

COPING STRATEGIES: A DETERMINING FACTOR FOR PSYCHOLOGICAL WELL-BEING IN CANCER PATIENTS

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ABSTRACT

OBJECTIVE

To examine coping strategies and psychological well-being among cancer patients.

STUDY DESIGN

Co-relational design

PLACE AND DURATION OF STUDY

Data was collected over a span of 03 months from MINAAR Nishtar hospital Multan, Oncology ward no 25-B Nishtar hospital Multan, BINU cancer hospital Bahawalpur and Shaikh Zaid hospital Rahim Yar Khan.

SUBJECTS AND METHODS

A purposive sample of 150 cancer patients from different hospitals of Multan, Bahawalpur and Rahim Yar Khan was selected. Sample of 150 cancer patients was consisted of 85 females and 65 male cancer patients whose age was ranged between 25 to 65. Cancer patients were assessed by researcher using Brief cope Inventory and Psychological well-being Questionnaires.

RESULTS

Significant correlation was found between psychological-well-being and different coping strategies. It was also found that coping strategies predict psychological well-being, Gender differences were also observed.

CONCLUSION

Coping strategies have positive relationship with psychological well-being and coping has an effect on psychological well-being of cancer patients. Psychological well-being was more in females and joint family systems.

KEY WORDS

BCI, Coping strategies, Psychological well-being, Cancer Patients.

INTRODUCTION

Cancer influences the physical wellbeing of the patients, as well as their emotions, just after the diagnosis has been made for the individual. Disease can have numerous unfavorable mental results for example; trouble, anxiety, tension and sadness which evoke an enduring transformation in the patient's mental, emotional and psychological processing. Coping is a critical mental process that includes a person's intellectual and behavioral endeavors to decrease or deal with a stressor¹. One vital element is the way an individual has coped to different things in life and how they built up their coping strategies. There are two broad strategies of coping: to ease the situation stressing and to act actively are attempts of strategies of problem solving, on the other side, emotion-focused coping strategies try to manage sentimental chain reaction of stress¹. Another distinction is made between active and avoidant coping styles. Active adapting methodologies are either behavioral or mental reactions intended to change the idea of the stressor itself or how one contemplates it, while Avoidant adapting systems lead individuals into exercises, (for example, alcohol use) or mental states that keep them from straightforwardly tending to distressing occasions². Since each patient is an interesting individual, an enthusiastic, intellectual and behavioral reaction can fluctuate a great deal and can usually be very changeable in a similar patient³. Although diverse coping skills in cancer patients are overwhelmingly planned with a specific end goal to decrease the misery and to enhance their personal satisfaction, No study has demonstrate persuading proof that some psychological coping skills like acknowledgment, submission to the inevitable, dissent, vulnerability, sadness can have a clinically imperative impact in the survival or repeat of cancer^{4,5}.

"Well-being is something other than joy. And also feeling fulfilled and cheerful, well-being implies creating as a man, being satisfied, and making a commitment to the group"⁶. There are distinctive sorts of well-being; mental, subjective, otherworldly and social. This study concentrates just on the psychological well-being since the effect of coping with cancer is more reflected in psychological well-being⁷. As per Ryff psychological well-being is an intricate build of mental improvement and emotional wellness. Ryff's scale of psychological well-being distinguishes diverse attributes as parts of psychological well-being which incorporates freedom, control over one's condition, constructive relational connections, a significance in life, finding the possibility of the self and tolerating the way oneself is⁸. Psychological well-being of the patients is badly affected due to cancer resulting in depression and anxiety⁹.

According to Sprangers and Schwartz cancer can lead to what the changes in patient functional skills, physical functions, the aspect, activity status, the family and social role and identity; all these changes affect their lives and their internal standards¹⁰. Literature is heavily focusing on disease and treatment while psychological aspects of illness also need attention. After reviewing the literature extensively, It is realized that many appraisal and coping systems are related with bring down frequency of mental reactions, for example, stress and trouble^{11,12,13,14,15}. In any case, thinking about the relationship between adapting techniques and mental reaction does not empower clinicians to see how individuals operationalise these coping systems or how to help their advancement.

