



HJRS Link: [Journal of Academic Research for Humanities \(HEC-Recognized for 2022-2023\)](#)

Edition Link: [Journal of Academic Research for Humanities, 3\(1\) January-March 2023](#)

License: [Creative Commons Attribution-Share Alike 4.0 International License](#)

Link of the Paper: <https://www.jar.bwo.org.pk/index.php/jarh/article/view/179/version/179>

DEMOGRAPHIC CORRELATES AND LEVEL OF DEATH ANXIETY AMONG CANCER PATIENTS WITH CHEMOTHERAPY AT CIVIL HOSPITAL BAHAWALPUR

Author 1: Dr. Aftab Hussain, Assistant Professor, Riphah International University, Email: aftab_hussain12@yahoo.com

Corresponding & Author 2: Dr. Aqeel Ahmad Khan, Assistant Professor, Islamia University of Bahawalpur, Email: aqeel.ahmad@iub.edu.pk

Paper Information

Citation of the paper:

(APA) Hussain. Aftab and Khan. Aqeel Ahmed (2023). Demographic Correlates and Level of Death Anxiety Among Cancer Patients with Chemotherapy at Civil Hospital Bahawalpur. Journal of Academic Research for Humanities, 3(1), 150-158.

Subject Areas:

1 Humanities
2 Psychology

Timeline of the Paper:

Received on: 17-02-2023
Reviews Completed on: 20-03-2023
Accepted on: 24-03-2023
Online on: 31-03-2023

License:



[Creative Commons Attribution-Share Alike 4.0 International License](#)

Published by:



Abstract

The current study was carried out to explore the demographic correlates and level of death anxiety among the patients who were receiving chemotherapy. For this purpose sample of (N=100) diagnosed cancer patients with chemotherapy was selected from the Civil Hospital Bahawalpur. The sample size was chosen by using the online calculator and data was collected by using the purposive sampling method. The overall research design of this study was cross-sectional with a quantitative type of research. The level of death anxiety was measured by using Templar Death Anxiety Scale (1970). The demographic correlates are socio-economic status, education level, residential area & profession. The results also reported that the patients belonging to Khanpur City showed a higher level of death anxiety than the patients of Rahim-Yar-Khan and Bahawalpur City. Similarly, the patients belonging to the rural areas showed a higher level of death anxiety. As per education, the patients who graduated showed higher levels of death anxiety. Lastly, the results also reported a higher level of death anxiety among the cancer patients who were at phase & 4 as compared to phase 1 & 2 levels of cancer patients. Hence, all the hypotheses of the study were accepted at a 0.5 level of significance. Based on the findings it concluded that the psychological care of cancer patients is as necessary as their medical care. So it is recommended that the humanitarian correlates should be addressed while treating cancer patients with chemotherapy as these are associated with their level of death anxiety.

Keywords: Death Anxiety, Cancer, Chemotherapy, Terminal illness, Patients, Correlates.

Introduction

The concept of death anxiety is basically refers to the individual's level of fear related to their level of death or death anxiety. It has been noticed that all individuals with chronic illnesses such as cancer, tumor, and cardiac issues and with chronic kidney failure often revealed the feelings of anxiety related to the death. Such state is called death anxiety which further leads the patients toward psychopathology and many other mental issues (Esmail, 2012). In another study by (Sung et al. 2020). stated that more than 10 million cancer patients reported a higher level of fear of death during chemotherapy and 32% of them died due to this sever fear of death anxiety (Neal & Rodin, 2015). It has also been observed that all the patients with cancer are living without any hope of life and also without any social and psychological support. Therefore, they are at the most higher risk to develop strong feelings of death anxiety that further threaten their psychological and physical health (Yang et al., 2017).

Causes of Death Anxiety

Level of death anxiety is significantly correlated with the type of disease such as cancer, heart attack and kidney issues (Khalek, 2002). Apart from this, demographic correlates such as socio-economic position, condition of disease, age, education, gender and marital status are also associated and known as the cause of death anxiety among patients with a terminal illness (Zana, 2009).

