recent researches have represented that anxiety disorders are common in the public. (Michael, Zetsch and Margraf , 2007; Stein and Stickler,; Simpson et al., 2010 ).

Based on the National Combination Survey, which has prepared information on the prevalence of mental disorders, 31.2% of the general population showed anxiety disorders during their lifetime, and 18.7% of individuals have shown symptoms of anexity disorders within 12 months. (Hersen, Turner, Beidel, 2007).

In recent years, anxiety disorders have become increasingly epidemic, but the stress of the diseases associated with these disorders is often significant (Somers et al., 2006). Anxiety disorders usually relate to depression, suicide, Alcoholism and other related abuses are associated with the high incidence of these disorders, which impose a great deal of pressure on society, and improvement in the treatment of these disorders requires major public health goals (Leray et al., 2011).

Delays in the diagnosis and treatment of anxiety disorders are costly for the patient, physicians, and the community (Arikian & Gormon, 2001). Other diseases and problems are co-occurring, given the diversity and abundant research that has been done in this field and the dual and contradictory results that have been obtained in different studies, it is necessary to do more research in this field. It was decided to study the relationship between caring stress and existential anxiety in family caregivers of cancer patients to understand if there is a relationship between caring stress and existential anxiety in family caregivers of cancer patients?

## **Research Methodology**

The method in this research was correlation. The statistical population consisted of all family caregivers of cancer patients of Mahak Institute in 96, whose number was (4400). Of these, 380 people were selected as a sample group according to Morgan Table 11 and the available method.

## **Research Tools**

### **Caregiver Burden in Ventory (IBC) (1989)**

The Caregiver burden ventory (CBI) was developed in 1989 by Novak and Gost to evaluate objective and subjective care pressure. This questionnaire consists of 5 subscales: time dependent care pressure, developmental care pressure, physical care pressure, social care pressure and emotional care pressure predict care pressure about 66% of the care pressure variance.

Also, the reliability of each of the subscales of caregiving pressure was obtained as below: time-dependent caregiving pressure and evolutionary caregiving pressure equal to 0/ 85. Cronbach's alpha was obtained and the subscales of physical care pressure, social care pressure and emotional care pressure were equal to 77%, 73%, and 86%, respectively were obtained. In Iran, in a research done by Abbasi et al. (2011), Cronbach's alpha coefficient of this questionnaire was 90% and its subscales were from 72% to 82%. In Salmani et al., 2013, Cronbach's alpha subscales were 0.72 to 0.82. In a research done by Salmani et al. (2013) Cronbach's alpha of whole questionnaire was 92%.

### **God Existential Anxiety Scale (1947)**

This scale was made by Lawrence and Katrina God in 1947 in 32 items. This test is in the research of Noor Alizadeh and Jan Bozorgi (2010) was validated by Cronbach's alpha method, in which the Khuzbi alpha coefficient was obtained as = 0.888%. This test was validated in this study by Cronbach's alpha method, 101 that is a proper alpha coefficient of =a 0.888 was obtained.

The internal consistency of this questionnaire was also obtained by binomialization method, which is: Cronbach's alpha: the first part 0/721, the second part 0.862, the correlation between the two forms 0.780, Spearman-Brown coefficient 0.876, Gotman coefficient 0.868 binary coefficient. In 1994, Holt conducted a study with a statistical sample of 102 people to study the validity of the 447 Existential Anxiety Scale. The results of that research represented that this questionnaire has a proper convergent and divergent validity with objective tests in life pursuing cognitive goals and depression.

The total correlation was 0.66, which indicates the high validity of this test. Also, in order to investigate the relationship between care pressure score and quantitative variables, Pearson correlation coefficient and regression were used.

## Results

**Table 1. Correlation coefficients between research variables**

| Variables                    | 1 | 2      | 3      | 4      | 5      | 6      |
|------------------------------|---|--------|--------|--------|--------|--------|
| Time-dependent care Pressure | - | 0.57** | 0.45** | 0.47** | 0.26** | 0.46** |
| Evolutionary care pressure   | - | -      | 0.18** | 0.29** | 0.22*  | 0.31** |
| Physical care pressure       | - | -      | -      | 0.50** | 0.39** | 0.28** |
| Social care pressure         | - | -      | -      | -      | 0.52** | 0.26** |
| Emotional care pressure      | - | -      | -      | -      | -      | 0.20** |
| Existential anxiety          | - | -      | -      | -      | -      | -      |

*P*<0.05 \* *p*<0.01 \*\*

As can be seen in Table 1, all the correlation coefficients obtained between the research variables are significant. Significant levels for all coefficients are marked with an asterisk in the table.

