

Original Research Article**Reflex Zone Therapy: Outlook of cancer patient undergoing chemotherapy regarding its acceptance**

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**Archana B**Email: [greenwater3020@gmail.com](mailto:greenwater3020@gmail.com)**Abstract**

**Background:** Cancer, the uncontrolled growth of cells, is a major cause of death throughout the world. Cancer prevalence in India is estimated to be around 2.5 million, with over 8, 00,000 new cases and 5, 50,000 deaths occurring each year due to this disease in the country. The Reflex zone therapy (RZT) a therapeutic method of reliving pain by stimulating the predefined pressure points on the feet. It is not a medical approach in the usual sense of the word but rather a holistic approach that is complementary to more traditional conventional medicine.

**Objective:** To find the opinion regard to the acceptance of reflex zone therapy among cancer patient undergoing chemotherapy in selected at selected hospitals of Karnataka, India.

**Methodology:** Non probability purposive sampling technique was used select 30 Cancer patients undergoing chemotherapy.

**Results:** Hundred (100) % patient experienced more comfort from previous to present chemotherapy cycle with RZT. Off 96.66% patient the intensity of pain was highly reduced and 3.33% moderately reduced. 30% of patient felt moderate reduction and 70% felt high reduction in sensation of nausea and as well as in the level of fatigue. With regard to anxiety 36.66% of cancer patient reported to have no anxiety at all and 63.33% felt anxious to some extent. 100% acceptance was reported by the patients to have RZT in their next chemotherapy cycles and also 100% of patients recommended RZT for other cancer patients undergoing chemotherapy.

**Conclusion:** RZT was one of the efficient forms of complementary therapy in reducing the distressing side effects of chemotherapy among cancer patients.

**Keywords:** Outlook, Cancer patients, Reflex zone therapy, Hospital.

**Introduction**

The term cancer, neoplasm and tumor are more often used interchangeably by both the professionals and the lay public strictly speaking, these words are not interchangeable.<sup>(1)</sup>

Cancer prevalence in India is estimated to be around 2.5 million, with over 8,00,000 new cases and 5, 50,000 deaths occurring each year due to this disease in the country.<sup>(2)</sup>

Chemotherapeutic drugs are chemically designed to target cells that are dividing and growing

rapidly. Once they reach the cancer cells, they act to retard their growth eventually resulting in their destruction.<sup>(3)</sup>

Due to the development of these distressing side effects, today, the use of complementary and alternative therapies (CAT) have emerged. Complementary Therapy is also referred to as Alternative Therapy. The National Centre for Complementary and Alternative Therapies, of USA defines that it combines conventional medical treatments and alternative and complementary treatments for which there is some high-quality scientific evidence of their safety and effectiveness.<sup>(4)</sup>

Some of the complementary and alternative therapies used by the cancer patients in order to overcome these distressing side effects are as follows; Acupuncture, Aromatherapy, Massage therapy, Musical therapy, Ayurvedic, Healing, Reflexology, Relaxation therapy, Vegetarianism and many more.<sup>(5)</sup>

Reflex zone therapy has been used for centuries. It is thought to have originated in the ancient Egypt. Reflex Zone Therapy (RZT) is also known as foot reflexology: Is a therapeutic method of relieving pain by stimulating the predefined pressure points on the feet. It is not a medical approach in the usual sense of the word but rather a holistic approach that is complementary to more traditional conventional medicine. It is a touch therapy which works by applying pressure and massage to certain areas on feet and hands. The reflexologist believe that in the reflex areas in the feet relate to individual parts of our body, and thus by applying pressure to certain reflex areas, certain bodily functions or corresponding organs can be stimulated. It is one of the most popular types of complementary therapies in the UK among cancer patients. As it is a complementary therapy it should not be used as an alternative to conventional medicine but rather as an additional therapy to conventional treatment.<sup>(6)</sup>