In cancer patients, death anxiety is also linked with psychological variables such as sadness, anxiousness, and stress. A study revealed that the prevalence of death anxiety is higher among individuals with advanced cancer (Tang, et al., 2011). Another study reported that the death of loved one, loss of time and age factor also become a cause of fear of death and dying among family members (Lo & Hales, 2011). Age is

considered one of the most important factor in connection with the level of death anxiety among patients. A study concluded that cancer patients of about 40 to 50 years ago were much more worried or revealed death anxiety as compared to adults and adolescents. Similarly, cancer patients who were married and have young children were more worried or reported death anxiety (Neel et al., 2015). Some demographic variables like education and marital status also linked with the level of death anxiety. In this regard, a study conducted by Bibi and Khalid (2020) revealed a positive association between education level and marital status with the level of death anxiety.

Prevalence of Death Anxiety among the Patients in Pakistan

Death anxiety is considered as a natural phenomenon and appears as comorbid symptoms anxiety or psychological distress. In Pakistani population this is known as a common symptom. For example, during the COVID-19 pandemic, all the patients revealed a higher level of death anxiety in Pakistan. But the severity of death anxiety was correlated with many other psychosocial and demographic factors such as level of income, marital status, age, education and other medical issues. In Pakistan, patients with chronic diseases reported 2% pathological symptoms and these were not sever. A gender-wise comparison revealed that women reported low level of anxiety in comparison with men (Shakil et al., 2022). A study conducted in Pakistan included a ample of surgical patients. The study aimed to check the prevalence of death anxiety among the patients admitted to the surgical unit. The results revealed a higher level of death anxiety among all the surgical patients (Azaiza, et. al. 2010). A higher level of death-related anxiety was reported among non-religious patients as compared with religious patients (Ghasemi et al. 2020). During 1st wave of COVID-19 the patients and their

families were more concerned about the health and revealed a higher level of anxiety related to the death of their loved ones admitted in hospitals in Pakistan (Kashif et al., 2020).

Review of Literature

Death anxiety is a psychological construct and is prevalent among individuals who were diagnosed with chronic illness. In this connection, there is a handful literature available in the context of death anxiety and its relationship with psychological, medical, neurological and cancer patients. This study attempts to fill the gap in research by exploring the demographic correlates and prevalence of death anxiety symptoms among cancer patients. The same study was conducted by (Clark et al 2017) to examine the prevalence of death anxiety among patients with cancer patients with chemotherapy. They revealed a higher level of death anxiety among cancer patients. A positive relationship between death anxiety and the onset of hypochondriasis was also reported (Grossman et al., 2018). The results of their study also proved that some demographic variables such as age, gender, and education were also significantly correlated with the severity of the anxiety symptoms.

(Jong et al 2018) conducted a study to check the association of religiosity with death anxiety. The findings of their study showed a negative association. Although, the level of death anxiety was significantly associated with their demographic variables such as age, socio-economic status and family residential status. Another study was conducted to find out the relationship of death anxiety among cancer patients in China. The results of this study demonstrated a higher level of death anxiety among the patients who were diagnosed with advanced cancer. The results of their study also revealed that the level of anxiety was higher among those who were living with adult children. Furthermore, the study also revealed that the patients with

higher level of self-esteem were less anxious and showed low level of death anxiety (Hong et al., 2022). A study reported that 14% patients with cancer showed a higher level of anxiety of death (Lottick et al., 2005). Another study revealed that the cancer patients having chemotherapy are more prone to develop death related anxiety and depression. This study also revealed that married patients with lack of social support report higher death anxiety as compared with the patients with higher level of social support (Khezri et al., 2015).

Scope of the Research

The phenomenon of death anxiety is a growing issue in all the patients who were diagnosed with terminal illness such as cardiac disease, tumors, and breast cancer and kidney failure. Such patients revealed the helpless feelings that further increase the fear of death anxiety in them. Studying the causes, symptoms and correlation of these among the patients is an ignored area. There is a handy literature available in this area. To fill this gap in the literature, the current study was carried out to find out the level of death anxiety among cancer patients with chemotherapy. The findings of this study will contribute a solid scientific findings in the existing literature and will be a message for community individuals as well as for the doctors, psychologist and health care officials to provide optimistic feelings and hope for life to the terminally filled patients in order to decrease the risk of increasing death anxiety.

Objectives of the study

1. To find out the demographic variables/correlates in association with the level of death anxiety among cancer patients with chemotherapy.
2. To find out the level of death anxiety among cancer patients with chemotherapy among male and female patients.
3. To find the level of death anxiety among cancer patients with chemotherapy

during phase 1st, phase 2nd, phase 3rd and phase 4th among males and females.