The correlation coefficient of time-dependent care stress with developmental care stress is 0.57 and the correlation coefficient of emotional care stress with existential anxiety is 0.20. According to information in the table above, the dimensions of caring pressure are considered as predictor variables and existential anxiety as the criterion variable. In the following, the intensity of correlation, the ability of explanation and self-correlation are examined in Table 2.

**Table 2. Summary of regression model and autocorrelation study**

| Watson camera statistics | Standard deviation | AR2  | R2   | R    |
|--------------------------|--------------------|------|------|------|
| 1/833                    | 3/78               | 0.20 | 0.21 | 0.46 |

According to the data in table 2, it can be noticed that the intensity of the correlation based on the value of the multiple correlation coefficient is equal to 0.21. The adjusted R-square is 0.20, which shows that 20% of the changes in the criterion variable like existential anxiety, can be explained by the predictor variables. The limit is normal. Also, according to Watson's camera statistics (1.833), the self-correlation between the predictor variables is normal. Table 3 of the ANOVA test investigates whether the regression model can significantly and appropriately predict the changes of the dependent variables.

**Table 3. ANOVA table to investigate the significance of the regression mode**

| <i>Sig.</i> | F statistics | Mean of squares | Sum of square | Freedom degree | Source of change |
|-------------|--------------|-----------------|---------------|----------------|------------------|
| 0.000       | 19/92        | 285/751         | 1428/756      | 2              | Regression       |
|             |              | 14/341          | 5220/025      | 364            | Remaining        |
|             |              | -               | 6648/781      | 369            | Total            |

According to the data in Table 3, the meaningful value of F with the degree of freedom of 2 and 364 less than the value of 0.01 is calculated, which indicates that the regression model is meaningful at the level of 99%.

( $0/01 < p$  and  $19.92 (=_{2,364} F)$ ).

**Table 9. Regression coefficients of the effect of care pressure on existential anxiety**

| significance level | Beta   | Non-standard coefficients |                    |        | Factor B                     |
|--------------------|--------|---------------------------|--------------------|--------|------------------------------|
|                    |        | standard                  | standard deviation | t      |                              |
| 0.000              | 12/193 | -                         | 2/789              | 34.008 | Constant level               |
| 0.000              | 6.253  | 0/300                     | 0/024              | 0.148  | Time-dependent care pressure |
| 0.000              | 5/578  | 0.263                     | 0/029              | 0/161  | Evolutionary care pressure   |
| 0.007              | 2/727  | 0/151                     | 0/020              | 0/055  | Physical care pressure       |
| 0.920              | 0.100  | 0.006                     | 0.019              | 0.002  | Social care pressure         |
| 0.031              | 2/161  | 0/130                     | 0.019              | 0.041  | Emotional care pressure      |

According to the information in Table 4, among the considered variables, time-dependent care pressure with a meaningful level of 0.000 and standardized regression coefficient of 0.300, evolutionary care pressure with a significant level of 0.000 and standardized regression coefficient of 0.263 Physical care pressure with a significance level of 0.007 and standardized regression coefficient of 0.151 and social care pressure with a significance level of 0.031 and standardized regression coefficient of 0.130 had the most effect in explaining the variance of the criterion variable. Also, the meaningful level of the constant value is calculated to be 0.000, which represents that the calculated constant value does not affect the criterion variable. The final result of the regression analysis, along with non-standard coefficients of effective variables in the model is given below.

Disappointment=  $34.008 + (-0.148 \times \text{positive perfectionism}) + (0.263 \times \text{negative perfectionism}) + (-0.055 \times \text{inner}) + (-0/041 \times \text{total})$

## Discussion and Conclusion

The findings indicate that there is a significant relationship between caring stress and existential anxiety in family caregivers of cancer patients. This result is in line with the findings of Ebrahimian et al. (2017), Safaiyan et al. (2017), Haghgoo et al. (2017), Nik danesh et al. (2017), Fayazzi et al (2016), Asgari et al(2015), Alnazly (2017), Sentkin et al. (2016), Chimeh et al. (2016), Hardin et al(2015), Shaban et al. (2014), Molla Oghloo et al.(2013), Ballestores et al.(2012).

It can be argued that patient care puts a lot of pressure on caregivers. This pressure multiplies the pressure in different ways when it is associated with a family members and on the other hand the patient has cancer and is struggling with death. This increase in pressure can be due to the prolongation of care time on the one hand and the loss of loved ones or family members on the other hand. In the meantime, we can point to more familiarity with the reality of death through the care and closeness of caregivers with patients, which in turn can increase anxiety in caregivers.

The results also showed that there is a significant relationship between time-dependent care pressure and existential anxiety in family caregivers of cancer patients. This result is based on the research findings of Safaiyan et al. (2017), Haghgoo et al. (2017), Nik Danesh et al. (2017), Fayazzi et al. (2016), Asgari et al. (2015), Alnazly(2017), Sentkin et al. (2016), Chimeh et al. (2016), Hardin et al. (2015), Shaban et al. (2014), Mollaghloo et al. (2013).