Distinctive cancer related stressors are adapted to in altogether different ways. There is not really a specific example of coping that is best to relieve psychological distress¹⁴. Research proves that the path in which the patient copes to Cancer the Crab directly affects different psycho - social components, for example, their nature of movement , psychological well-being, social principal cooperation , how they coordinate the ailment into their life etc.^{16,17} These coping strategies can hold on in the patient's life post treatment.^{18,19,20} Therefore, the part of and requirement for coping to cancer is a region that keeps on being of stake in oncology.

Cancer is a life threatening disease which is most prevalent these days that disrupts daily routine life including health, education, job and relationships. Existing literature explored disease and different treatment proposals for cancer patients. Psycho-oncology is a relatively new trend in this field so main motive of this study was to investigate the coping strategies and psychological well-being among cancer patients. The study aimed to assess the correlation between psychological well-being and coping strategies in cancer patients. Further, the impact coping strategies on psychological well-being will also be assessed in cancer patients. Gender, age and family system differences in psychological well-being and coping strategies will also be assessed in cancer patients.

SUBJECTS AND METHODS

Participants

This correlational study was carried out in Oncology departments of four hospitals of Multan, Bahawalpur and Rahim Yar Khan (i.e. MINAAR Multan, Nishar Hospital Multan, BINU Hospital Bahawalpur, Shaikh Zaid Hospital Rahim Yar Khan) after the consent of patients for participation. The purposive sampling procedure was used to select the sample. The criterion group (n=150; M=65, F=85) had age ranged between 25 to 65 years old men and women. The researcher read each statement and response categories for the patients who were not literate.

Instruments

Brief Cope Inventory.

Brief Cope Inventory developed by Carver²¹ measures coping capacity of the respondents was used to see coping strategies. Inventory is comprised of 28 items with 4 point likert scale ranging from I haven't been doing this at all (1) to I've been doing this a lot (4).

There is no reverse scoring in this scale. It measures four main coping styles: problem focused, emotion focused, less useful and recently developed. All categories/coping styles have further subscales²¹.

Psychological wellbeing scale:

Psychological wellbeing questionnaire developed by Gough,²² Consisting of a sequence of 38 items was used to measure psychological well being. Dichotomous scoring procedure was used which has 0-1 answers group wherever '1' is allocate for 'true' response category and '0' is assigned for "false" responses . The scale has 7 true items (6, 9, 10, 12, 19, 33, and 37) and remaining items were false. Cronbach's alpha is .87 for this scale.

Procedure

The questionnaire booklets consisted of Brief cope inventory and Psychological well-being scale along with consent form and demographic information. Researcher got permission from the author of the questionnaire through electronic mail and patients were briefed about the purpose of the research and consent was taken for participation and they were assured about anonymity of the data. Scales were administered to cancer patients of different hospitals of Multan, Rahim Yar Khan and Bahawalpur and data was collected through purposive sampling. Patients were educated how to fill the questionnaires and they were advised to respond each item truthfully. SPSS 20 version (Statistical Package for Social Sciences) has been used in favor of the descriptive and inferential statistical analysis of the figures collected from the cancer patients.

RESULTS

Cronbach's Alpha Reliability of psychological well being is 0.79 and brief cope inventory has 0.86. it depicts that they posses high consistent values. Hence researcher can use this data for further analysis

Table 1
Coefficient Alpha for the scale of Psychological Wellbeing and Brief Cope Inventory

| Cronbach's Alpha | No of Items |
|-------------------------|-------------|
| Psychological Wellbeing | 0.79 |
| Brief Cope Inventory | 0.86 |

Table 2
Correlation between Psychological Wellbeing and sub scales of Brief Cope Inventory (n=150)

| | | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|----|---|-----|-----|------|------|---|-----|-----|------|------|------|-----|------|-------|-------|
| Pw | - | .00 | .14 | .03 | .13 | | .00 | .22 | .03 | .12 | .05 | .15 | .00 | .00 | .00 |
| Sb | | - | .18 | .23 | .20 | | .34 | .05 | .06 | .35* | .24* | .04 | .21* | .20* | .05 |
| Ac | | | - | .52* | .41 | | .29 | .15 | .43* | .30* | .38* | .21 | .21* | .29** | .20* |
| D | | | | - | .60* | | .52 | .32 | .58* | .57* | .52* | .05 | .35* | .37** | .31** |
| Sd | | | | | - | | .51 | .26 | .52* | .65* | .44* | .05 | .29* | .31** | .32** |
| Sa | | | | | | | .78 | .21 | .51* | .29* | .58* | .02 | .38* | .21** | .42** |