Despite the variety of diseases process and stages of the disease, cancer patients share many of the same nursing care needs. It is clearly the nurses

responsibility to identify such needs and initiate plans for appropriate care, the aim being to assist the individual sick or well in the performance of those activities contributing to health or its recovery (or to a peaceful death). At the same time she must help people to be independent of such assistance as soon as possible. Her role is, therefore an one designed to detect changes in the patient's condition, either in response to treatment or as an indication of disease progression.<sup>(7)</sup>

It is estimated that about 9 million new cancer cases are diagnosed every year and over 4.5 million people die from cancer each year in the world. The estimated number of new cancers in India per year is about 7 lakhs and over 3.5 lakhs people die of cancer each year. Out of the 7 lakhs new cancers, about 2.3 lakhs (33%) cancers are tobacco related. There would be about 1.5 lakhs cancer cases at any given time in Karnataka and about 35,000 new cancer cases are added to this pool each year.<sup>(8)</sup>

**According to Barbara and Kevin** Reflexology is the physical act of applying pressure to the feet and hand with specific thumb, finger and hand techniques without the use of oil or lotion. It is based on a system of zones and reflex areas that reflects an image of the body on the feet and hand with a premise that such work effects a physical change to the body.<sup>(9)</sup>

### Objective

To find the opinion regard to the acceptance of reflex zone therapy among cancer patient undergoing chemotherapy in selected at selected hospitals of Karnataka, India.

### Methods & Materials

**Independent variable:** Outlook & acceptance

**Dependent Variable:** Age, Gender, Type of Cancer, Stage of Cancer, Chronicity (duration) of the condition, Type of Chemotherapy, and Number of Chemotherapy cycles been received.

**Setting:** Selected Oncology hospitals at Karnataka.

**Population:** Population represents the entire group under study and in this study the population were the Cancer patients undergoing chemotherapy.

**Sample, Sampling & Sample size:** Non probability purposive sampling technique was used select 60 Cancer patients undergoing chemotherapy.

**Inclusion criteria:** Cancer patients undergoing chemotherapy who are

- Willing to participate.
- Above 18yrs of age.
- Who can comprehend and speak Kannada & English.

**Exclusion criteria: Cancer Patients undergoing chemotherapy who are**

- Not willing participate.
- In debilitating condition.
- Patients on combine treatment.

#### Data Collection Techniques and Instruments

To collect the relevant data Personal variable Performa to assess the sample characteristics and Oppinionnaire to assess the subjects' level of

satisfaction with regard to reflex zone therapy were used.

#### Description of Tool

**Section A:** The personal variable Performa It includes the demographic variables Age, Gender, Type of Cancer, Stage of Cancer, Chronicity (duration) of the condition, Type of Chemotherapy, and number of Chemotherapy cycles been received.

**Section B:** Opinionaire which contains 8 items relating to the subjects satisfaction level with the use of RZT.

#### Data Collection Procedure

Formal administrative permission was obtained from the administrators in the selected hospitals at Karnataka. The sample of cancer patients undergoing chemotherapy were selected, 30 members. In order to obtain a free and true response, the selected subjects were explained about the purposes and usefulness of the study and assurance about confidentiality was given. A written consent was obtained from the participants. The data collection process was terminated after thanking each respondent for their participation.

## Results

### Description of Selected Personal Variables

**Table 1:** Frequency and percentage distribution according to Age

Gender

Type of Cancer

Stage of Cancer

Chronicity of condition

Type of Chemotherapy and Number of Chemotherapy cycles received among cancer patients undergoing chemotherapy in experimental and control group.