This means that by time going on and the increase in the length of care by family caregivers, the time-dependent caregiver pressure increases and caregivers feel more existential anxiety, which can be because of more thinking about illness and death.

The results showed that there is a significant relationship between developmental care pressure and existential anxiety in family caregivers of cancer patients and the above hypothesis is confirmed. This result is based on the research findings of Ebrahimian et al. (2017), Safaeian et al (2017), Haghgoo et al. (2017), Nik Danesh et al. (2017), Fayazi et al (2016), askari et al. (2015), Alnazli (2017), Sentkin et al. (2016), Chimeh et al. (2016), Hardin et al. (2015), Shaban et al. (2014), Mollaoghloo et al. (2013), Ballestores et al.( 2012). It can be argued that with increasing physical care pressure, caregivers feel more weak and incapacitated and in fact find themselves weaker than before, which in turn, along with daily thinking about illness and patient care, in turn increases anxiety

The results showed that there is a significant relationship between social care pressure and presence anxiety in family caregivers of cancer patients and the above hypothesis is confirmed. This result is based on the research findings of Ebrahimian et al. (2017), Safaeian et al (2017), Haghgoo et al. (2017), Nik Danesh et al. (2017), Fayazi et al (2016), askari et al (2015), Alnazli (2017), Sentkin et al. (2016), Chimeh et al. (2016), Hardin et al. (2015), Shaban et al. (2014), Mollaoghloo et al. (2013), Ballestores et al. (2012). It can be argued that caregivers who are under a lot of pressure on their own feel a lot of helplessness due to the double pressure of social care, and this feeling of helplessness and support can increase existential anxiety.

Also, based on the results, there is a significant relationship between emotional care pressure and existential anxiety in family caregivers of cancer patients and the above hypothesis is confirmed. This result is based on the research findings of Ebrahimian et al. (2017), Safaeian et al (2017), Haghgoo et al. (2017), Nik Danesh et al. (2017), Fayazi et al (2016), Askari et al. (2015), Alnazli (2017), Sentkin et al. (2016), Chimeh et al. (2016), Hardin et al. (2015), Shaban et al. (2014), Mollaoghloo et al. (2013), Ballestores et al. (2012). It can be argued that the emotional connection between caregivers and family patients due to the great depth and also the feeling of pity along with the torment of conscience for the inability to treat the patient increases the anxiety of death of family caregivers.

## References

- Abbasi a, asayeh h, rahimi h, shariati a, hosseini sa, shariati a, hossieni sa. The burden & on caregivers from Hemodialysis patients and Related Factors. *Journal Of Gorgan Bouyeh Faculty of Nursing & Midwifery*. 2010;7(1):26-33/. [Text in Persian]
- Abbasi A, Ashraf-eahimi N, Asayesh H, Shariati A, A Rahimi H, Mollaei E. relationship between caregivers burden and counter skills in hemodialysis patient. *Oroomiyeh Faculty if nursing and midwifery journal*. 2012(39):533-9. [Text in Persian]
- Afegheh S, Ardeshirzadeh M, Jafari F, Mahmoodi M, Sadeghinejad G, Comparingsuffer toleration in schizophrenic patients caregivers with ESRD paint caregiver. *Maazandaran university of Medical science joutnal*. 2007;17(62):31-9 [Text in Persian]
- Alnazy, E. (2016). coping strategies and socio-demographic characterizes among Jordanian caregivers of pationts receiving hemodialysis. *saudi J kidney dis transpl*, 27(1):101-106.
- American psychiatric association. (2013), diagnostic and statistical manual of mental disorders. fifth ed. Arlington: American Psychiatric association.
- Arikian S.R, Gorman J.K. A Review of the diagnosis pharmacologic treatment , and economic aspects of anxiety disorders. (2001), the primary care componian to the journal of clinical psychiatry. 3(3):110-117
- Brunner LS, Smeltzer SCC, Bare BG, Hinkle JL, cheever KH. Brunner on & Suddarth's Textbook of Medical-surgical Nursing 1 Suzanne C, Smeltzer ... [et All.] 1 Wolters Kluwer Health 2010
- Chimeh N, Malakouti k, Panaghi L, Ahmad Abadi Z, Nojomi M, Ahmadi Tonkaboni A. care giver burden and mental health in schizophrenia. *journal of Family Research* 2008;4(3);277-92 [text in persian]
- Dadsetan p, Pathological psychology transformation form child hood to adulthood, Tehran, organization for the study and compilation of university Humanities books. (samt), 2008 , third edition
- Davahli, M. R., Karwowski, W., & Taiar, R. (2020). A System Dynamics Simulation Applied to Healthcare: A Systematic Review. *International Journal of Environmental Research and Public Health*, 17(16), 5741.
- Ghamkharfard Z, Amrollahi M, Azadfalsh P (2014) invertigating childhood anxiety presdictors based on the childs maladaptive schemas and maternal parentiny styles. *journal of behavioral science*. 6(3)253-62
- Hachialigou N, Ozer N, Erdem N, Eric B. the quality of lifr family caregivers of cancer patient in the East of Turkey. *European journal of Oncology Nursing* .2010;14(3):211-7
- Hersen M, Turner s, Beidel D. (2007) Adult psychopathology and diagnosis. fifth ed. Hoboken , newjersey: john wiley & sons , Inc
- Jareh, S., & Karimi, A. (2018). Comparative Parallel Plurality Voting Algorithm for Fault-Tolerant Medical Robot. *Maпта Journal of Electrical and Computer Engineering (MJECE)*, 1(2), 37-44.
- Keeley ML, storch EA. Anxiety disorders in youth in journal of pediatic nursing 24(1):26-40(2009)
- Lashkaripour k, Bakhshani N.M, and soleimani M.J (2006) examing the relationship between test anxiety and in zahedan in th academic year 2005-2006. *Tabib-e-shorgh*. 8 (4), 253-259
- Lukbin Im, Larsen PD. chronic illness: Impact and interventions jones & Barelett Learning 2011