Hypotheses of the study

1. Level of death anxiety will significantly vary as per the demographic variables/correlates of the patient.
2. The level of death anxiety would be higher among female cancer patients with chemotherapy as compared with male patients.
3. Level of death anxiety would be higher among the cancer patients who were at phase 3rd and 4th as compared with phases 1st and 2nd.

Methodology of the Study

The method of includes the following steps taken during the research process.

Demographic Characteristics of the Participants

In this study overall (N=100) cancer patients with chemotherapy were included. Out of which 50% were male, 50% were female, 50% were rural, 33% were urban and 67% Bahawalpur, 21% from Bahawalnagar, 25% Rahim Yar Khan, 27% belongs to poor status.

Problem statement of the Study

It has been observed that the medical, neurological and cancer patients reveals they symptoms of helplessness during the onset of disease. Particularly, the cancer patients having chemotherapy reported a higher level of death anxiety. Due to this their disease become worsen day by day. Keeping in mind the psychological symptoms of medical patients this study was carried out to address the demographic correlates and level of death anxiety among the cancer patients with chemotherapy at Civil Hospital Bahawalpur.

Research Design of the study

This was a quantitative research with a cross-sectional research design.

Sample Size

Sample size of this study was the (N=100) cancer patients with chemotherapy. Both genders (Male and Female) were included in

the study. The total sample was calculated by using Power online sample size.

Sampling Technique

In this research, data was collected by using a purposive sampling technique.

Inclusion & Exclusion Criteria

All the males and females of the age range 18 years to 70 years who were diagnosed cancer patients with chemotherapy were included in this research. All the patients belongs form different districts of Bahawalpur including Rahim-yar-Khan, Khanpur, Bahawalnagar and Bahawalpur.

Assessment Measure.

The data was collected by using Death Anxiety Scale developed by Templar (1970). This scale measures the level of death anxiety and consists on 15 items with responses of true and false. This scale was valid and reliable.

Results of the study

The results from the collected data are discussed as under:

Table 1

Demographic Variable/Characteristics of the Participants (N=100)

Demographic variables	Frequency	Percentage
Gender		
Male	50	50.0
Female	50	50.0
City		
Bahawalpur	27	27.0
Bahawalnagar	21	21.0
Rahim Yar Khan	25	25.0
Khan Pur	27	27.0
Residential Area		
Rural area	67	67.0
Urban area	33	33.0

Demographic variables	Frequency	Percentage
Social		
Economic Status		
Very poor	36	36.0
Lower Class	24	24.0
Middle Class	27	27.0
Upper Class	13	13.0
Education		
Illiterate	12	12.0
Matriculation	36	36.0
Intermediate	19	19.0
Graduation	17	17.0
Masters	16	16.0
Profession		
Farmers	39	39.0
Labors	32	32.0
Teachers	23	23.0
Shopkeepers	6	6.0
Phases of chemotherapy		
First Phase	25	25.0
2 nd Phase	29	29.0
3 rd Phase	27	27.0
4 th Phase	19	19.0

Note

The above table shows statistical analysis of data and descriptive statistics (frequencies, percentages) calculated from the sample (n=100) selected. All the participants belongs to different districts of Bahawalpur with diversified demographic features.

Table 2

Showing the Bivariate Correlation among Overall Clinical Variables (n=100)

Clinical variables	Age	Gender	Socio Economic Status	Phases of chemotherapy	Death Anxiety
Age	1				
Gender	0.113	1			
Socio Economic Status	-0.005	0.727**	1		
Phases of chemotherapy	-0.020	-0.057	-0.016	1	
Death Anxiety	-0.073	-0.031	0.080	0.943**	1

Note

The above table shows bivariate correlation among all the clinical variables under study in this research. The values in table that are showing with star (*) is significant at 5% level and the values with double star (**) is significant at 1% level of significance.

Table 3

Showing the Comparison of Death Anxiety between Males and Female Patients Using T-test

Gender	N	Mean	Std. Deviation	T-Test Comparison	
				T-Score	P-value
Female	50	56.94	15.63	3.806	0.000**
Male	50	44.57	16.88		

*. $p < 0.05$ and **. $p < 0.01$

Note

The table shows comparison of death anxiety score according to gender (male and female) of the respondents to check the significance of difference. In the above table, T-test is used to check the significance of difference and t-score is 3.806 with p-value is 0.000 showing the test is significant at 1% level of significance.