Table 2 (Continue)

| | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|----|---|---|---|---|---|---|-----|------|------|------|-----|------|-------|-------|
| Es | | | | | | - | .21 | .50* | .44* | .56* | .04 | .36* | .30** | .55** |
| Is | | | | | | | - | .59* | .38* | .32* | .04 | .06 | .02 | .37** |
| Bd | | | | | | | | - | .49* | .54* | .03 | .31* | .17 | .49** |
| V | | | | | | | | | - | .50* | .06 | .35* | .23** | .43** |
| Pr | | | | | | | | | | - | .00 | .49* | .32** | .56** |
| H | | | | | | | | | | | - | .08 | .11 | .02 |
| A | | | | | | | | | | | | - | .11 | .47** |
| R | | | | | | | | | | | | | - | .05 |
| P | | | | | | | | | | | | | | - |

df=148 P<0.05 Pw = psychological well-being; Sb =self-blame; Ac = active coping; D = denial; Sd = self distraction; Sa = substance abuse; Es = emotional support; Is = instrumental support; Bd = behavioral disengagement; V = venting; Pr = positive reforming; H = humor; A = acceptance; R = religion and P = planning

Above table shows the association between Psychological well-being and sub scale of brief cope inventory. Table indicates psychological well-being is positively correlated with sub scales of SB(Self blame), D(Denial), ES(Emotional support),BD(Behavioral disengagement),PR(Positive reforming).

Table 3
Liner regression analysis explaining impact of Brief cope inventory on Psychological well being (n=150)

| Variables | R ² | ΔR ² | B | SE | β | t | p |
|----------------------|----------------|-----------------|--------|------|------|------|------|
| Constant | .031 | .001 | 22.492 | 1.65 | | | |
| Brief cope inventory | | | .010 | .026 | .031 | .379 | .042 |

df=148

Table 3 presents linear regression analysis for brief cope inventory and psychological wellbeing. Results showed that coping styles predicted the psychological well-being of cancer patient ($\beta=.031$, $t=.379$, $p<0.05$). It shows only 3 percent variance in psychological wellbeing could be attributed to coping styles of the patients which is very minor.

Table 4
Mean, Standard deviation, t- value, p value and Cohen's d of gender on psychological well-being (N=150)

| Scales | Gender | n | Mean | S.D | t | p | Cohen's d |
|--------------------------|--------|----|-------|-------|-------|------|-----------|
| Psychological well-being | Female | 85 | 25.51 | 3.676 | 1.571 | 0.01 | 0.033 |
| | Male | 65 | 22.58 | 3.468 | | | |

Above table shows difference of gender in the scores of psychological wellbeing. There was significant difference in male (M= 22.5, SD= 3.46) and female (M= 25.5, SD= 3.67) $p<0.05$ scores of Psychological well-being in cancer patient. Value of Cohen's d showed small effect on psychological well-being while collected value of Cohen's d is (0.033).

Table 5
Mean, Standard deviation, t- value, p value and Cohen's d of gender on Brief coping inventory (n=150)

| Scales | Gender | n | M | SD | t | p | Cohen's d |
|-----------------------------|--------|----|------|-------|-------|------|-----------|
| Self blame | Male | 65 | 4.38 | 1.195 | .109 | .914 | 1.605 |
| | Female | 85 | 4.36 | 1.04 | | | |
| Active coping | Male | 65 | 5.45 | 1.132 | .597 | .045 | 4.816 |
| | Female | 85 | 4.32 | 1.42 | | | |
| Denial | Male | 65 | 5.00 | 1.54 | .918 | .036 | 0.011 |
| | Female | 85 | 6.78 | 1.28 | | | |
| Self distraction | Male | 65 | 4.61 | 1.37 | -.795 | .428 | -8.540 |
| | Female | 85 | 4.81 | 1.58 | | | |
| Substance abuse | Male | 65 | 5.29 | 1.25 | 2.541 | .012 | 0.087 |
| | Female | 85 | 4.67 | 1.63 | | | |
| Brief cope inventory | | | | | | | |
| Emotional support | Male | 65 | 5.30 | 1.37 | .970 | .334 | 0.012 |
| | Female | 85 | 5.08 | 1.43 | | | |
| Instrumental support | Male | 65 | 4.10 | 1.40 | 2.15 | .033 | 4.220 |
| | Female | 85 | 3.65 | 1.15 | | | |
| Behavioral disengagement | Male | 65 | 5.23 | 1.49 | 1.26 | .208 | 0.021 |
| | Female | 85 | 4.94 | 1.30 | | | |
| Venting | Male | 65 | 4.69 | 1.34 | .278 | .782 | 1.044 |
| | Female | 85 | 4.63 | 1.16 | | | |
| Positive reforming | Male | 65 | 5.06 | 1.61 | 1.60 | .111 | 2.337 |
| | Female | 85 | 4.68 | 1.27 | | | |
| Humor | Male | 65 | 1.15 | 1.79 | -1.76 | .040 | -2.828 |
| | Female | 85 | 1.36 | .66 | | | |
| Acceptance | Male | 65 | 4.92 | 1.65 | .461 | .645 | 2.871 |
| | Female | 85 | 4.81 | 1.30 | | | |
| Religion | Male | 65 | 4.36 | 1.30 | -3.50 | .727 | -1.118 |
| | Female | 85 | 4.43 | 1.00 | | | |
| Planning | Male | 65 | 6.30 | 1.39 | 1.89 | .030 | 0.048 |
| | Female | 85 | 4.90 | 1.20 | | | |

