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Research Article

**AN OBSERVATIONAL STUDY ON THE HISTORIES OF
FAMILY CANCER, COPING STYLE AND MENTAL
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DHQ Hospital Faisalabad**Article Received:** January 2020 **Accepted:** February 2020 **Published:** March 2020**Abstract:**

Objective: The purpose of this study is to find out the association between past history of cancer in family, style of coping and mental distress.

Methodology: We analyzed 80 patients present with the past history of cancer in family and 72 normal healthy control with the utilization of SCL-90 a self-reporting inventory, styles of coping and the influence of the event scale revised (IES-R).

Results: In the patients of both groups we discovered many differences in hypertension, anxiety and distress specific to cancer and style of coping. There was positive correlation of mental distress as hypertension, anxiety and distress specific to cancer with the negative style of coping and past history of cancer in the family. Negative style of coping performed a transitional role in past history of cancer in family and mental distress.

Conclusion: Negative style of coping will prompt a very strong mental distress in the patients who are present with the past history of cancer in their family.

Key Words: Negative, Coping, Anxiety, Hypertension, Distress, Breast Cancer, Association.

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INTRODUCTION:

Research on the association between the past history of cancer in the family, style of coping and mental distress, professionals focus on the healthy females with past history of breast cancer in family. According to various reports, distress specific to cancer in females with the past history of breast cancer in family was much higher than the females without past history of cancer in their family [1, 2]. Style of coping is very vital in setting individual environmental adaptability and mental health. Research works conducted in the past stated that positive styles of coping have association with better mental adjustment and negative styles of coping have relation with the maladjustment and it is very harmful for the mental health of the individual [3, 4]. Suffering of the close family members with this fatal disease of cancer is a stressor for life to their closer ones, which will stimulate various cognitions that they will have to suffer this very complication in future by heredity, resulting in various styles of coping and various mental reactions [5, 6]. Cao in his research work examined the healthy females with past history of breast cancer in their family and stated that 46.0% females among them were present with the concern that they would have to suffer from this disease in near future and 28.0% females said that this particular concern to suffer this complication was disturbing their routine activities [7].

The morbidity due to gastric, breast and lung cancers is very high in our regions. This current research work recruited the healthy persons with past history of family of all of these 3 types of cancers as participants. The aim of this research work was to investigate the style of coping which are not good for the mental adjustment of the person and to determine the effective styles of coping by analyzing the association between past history of cancer in family, style of coping and mental distress which

will provide a valuable data for intervention in mental health.

MATERIAL AND METHODS:

We divided the patients of this research work into 2 groups. One group consisted healthy persons with past history of cancer in family. We selected 82 healthy persons accompany with the re-examination of the patients suffering from cancer. Valid size of samples was 80 in which 46 were males and 34 were females. Mean age of the patients were 44.5 ± 11.6 years. The 2nd group consisted the persons without any past history of cancer in the family. We selected 76 healthy persons from DHQ Hospital, Faisalabad. There were 38 males and 34 females in this group of controls. Valid size of sample in this group was 72 in which 30 were males and 34 participants were females. Mean age of the persons in this group was 43.8 ± 10.7 years. There was not any significant difference in the gender, age, status of education and income status among participants of both groups.

We collected the information about age, gender, level of education, income level, profession and relation with the patients of cancer and their duration of illness on a well-organized form. We arranged a questionnaire to determine the style of coping. Total questions were 20 in which 12 were positive questions of coping and 8 were negative questions of coping [8]. We used the SCL-90 for calculation of anxiety and hypertension. There were 23 questions extracting the hypertension and anxiety [9]. Event scale revised included 22 questions about the avoidance, intrusion and hyper-arousal. The numbers in these 3 factors are describing the distress induced by cancer. Higher scores were describing the more distress among patients [10].

RESULTS:

We found a significant difference in both groups in anxiety, intrusion, hyper-arousal, hypertension and avoidance as mentioned in Table-1.

Group	Without Family History	With Family History
	Mean \pm SD	Mean \pm SD
Anxiety	1.37 \pm 0.36	2.15 \pm 0.52
Depression	1.96 \pm 0.51	3.06 \pm 0.73
Intrusion	5.83 \pm 1.92	10.22 \pm 2.38
Avoidance	8.86 \pm 2.19	12.27 \pm 3.1
Hyper-arousal	6.37 \pm 1.61	8.16 \pm 2.04

We found no important correlation between above mentioned five factors and positive style of coping. Past history of cancer in family and negative style of coping have association with above-mentioned five factors as elaborated in Table-2.