Table 4

Showing the Comparison of Death Anxiety between Rural and Urban Patients Using T-test

Residential area	N	Mean	Std. Deviation	T-Test Comparison	
				T-Score	P-value
Rural area	67	56.54	16.57	5.389	0.000**
Urban area	33	39.00	12.28		

*. $p < 0.05$ and **. $p < 0.01$

Note

The above table shows comparison of death anxiety among the respondents according to residential area of the respondents to check the significance of difference. T-test is used to check the significance of difference and t-score is 5.389 with p-value is 0.000 showing the test is significant at 1% level of significance.

Table 6
Showing the Comparison of Death Anxiety
According to their City

City	N	Mean	S.D	95% CI	
				LL	UL
Bahawalpur	27	40.52	20.15	32.55	48.49
Bahawalnagar	21	55.05	17.13	47.25	62.85
Rahim Yar Khan	25	52.16	12.91	46.83	57.49
Khan Pur	27	56.33	14.17	50.73	61.94
Total	100	50.75	17.34	47.31	54.19

Table 7
ANOVA showing significance regarding residential city

Source of Variation	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	4105.697	3	1368.566	5.124	0.002**
Within Groups	25643.053	96	267.115		
Total	29748.750	99			

Note

The above tables are showing comparison of death anxiety of the respondent patients according to their residential city. ANOVA test is used to discuss the significance and of test and F-score value is 5.124 with p-value 0.002 showing the test is significant at 1% level of significance.

Table 8
Showing the Comparison of Death Anxiety
in Case of Socio-Economic status

Socio economic status	N	Mean	S.D	95% CI	
				LL	UL
Very Poor	36	44.61	20.66	37.62	51.60
Lower Class	24	59.42	11.70	54.48	64.36
Middle Class	27	54.52	15.70	48.31	60.73
Upper Class	13	43.92	9.57	38.14	49.71
Total	100	50.75	17.34	47.31	54.19

Table 9
ANOVA showing significance regarding Socio economic status

Source of Variation	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	4148.697	3	1382.899	5.186	0.002**
Within Groups	25600.053	96	266.667		
Total	29748.750	99			

Note

The table is showing comparison of death anxiety level of the respondents according to socio economic status. ANOVA test is used to discuss the significance and of test and F-score value is 5.186 with p-value 0.002 showing the test is significant at 1% level of significance.

Table 10
Showing the Comparison of Death Anxiety
in Case of Education

Education	N	Mean	S.D	95% CI	
				LL	UL
Illiterate	12	25.67	8.62	20.19	31.14
Matriculation	36	54.78	12.88	50.42	59.14
Intermediate	19	53.53	19.29	44.23	62.82
Graduation	17	56.94	14.89	49.29	64.59
Masters	16	50.62	16.22	41.98	59.27
Total	100	50.75	17.34	47.31	54.19

Table 11
ANOVA showing significance regarding education

Source of Variation	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	8932.433	4	2233.108	10.191	0.000**
Within Groups	20816.317	95	219.119		
Total	29748.750	99			

Note

The table is showing comparison of death anxiety of the respondents according to educational study grade. ANOVA test is used to discuss the significance and of test and F-score value is 10.191 with p-value 0.000 showing the test is significant at 1% level of significance.

Table 12
Showing the Comparison of Death Anxiety
in case of Profession

Profession	N	Mean	S.D	95% CI	
				LL	UL
Farmers	39	50.44	11.53	46.70	54.17
Labors	32	44.81	21.81	36.95	52.67
Teachers	23	54.26	16.49	47.13	61.39
Shopkeepers	6	71.00	4.52	66.26	75.74
Total	100	50.75	17.34	47.31	54.19

Table 13

ANOVA showing significance regarding Profession

Source of Variation	Sum of Squares	D.F	Mean Square	F	Sig.
Between Groups	3875.850	3	1291.950	4.794	0.004**
Within Groups	25872.900	96	269.509		
Total	29748.750	99			

Note

The table is showing comparison of death anxiety level of the patients according to their profession. ANOVA test is used to discuss the significance and of test and F-score value is 4.794 with p-value 0.004 showing the test is significant at 1% level of significance.