- Michael T,Zetche U,Margaraf j.(2007) epidemiology of anxiety disorders.psycjiatry.6:136-42
- Mohseni Tabrizi, A., & Hekmatpour, P. (2016). HIV/AIDS related stigma in Iran: A qualitative study. *IAU International Journal of Social Sciences*, 6(2), 13-19.
- Mollaogiu M,kaystas M,Yurugen B,Effects on caregivers burden of education rlated to home care in patients undergoing hemodialysis .*Hemodialysis International* .2013
- Nooralizade M,Janbozorgi M.(2016),the relationship between existential anxiety and their comparison in three groups of criminals,ordinary and religious,quarterly journal of psychology and religion ,N3(2):29-44
- Nursing and Midwifery Urmia University of Medical Sciences.2009;7(3):34-9[Text in Persian]
- Potter PA,Perry AG,Hall A,Stockert Patricia A,Fundamentals of nursing:Elsevier Mosby:2009
- Rector N.A. Behvaoural therapy for server mental disprders(2005).
- Salmani N,Ashketorab T,Hasanvand S.the burden of caregiverand related factosaf oncology.Jaurnal of nursing and midwifery faculty,shaheed beheshti university of medical sciences. 2014;24(84):7151-8
- Sanaat, A., Arabi, H., Ay, M., & Zaidi, H. (2019). Novel preclinical PET geometrical concept using a monolithic scintillator crystal offering concurrent enhancement in spatial resolution and detection sensitivity: a simulation study. *Phys Med Biol*. doi:10.1088/1361-6560/ab63ef
- Sanaat, A., Arabi, H., Mainta, I., Garibotto, V., & Zaidi, H. (2020). Projection-space implementation of deep learning-guided low-dose brain PET imaging improves performance over implementation in image-space. *J Nucl Med*. doi:10.2967/jnumed.119.239327
- Shafiabadi A,Naseri GH.(2006),counseling and psychotherapy theories,Tehran,university publication center.
- Simpon H B,Neria Y,Lewis-Fernandez R , Schnier F.(2010) anxiety aisorders:Theory , Research , and clinical university press,USA
- Soleimanifar, S., Jafari, Z., & Zarandy, M. M. (2015). Validity and Reliability of “Parental Attitudes of Various Aspects of Cochlear Implantation” Questionnaire. *Iranian journal of otorhinolaryngology*, 27(83), 449.
- Soleimanifar, S., Jafari, Z., Zarandy, M. M., Asadi, H., & Haghani, H. (2016). Relationship between intelligence quotient and musical ability in children with cochlear implantation. *Iranian journal of otorhinolaryngology*, 28(88), 345.
- Somwers u, Goldner E,waraich p,Hsu L.(2006) Prevalence and incidence studies of Anxiety disorders:A systematic review of the literature . *can psychiatry*.51:100-13
- Stein M,stickler T.(2010)Behavioral neurobiology of anxiety and its treatment: springer,USA
- Tabar, A. S. (2018). Psychic and Mental Effects of Roof Garden on Dwells of Residential Building (Case of the Radin Residential Building in Tehran City). *Mapta Journal of Architecture, Urbanism and Civil Engineering (MJAUCE)*, 1(2), 40-46.

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