Table-II: The Relationship Between Family History Of Cancer, Coping Style And Psychological Distress

Group	Anxiety	Depression	Intrusion	Avoidance	Hyper arousal
Family history	0.419	0.382	0.461	0.497	0.443
Positive coping style	-0.261	-0.302	-0.182	-0.227	-0.176
Negative coping style	0.486	0.611	0.372	0.594	0.57

The current research work employed mediating impact model of testing of 3 steps to interrogate the intermediary part of negative style of coping in the past history of cancer in family and mental distress. In the 1st step, we considered the past history of family as argument and negative style of coping as dependent variable to examine the predictive impact of past history on the negative style of coping; secondly, we considered the negative style of coping as argument and anxiety as dependent variable to examine the prognostic impact of negative style of coping on mental distress; thirdly, we used the hierarchical regression analysis for the investigation of the impact of past history of family on mental distress when considering the negative style of coping. The findings stated that negative style of coping had important positive prognostic impact on the mental distress but the prognostic impact of the past history of the family reduced when there were controlled variables of demography as mentioned in Table-3.

Table-III: The Intermediary Effect Of Negative Coping Style On Cancer-Specific Distress

Characteristics		Negative Coping Style		Cancer-Specific Distress		Cancer-Specific Distress		
		Step 1	Step 2	Step 1	Step 2	Step 1	Step 2	Step 3
Step I	Sex	-0.108	-0.11	-0.116	-0.101	-0.116	-0.162	-0.128
	Age	0.317	0.326	0.359	0.281	0.359	0.114	0.274
	Economic income	0.197	0.195	0.161	0.104	0.161	0.146	0.172
Step II	Family history	-	0.374	-	-	-	0.407	0.351
Step III	Negative coping style	-	-	-	0.463	-	-	0.431
	AF	2.681	8.653	3.372	16.418	3.308	12.328	13.081
	R2	0.128	0.241	0.141	0.275	0.136	0.232	0.332
	AR2	0.176	0.183	0.172	0.24	0.172	0.201	0.206

DISCUSSION:

With modernity and development of society, the demand for the Quality of Life is very high. With the alterations in environment and lifestyles of the populations, cancer has become as the most serious complication threatening the life of the populations. Cancer brings the mental distress in the patients as well as it impacts the life of the other members of their family. So, the condition of the mental health of the other family members has direct association with the Quality of Life and mood of the suffering

patients [11]. There are many clinical practices suggesting that the hereditary factor can play an important role in the development of the cancer [12]. This is because of the aberration of the chromosomes [13]. There are 46 chromosomes in the cells of normal human being. Different carcinogens stimulate the aberration of the chromosomes, which displays these chromosomes in variant from chromosomes present in healthy cells in morphology and quantity.

Sometimes, this aberration passes to the offspring, which make it capable that next generation will suffer from this complication of cancer [14]. But only having the probability does not mean that these persons will suffer from cancer but it says that there are greater chances among them to suffer from cancer as compared to the other normal healthy persons. In general, cancer has an association with the hereditary. For persons with the past history of cancer in the family, they should realize the fact that they may have to face this complication because of but they should get rid of unnecessary fear and they should take more preventive measures to escape from this danger and they should try to recognize it early and treat this complication as early as possible [15]. About 10% to 15% cancer is the result of hereditary [16].

There are records of familial cancer in various research works [17]. There is very high heritability of lung cancer, colorectal cancer, and retinoblastoma and breast cancer [18, 19]. Genetic studies have discovered that cancer cannot be genetic in nature and people's inheritance is just the possibility to have cancer [20,21]. Majority of cancers are the outcome of the interaction between various factors of gene and environment. Common environment of living and lifestyle are intended to stimulate the similar cancer in the whole family. There is genetic predisposition of some types of the cancer as breast cancer [22]. Different style of coping can influence the emotional condition of an individual and further it can affect the mental condition of that person [23]. The current research work shows that patients having past history of cancer in the family appears with much hypertension, anxiety and distress related with cancer as compared to patients who are present without any past history of cancer in their family.

CONCLUSION:

The findings of this research work concluded that these patients have to face high level of negative feelings and mental depression with employment of the negative style of coping.

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