Table 14

Showing the comparison of Death Anxiety in case of Phases of chemotherapy

Phases of chemotherapy	N	Mean	S.D	95% CI	
				LL	UL
First Phase	25	29.08	8.16	25.71	32.45
2nd Phase	29	43.62	4.55	41.89	45.35
3rd Phase	27	62.52	5.30	60.42	64.62
4th Phase	19	73.42	2.61	72.16	74.68
Total	100	50.75	17.34	47.31	54.19

Table 15

ANOVA showing significance regarding phases of chemotherapy

Source of Variation	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	26718.710	3	8906.237	282.174	0.000**
Within Groups	3030.040	96	31.563		
Total	29748.750	99			

Note

The table is showing comparison of death anxiety level of the respondents according to the phase of chemotherapy. ANOVA test is used to discuss the significance and of test and F-score value is 282.174 with p-value 0.000 showing the test is highly significant at 1% level of significance.

Discussion

This study was conducted to check the demographic correlates and the level of death anxiety among the patients availing chemotherapy at Civil Hospital Bahawalpur. In this regard, three hypotheses were generated.

- The first hypothesis of this study was generated to explore the demographic correlates of the cancer patients with chemotherapy. The results of this hypothesis revealed different demographic correlates of cancer patients having chemotherapy. Such as, the level of death anxiety was higher among the patients belonging to rural areas as compared with urban areas. Similarly, death anxiety symptoms were higher among the patients residing in Khanpur who were belonging to lower class socioeconomic status. Moreover, the patients who were shop keepers showed more fear of death anxiety. Level of education also was also associated with the fear of death anxiety that was higher among graduate patients. The results of this hypothesis are in line with the previous research such as (Vinton et al 2014) identified the demographic correlates and pointed out that level of education, residential set up and socio-economic status was significantly correlated with poor health and with sever fear of death anxiety among .
- The Second hypothesis was generated to compare the fear of death among male and female cancer patients. It was hypothesized that the fear of death

anxiety would be significantly higher among female cancer patients with chemotherapy. The results of this hypothesis reported a higher level of death anxiety among female. Hence this hypothesis also accepted. The result the second hypothesis is also similar with the results of previous researches such as (Hay et al 2006) conducted a study to find out the demographic correlates of cancer patients and reported that females score higher on death anxiety scale as compared to male patients.

- The third hypothesis was developed to compare the level of death anxiety among the patients receiving chemotherapy according to their phases for example phases 1, 2, 3 & 4. The results of this study revealed that the patients at phase 3 & 4 revealed a higher level of death anxiety. The results of this hypothesis is an addition in literature because the researcher found no such research findings in which any type of comparison of death anxiety level among the cancer patients is reported.

Conclusion

Based on the findings from the study, revealed that patients with chronic illness or terminal illnesses are very much concerned about their life uncertainty. Due to this uncertainty, they develop feelings of sadness which further leads them to the cycle of fear of death. Hence, this concluded that the psychological care of cancer patients is as important as their medical care.

Recommendations of Study

On the basis of the findings, this study recommends that there are some psychological symptoms as associated with medical or neurological diseases. As this study revealed a higher level of death anxiety among the cancer patients with chemotherapy. Hence, managing these psychological symptoms is as necessary as to treat the medical symptoms of the patients.

Managing psychological symptoms will be good for the mental health of the patients. Hence, promoting psychological health of the patients is necessary.

