Different kinds of cancer incidence rate in patients who suffer from death rumination disorder and employed psychological defence styles

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ABSTRACT

Background: Cancer is malignant disease with high risk of incidence which disease lead to stressful and pressure condition. Study estimated different kinds of cancer that these are in high incidence rate then study consider relation between kinds of cancer with death rumination disorder and psychological defence styles. **Materials and methods:** The study was done using two questionnaire such as: death rumination questionnaire and defence style questionnaire-60 (DSQ-60). Study was conducted in 200 patients who after oncologist diagnosis bedded in hospital. Investigation used all data collected analysed by SPSS version 21 software, the MANOVA test was used. **Results:** In particular, leukemia was peak of high risk incidence in cancer population, whereas kinds of cancer correlated with death-analysis(P value 0.027), this is factor of death rumination disorder also kinds of cancer correlated with projective(P value 0.004) and suppression(P value 0.015)that these are factors of psychological defence styles. **Conclusions:** leukemia was found to have high incidence rate meanwhile study indicated there are statistically significant difference between kinds of cancer with factors of death rumination disorder and factors of defence styles in cancer patients. Kinds of cancer correlated with death-analysis, projective and suppression.In fact oncologist diagnosis lead to death rumination disorder thus patients used psychological defence styles in order to adapt with pressure and stressful condition of disease and treatment.

KEYWORDS: Kinds of cancer, incidence rate, cancer patients, death rumination disorder, psychological defence styles.

INTRODUCTION

Nowadays cancer disease has attracted worldwide attention in all age rank. Cancer is spread abnormal cells, primary and next serious effect is tumor and metastatic of malignant cells[1].Cancer disease after the accident and heart disease was third cause of deathin Iran [2].Numbers of kinds of cancer are in high incidence rate which this numbers cancer must to get more attention against other cancer for prevent widespread. Oncologist condition make psycho-pressure in patients. This situation lead to death rumination disorder that is thinking over and over time about death.

Therefore patients use psychological defence mechanisms to adapt with disease condition and treatment meanwhile they response to stress. Ego defence mechanisms as response of distress and cancer diagnosis condition in patients, although advance adaptive defence mechanisms must be modified for dissonance behavior-treatment in cancer patients [4].

Patients with HTN diagnosis, they widely encounter from defence styles and more developed ability for feeling [5].Intestinal stoma patients indicate physical and psychological health problem, then patients reflected level of self-image adaptation, meanwhile elderly patients use only a small part of defence styles as coping process [6].Actually, defence mechanisms happen in every patient [3].

In this study, we aim to look into estimated difference kinds of cancer in term of cancer patients scores on death rumination disorder and employed psychological defence styles.

MATERIALS AND METHODS

The present investigation was conducted in 200 patients that they went into hospital and they bedded in oncology parts of hospital after diagnosis with cancer disease. Cases of cancer

study getting various treatment such as surgery, chemotherapy and radiology. Patients should be informed and consent to answered interview and questionnaire. Interview of each patient took approximately 45-60 minutes to complete the questionnaires. The study started from 12th April 2014 to 20th March 2015. Data collection was during 12 months.

Instrument

Two questionnaire were used including death rumination questionnaire and defence style questionnaire. Death rumination questionnaire was on the basis of Ruminative Responses Scale. RRS made by Nolon-Hoeksema. Death rumination questionnaire semi structured interviews and self-report inventories, baseline negative mood and self-criticism, this involving repetitive self-focused[7,8].It estimate 6 version of death rumination include: self-focus, self-critical, self-exhaust, death-focus, death-analysis, and dysfunctional-mood. Respondents answer each of the 13 items on a 5 point Likert scale with click of one (not at all applicable to me) and five (completely applicable to me).Defence style questionnaire (DSQ-60) created by Thygesen, Drapeau, Trijsburg, Lecours and de Roten, 2008.

Self-report is cornerstone of DSQ questionnaire, defence style based in the 60 item model of the scale that it assesses 30 psychological defence styles such as: acting-out, affiliation, altruism, anticipation, denial, devaluation of self, devaluation of other, displacement, dissociation, fantasy, help-rejecting complaining, humour, idealization, intellectualization, isolation, omnipotence, passive aggressive, projection, identification, rationalization, reaction formation, repression, self-assertion, self-observation, splitting of self, splitting of other, sublimation,

suppression, undoing, and withdrawal. Respondents answer each of the 60 items on a 9 point Likert scale with anchors of one (not at all applicable to me) and nine (completely applicable to me) [9].

The All questionnaires were checked for completion of information and the responses were coded for entry in the computer. Questionnaire data analyse was performed with Microsoft the statistical package for the social science (SPSS-pc) software version 21.Age rank was considering with frequency statistics and multivariate test assessment age rank with 30 styles of defence and 6 death rumination kinds, furthermore, all statistical tests were done to determine any significant difference at 5% level.

RESULTS

Total study patients were 200, in eleven kinds of cancer that they bedded in hospital. Sample research such as 118 female and 82 male cancer patients. Study evaluated in cancer patients, they got various treatment meanwhile patients suffer from 6 type of death rumination disorder hence they encounter from 30 kinds of psychological defence mechanisms (mentioned in methodology part) consciously and unconsciously.