df=148 $p<0.05$, $P>0.05$

Table 5 indicated the mean differences of gender for subscales of brief cope inventory: Humor, Active coping, substance abuse, Instrumental support, planning $p<0.05$ were significantly different in male and female cancer patients. Humor, Active coping, substance

abuse, Instrumental support, planning were more in male cancer patients and Denial was more in females. Value of Cohen's d showed small effect on sub scale of Brief cope inventory which is self blame whereas collected value of Cohen's d is (1.605), large effect of Cohen's d was on Active coping (4.816), small effect on Denial (0.011), small effect on self-distraction, substance abuse, emotional support, behavioral disengagement, humor religion and planning has also small effect of Cohen's d and their values are respectively given (-8.540, 0.087, 0.012, 0.021, -2.828, -1.118 and 0.048) larger effect of Cohen's d was on instrumental supports which is (4.220) and also larger effect was found on venting (1.044), positive reforming (2.337) and Acceptance (2.871).

Table 6
Mean, Standard deviation, t- value, p value and Cohen's d of Family System on Psychological Well-being(n=150)

| Scales | Groups | n | Mean | S.D | t | P | Cohen's d |
|-------------------------|---------|----|-------|------|--------|------|-----------|
| Psychological wellbeing | Joint | 83 | 26.75 | 3.39 | -1.364 | 0.02 | 0.025 |
| | nuclear | 67 | 23.55 | 3.28 | | | |

Note: $df=148$ $p<0.05$

Table 6 indicated that psychological well-being differed with respect to family system. Psychological well-being was more in joint family system (M= 26.75, SD= 3.39) as compare with nuclear family system (M= 23.55, SD= 3.28) $p<0.05$. Small effect of Cohen's d of psychological well-being on family system was observed (0.025).

Table7
Mean, Standard deviation, t- value, p value and Cohen's d of family system on Brief coping inventory.(n=150)

| Scales | Fsys | n | M | SD | t | p | Cohen's d |
|-----------------------------|---------|----|-----|------|--------|------|-----------|
| Self blame | Joint | 83 | 4.4 | 1.05 | .133 | .018 | 2.390 |
| | Nuclear | 67 | 4.2 | 1.16 | | | |
| Active coping | Joint | 83 | 4.3 | 1.29 | -0.12 | 0.90 | -1.314 |
| | Nuclear | 67 | 4.3 | 1.32 | | | |
| Denial | Joint | 83 | 4.8 | 1.41 | -0.23 | 0.81 | -4.830 |
| | Nuclear | 67 | 4.9 | 1.38 | | | |
| Brief cope inventory | | | | | | | |
| Self distraction | Joint | 83 | 3.5 | 1.49 | -1.57 | 0.01 | 0.033 |
| | Nuclear | 67 | 4.9 | 1.48 | | | |
| Substance abuse | Joint | 83 | 4.9 | 1.50 | -0.21 | 0.03 | -4.026 |
| | Nuclear | 67 | 5.9 | 1.52 | | | |
| Emotional support | Joint | 83 | 6.1 | 1.51 | -0.109 | 0.04 | -1.605 |
| | Nuclear | 67 | 5.1 | 1.28 | | | |
| Instrumental support | Joint | 83 | 3.8 | 1.32 | 0.405 | 0.68 | 2.216 |
| | Nuclear | 67 | 3.8 | 1.23 | | | |
| Behavioral disengagement | Joint | 83 | 5.1 | 1.48 | 1.117 | 0.26 | 0.016 |
| | Nuclear | 67 | 4.9 | 1.27 | | | |
| Venting | Joint | 83 | 4.6 | 1.29 | -0.367 | 0.71 | -1.820 |
| | Nuclear | 67 | 4.7 | 1.18 | | | |
| Positive reforming | Joint | 83 | 6.6 | 1.36 | -1.519 | 0.01 | -0.031 |
| | Nuclear | 67 | 5.0 | 1.52 | | | |
| Humor | Joint | 83 | 2.2 | 0.70 | -0.602 | 0.04 | -4.897 |
| | Nuclear | 67 | 1.3 | 0.76 | | | |