References

- Azaiza, F., Ron, P., Shohamb, M., & Giginia, I. (2010). Death and Dying Anxiety Among Elderly Arab Muslims in Israel. *Death Studies*, 34, 351-364.
- Bibi, A. & Khalid, M. A. (2020). Death anxiety, perceived social support, and demographic correlates of patients with breast cancer in Pakistan. *Death Studies*. 44(12), 787-792. doi: 10.1080/07481187.2019.1614108
- Clark, P. M., Elzi, M., Tangu, M. H. & Pusana, G.T. (2017). Fear and Mental Health Issues among Patients. *Health Psychology*, 4 (2), 116-126.
- Esmail, M. (2012). The effectiveness of therapy on anxiety mean death in the elderly. *Cult Couns Psychotherapy*,3(9),53–68.
- Ghasemi, F., Atarodi, A., & Hosseini, S.S. (2020). The Relationship Between Religious Attitudes and Death Anxiety in the Elderly People. *Journal of Psychology and Health*, 10(3), 135-142.
- Grossman, U.N., Furi, L.T. Jhon, S. Petter, L. & Mery, K. (2018). Death Causes and Factors. *Journal of Psychological Research*. 2 (1), 11-22.
- Hay, J. L., McCaul, K. D. & Magnan, R. E. (2006). Does worry about breast cancer predict screening behaviors? A meta-analysis of the prospective evidence. *Prev Med*, 42 (6), 401-408.
- Hong, Y., Yuhan, L., Youhui, G., Zhanying, W., Shili, Z. & Xiaoting, H. (2002). Death anxiety among advanced cancer patients: a cross-sectional survey. *Support Care Cancer*. 30(4),3531-3539. doi: 10.1007/s00520-022-06795-z.
- Jong, N., Wissesl, P. Q. Lessier, T. & Rozy, P. (2018). Psycho-Social Factors of Cancer Patients in Hospital Settings. *Journal of Medical Health*. 7(2), 233-245.

- Kashif, M., Ak, M., Uğuz, F., & Türkmen, O.O. (2020). The mediating role of selfcompassion in the relationship between Section I: Gerontological Nursing Death Anxiety, Older Adults COVID-19 threat and death anxiety (eng). *Journal of Clinical Psychology*. 23(50), 15-23.
- Khalek, A. M. (2002). Why do we fear death? The construction and validation of the Reasons for Death Fear Scale. *Death Stud.* 26(8), 669–80. doi: 10.1080/07481180290088365.
- Khezri, L., Bahreyni, M., Ravanipour, M. & Mirzaee, K. (2015). The Relationship between spiritual wellbeing and depression or death anxiety in cancer patients in Bushehr. *Nurs Vulnerables*. 2. 15- 28.
- Lo, C. Hales, S. (2011). Measuring death-related anxiety in advanced cancer: preliminary psychometrics of the Death and Dying Distress Scale. *Journal of Pediatric Hematol Oncol.* 33(2),140–145.
- Lottick, N. S., Vanderwerker, L. C., Block, S. D., Zhang, B. & Prigerson, H. G. (2005). Psychiatric disorders and mental health service use in patients with advanced cancer. *Cancer*. 104 (3), 2872–2881.
- Neel, C., Lo, C., Rydall, A., Hales, S., & Rodin, G. (2015). Determinants of death anxiety in patients with advanced cancer. *BMJ supportive & palliative care*, 5(4), 373-380.
- Shakil, M. Farzana Ashraf, Shahnaila Tariq, Alia Asmat, Amina Muazzam, & Naima Hassan. (2022). The prevalence and comorbidity of death anxiety and psychological distress in pakistani population during covid-19 pandemic. *Journal of Archaeology of Egypt / Egyptology*, 19(1), 620-632.
- Sung, H., Ferlay, J., Siegel, R. L., Laversanne, M., & Soerjomataram, I. (2020). GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA Cancer J Clin.* 71(3),209–249. doi: 10.3322/caac.21660
- Tang, P. L., Chiou, C. P. & Lin, H. S. (2011). Correlates of death anxiety in Taiwanese cancer patients. *Cancer Nurs.* 34 (1),286–92.
- Templer, D. I. (1970). Development of Death Anxiety Scale: A Validation Study. *Health Sciences*. 21(2), 134-145.
- Vrinten, C., Jaarsveld, C. H., Waller, J. (2014) The structure and demographic correlates of cancer fear. *BMC Cancer*, 14 (6), 597. <https://doi.org/10.1186/1471-2407-14-597>
- Yang, B., Fu, X., Sidiropoulos, N. D., & Hong, M. (2017). Towards k-means-friendly spaces: Simultaneous deep learning and clustering. In *International Conference on Machine Learning* (Pp.3861-3870). PMLR.
- Zana, A. (2009). Attitude to death and changes of death image in Hungarian society. Study of the differences in generational value-judgments and of the possibilities of measurement. Is death still a taboo. *Orv Hetil.*150(25),1183–7. doi: 10.1556/OH.2009.28577.