Study Described of 11 kinds of cancers in patients. Evidence indicated Leukemia with21.5% was peak of incidence rate which get more attention in cancer patients population, then Lymphoma with 15.5% was next high incidence rate in cancer.[table.1]

Table 1: Incidence 11 kinds of cancer among study subjects

Number	Variable (kind's cancer)	Frequency	Percent
1	Leukemia	43	21.5
2	Lymphoma	31	15.5
3	Stomach	24	12
4	Lung & Brunch	21	10.5
5	Colon & Rectum	20	10
6	Breast	14	7
7	SCC	10	5
8	Mole	10	5
9	Oesophagus	10	5
10	Ovarian	9	4.5
11	Tumour	8	4
Total		200	100

(95% confidence interval)

Multivariate analysis was found that there was a statistically significant difference between eleven kinds of cancer in patients with death rumination disorder and employ psychological defence styles, F (360, 1515) = 1.22, p=.007;

Wilks' Lambda=.085; partial eta squared= .21, Bonforroni adjusted alpha level= .001.[table. 2]

Studies show that kinds of cancer related with number of death rumination disorder and psychological defence styles

factors. Factor related with kinds cancer including death-analysis (P value 0.027)which was factor of death rumination disorder hence kinds cancer related with psychological defence styles such as projective(P value 0.004) and suppression(P value 0.015). Projective was in 99% confidence interval. Death- analysis and suppression were in 95% confidence interval.[table.3]

Table 2: Effect kinds of cancer in death rumination and employed psychological defence styles

Wilks' Lambda Value	F	P value	partial Eta square
0.085	1.22	0.007	0.21

(99% confidence interval)

Table 3: kinds of cancer related with factors of death rumination and defence styles

Factors	F	P value	partial Eta square
Death-analysis	2.08	0.027	0.1
Projective	2.72	0.004	0.12
Suppression	2.28	0.015	0.1

DISCUSSION

Present research indicate leukemia was peak of incidence rate in cancers patient's population. World health ranking investigated about leukemia death rate in Middle East, it declared leukemia was 18 cause of death in Iran which is poor condition in this country [10].Statistics by country extrapolated, leukemia incidence was 7,643 from 67,503,2052 in Iranian's population [11]. Cancer fact & figure estimated 60,140 new cases of leukemia are expected in 2016 [12]. Leukemia incidence rates was reported 13% high in the most recent year[13]. Projected numbers of incident cases leukemia from 2015 to 2040 females (12%) 2015 to (88%) 2040 and males (22%) 2015 to (117%) 2040 [14]. Trends in Irish cancer incidence 1994-2002 with predictions to 2020 estimated incidence rate of leukemia in female and male were 13% and 87% respectively from 1998-2002, with projected to 2020 (±95% prediction intervals) [15].

Study indicates kind cancers was effective impact in death rumination and encountering psychological defence styles for cancer patients, hence, death rumination disorder as high as kinds of cancer which is in high incidence rate. Death rumination is self-reflection of death thinking. There was highlight distinction between rumination and more adaptive forms of self-reflection, based in cognitive deficits or rumination, then, this correlated with neural and genetic state meanwhile, self-reflection could be power intervention against rumination feeling [16].

Rumination could be defined as prolong process of inflexible cognitive style [17]. Patients with negative feeling lead to death rumination especially death focus in treatment situation. There were synergistic effects of rumination and negative emotion in predicting number of impulsive behaviors subsequently reported [18]. Death rumination is hopeless response in patients meanwhile death rumination related with part of brain and mental health. Rumination is typical of pathological grief responses in disaster condition [19]. Distinguishing of rumination condition and the other mental states is connectivity changes involving the amygdala part, it is to be important found [20].

Rumination is worse functioning on all mental health, this make Sleep problems [21]. Actually death rumination is responses of anxiety and depression mood to help patient to handle dissonance state and problem solving. Other study implicate rumination as a mechanism of stress sensitivity and suggest pathways through which it may maintain depression and anxiety in everyday life [22]. Oncologist diagnosis lead to stressful and depression mood hence patient engage death rumination. Stressful life events induce rumination, this is potentially useful targets that is preventing the onset of depression and anxiety [23].Study shows the meditational effects of adaptive and maladaptive rumination in the relationship between illness perception and negative emotions [24].

Patients with oncologist diagnosis whereas suffer from death rumination disorder, patients persuade to using psychological defence styles due to patients adaptive with problem in conflict condition. Psychological defence styles improved by following dissonance experience because they lead to learn professional capacity and knowledge against error event [25]. Developmental, personality, and social psychologists implication from defence styles which define psychological functioning [26]. Therefore, mechanisms defined as unconscious process, cognitive operations alter by developmental periods for protective function, and that can be assessment of personality and experimental schedules [27].

Individuals can promotion behavior in certain situation, patients need to adaptive with treatment condition [28]. HD patients use defence styles as psychological treatment against stressor and improve health quality of life then defence styles amenable patients for disease treatment [29]. Intestinal stoma patients indicate physical and psychological health problem, then patients reflected level of self-image adaptation, meanwhile elderly patients use only a small part of defence styles as coping process [6].Haemodialysis patients employing passive–aggressive behaviours which is from defence style, this related to patients personality [30].

Ego defence mechanisms as response of distress and cancer diagnosis condition in patients, although advance adaptive defence mechanisms must be modified for dissonance behavior-treatment in cancer patients [4]. Study declare there is strong correlation between somatic and psychological data was revealed, as part of an original complex psychosomatic model ,patients with oncologist diagnosis using defence style as coping strategies and emotional response to all condition of diagnosis [31]. Defence mechanisms were general acceptable regulation in patient populations hence, clinicians can most effectively target defences in psychotherapy [32].

CONCLUSION

leukemia was found to have high incidence rate meanwhile study indicated there are statistically significant difference between kinds of cancer with factors of death rumination disorder and factors of defence styles in cancer patients. Kinds of cancer correlated with death-analysis, projective and suppression. In fact oncologist diagnosis lead to death rumination disorder thus patients used psychological defence styles in order to adapt with pressure and stressful condition of disease and treatment.

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