$df=148$ $p<0.05$, $P>0.05$

The results showed that subscales of brief cope inventory differ in family system among cancer patients such as planning, Humor, Acceptance, positive reforming, Emotional support, self is more in joint family system as compared with nuclear family system and substance abuse and self-distraction is more in nuclear family system than joint families. Value of Cohen's d showed large effect on self-blame where collected value of Cohen's d is (2.390), small effect on active coping, Denial, self-distraction, substance abuse, emotional support, behavioral disengagement, venting, positive reforming, humor, acceptance, religion and planning; collected values are presented in table 7; larger effect of Cohen's d is on instrumental support was observed (2.216).

DISCUSSION

Current study was directed to analyze the impact of coping strategies on psychological well-being among cancer patients. Results showed that there was positive association between psychological well-being and the sub scales of brief cope inventory. Current study demonstrates that subscale of brief cope inventory differs in family systems among cancer patients such as planning, Humor, Acceptance, Positive reforming, Emotional support and self is more in joint family system than nuclear and substance abuse and self-distraction is more in nuclear family system than joint. As per previous literature, avoidant forms of coping, such as self-distraction, have been significantly related to negative effects during treatment.²³

Psychological well-being was more in joint family system than nuclear family system, illness of the person is an important event in the life that should be taken into consideration when assessing the risks for the processes of coping of streamer cancer. A study done in India showed that living in a joint family system was associated with a favorable outcome in sufferers of depression²⁴.

Current study showed that testing of mean decision of gender orientation for subscale of brief cope inventory Humor, Active adapting, substance abuse, Instrumental support and Planning is different in male and females cancer patients. This study revealed psychological well-being was more in females as compare with male cancer patients. Past investigations recommended that females discovered meaning and reason in their lives uniquely in contrast to men. They got quality and control through their relational connections and confidence. Higher scores for women on instruments which measured spiritual well-being had additionally been accounted for by different analysts^{25,26}.

CONCLUSION

It is concluded that there is positive link between psychological well-being and coping strategies among cancer patients and coping strategies also predict the psychological well-being of cancer patients. Psychological well-being is more in females and joint family systems as compared with males and nuclear family system. Depending upon the visualization of the patient, it may not be feasible to just energize an uplifting state of mind and it may be not feasible to remind the patient that it will in the end improve. Mental health conditions are accepted to be under diagnosed in cancer

patients; it is shrewd to take a proactive way to recognize these conditions.




LIMITATIONS AND SUGGESTIONS

- Some patients refused to fill questionnaire due to pain, fatigue and some refused due to their chemo session so it reduced the no of participants so future research can enhance sample size.
- This Study was conducted only in the major hospitals of south Punjab, other parts of the country may also reveal different picture.
- Future research may also focus on other psycho-social factors of oncology. Mediating role of religion and social support should be considered in cancer patients.
- Future studies should be conducted to reduce their negative thoughts that arise in cancer disease and strategies to enhance coping must be introduced.

REFERENCES

1. Folkman S, Lazarus RS. An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior*. 1980; 21: 219-239.
2. Holahan CJ, Moos RH. Risk, resistance, and psychological distress: A longitudinal analysis with adults and children. *Journal of Abnormal Psychology*. 1987; 96: 3-13.
3. Sprah L, Sostaric M. Psychosocial Coping Strategies in Cancer Patients. *Radiol Oncol*. 2004; 38(1): 35-42.
4. Petticrew M, Bell R, Hunter D. Influence of psychological coping on survival and recurrence in people with cancer: systematic review. *BMJ* 2002; 325: 1066-76.
5. Ross L, Boesen EH, Dalton SO, Johansen C. Mind and cancer: does psychosocial intervention improve survival and psychological well-being? *Eur J Cancer* 2002; 38: 1447-57.
6. Shah, H., & Marks, N. A well-being manifesto for a flourishing society. London: The New Economics Foundation; 2004.
7. Johnson E. Religious Coping and Psychological Well-Being among Cancer Patients: A Critical Review. *Indian Journal of Research*. 2014; 3(12): 4-6.
8. Ryff CD. Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of personality and social psychology*. 1989 Dec; 57(6): 1069.
9. Costanzo ES, Ryff CD, Singer BH. Psychosocial adjustment among cancer survivors: findings from a national survey of health and well-being. *Health Psychology*. 2009 Mar; 28(2): 147.
10. Sprangers MA, Schwartz CE. Integrating response shift into health-related quality of life research: a theoretical model. *Social Sciences and Medicine*. 1999; 48(11): 1507-1515.
11. Dempster M, Howell D, McCorry NK. Illness perceptions and coping in physical health conditions: A meta-analysis. *Journal of psychosomatic research*. 2015; 79(6): 506-13.
12. Levy A, Cartwright T. Men's strategies for preserving emotional well-being in advanced prostate cancer: An interpretative phenomenological analysis. *Psychol Health*. 2015; 30(10): 1164-82.
13. Chen PY, Chang H-C. The coping process of patients with cancer. *European Journal of Oncology Nursing*. 2012; 16(1): 10-6.
14. De Faye BJ, Wilson KG, Chater S, Viola RA, Hall P. Stress and coping with advanced cancer. *Palliat Support Care*. 2006; 4(3): 239-49.

15. Carolan CM, Smith A, Forbat L. Conceptualising psychological distress in families in palliative care: Findings from a systematic review. *Palliative Medicine*. 2015; 29(7): 605-32.
16. Blank TO, Bellizzi KM. After prostate cancer: Predictors of well-being among long-term prostate cancer survivors. *Cancer* 2006; 106: 2128-35
17. Schou I, Ekeberg O, Ruland CM. The mediating role of appraisal and coping in the relationship between optimism-pessimism and quality of life. *Psychooncology*. 2005; 14: 718-27.
18. Hedestig O, Sandman PO, Tomic R, Widmark A. Living after external beam radiotherapy of localized prostate cancer: A qualitative analysis of patient narratives. *Cancer Nurs*. 2005; 28: 310-7.
19. Juraskova I, Butow P, Robertson R, Sharpe L, McLeod C, Hacker N. Post-treatment sexual adjustment following cervical and endometrial cancer: A qualitative insight. *Psychooncology*. 2003; 12: 267-79.
20. Molassiotis A, Chan CW, Yam BM, Chan ES, Lam CS. Life after cancer: Adaptation issues faced by Chinese gynaecological cancer survivors in Hong Kong. *Psychooncology*. 2002; 11: 114-23.
21. Carver C. You want to measure coping but your protocol's too long: consider the brief COPE? *Int. J. Behav. Med*. 1997; 4: 92-100.
22. Gough, H. The California psychological inventory administrator's guide. Palo Alto, CA: Consulting Psychologists Press. 1987
23. Schroevers MJ, Kraaji V, Garnefski N. Cancer patients' experience of positive and negative changes due to the illness: Relationships with psychological well-being, coping, and goal reenactment. *Psycho-Oncology*. 2011; 20, 165-172.
24. Jhingon HP, Sagar R, Pandey RM : Prognosis of late-onset depression in the elderly: a study from India. *Int psychogeriatric*. 2001, 13(1): 51-61.
25. Crose R, Nicholas DR, Gobble DC, Frank B. Gender and wellness: A multidimensional systems model for counseling. *Journal of counseling & Development*. 1992; 71: 149-156.
26. Van Eeden C, Wissing MP, Dutoit, MM. Gender differences in bio-psycho-social well-being- Fact or fiction? Implications for life skill development. Paper presented at the 1st South African National wellness conference, Port Elizabeth, South Africa. 2000; March.

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