N= 60

Selected personal variable		Experimental group n=30		Control group n=30		Total n=60	
		f	%	f	%	f	%
Age	a.18-30	1	3.33	2	6.6	3	5
	b.30-50	16	53.33	12	34	28	46.6
	c.50-70	11	36.66	13	43.33	24	40
	d.>70	2	6.6	3	10	5	8.33
Gender	Male	0	0	12	40	12	20
	Female	30	100	18	60	48	80
Type of cancer	Epithelial Tissue	26	86.66	24	80	50	83.33
	Connective tissue	2	6.6	3	10	5	8.33
	Nervous tissue	1	3.33	2	6.6	3	5
	Haematopoietic tissue	1	3.33	2	6.6	3	5

Stage of cancer	Stage I	10	33.33	-	0	10	16.66
	Stage II	15	50	12	40	27	45
	Stage III	3	10	10	33.33	13	21.66
	Stage IV	2	6.6	8	26.66	10	16.66
Chronicity of the condition	<1yr	21	70	22	73.33	43	71.66
	1-2yr	9	30	8	26.66	17	28.33
Type of chemo - therapy	Alkylating agent	10	33.33	17	56.66	27	45
	Antimetabolite	4	33.33	10	33.33	20	33.33
	Anti tumor antibodies	7	23.33	3	10	10	16.66
	Corticosteroids	2	6.66	0	0	2	3.33
	Miscellaneous	7	23.33	5	16.66	12	20
Number of cycles received	>2cycles	10	33.33	10	33.33	20	33.33
	3-4 cycles	13	43.33	16	53.33	29	48.33
	5-6 cycles	7	23.33	2	6.66	9	15
	>6 cycles	0	0	2	6.66	2	3.33

In order to establish the acceptance of RZT among cancer patients undergoing chemotherapy in the experimental group frequency and percentage was computed.

The data shows that majority (46.6%) of the total sample were in the age group of 30-50 years. Eight (80%) of the sample were female and 20% male, Distribution in the respective groups shows that experimental group had all (100%) females where as control group had some number of males (12% & 40%) respectively and 83.33% of the sample had epithelial tissue tumor. Similar trends were seen in experimental and control group (86.66% and 83.33%) respectively. Among participants 45% were in II stage of cancer similar trends was seen in experimental and control group

(50 % and 40%) respectively. The data also reveal that reveals that, majority (71.66%) were suffering from cancer for past 1 yr similar trend was seen in experimental and control group (70% and 73.33%) respectively. It suggest that the alkylating agent, anti metabolites, antitumor antibodies and corticosteroids were the agents used in treating cancer with frequency of their use in descending order respectively (45%,33.33%,16 %& 3.33%) Similar trends were seen in the experimental and control group also. It shows that majority (48.33%) of the samples have received 3-4 cycles of chemotherapy. Similar trends were seen in experimental and control group (43.33% and 53.33%) respectively.

**Table 2:** Finding related to acceptance of RZT among cancer patients undergoing chemotherapy

N=30			
SI NO	PATIENT SATISFACTION OPINIONAIRE	n=30 f	%
1	Experience with RZT during chemotherapy cycles (a) Relaxed (b) No change	30	100
2	Difference in the comfort level from previous to present chemotherapy cycle. (a) More comfortable (b) Comfortable to some extent (c) Uncomfortable to some extent	30	100
3	Reduction in the intensity of pain with RZT (a) Mildly reduced (b) Moderately reduced (c) Highly reduced	0 1 29	0 3.33 96.66
4	Reduction in the sensation of nausea with RZT (a) Mildly reduced (b) Moderately reduced (c) Highly reduced	0 9 21	0 30 70

5	Difference in the anxiety from previous to present chemotherapy cycle with RZT. (a) No anxiety at all (b) Anxious to some extent (c) Highly anxious	11 19 0	36.66 63.33 0
<b>SI NO</b>	<b>PATIENT SATISFACTION OPINIONAIRE</b>	<b>n=30</b> <b>f</b>	<b>%</b>
6	Reduction in the level of fatigue with RZT (a) Mildly reduced (b) Moderately reduced (c) Highly reduced	0 9 21	0 30 70
7	Likes to have RZT in next chemotherapy cycles (a) Yes (b) No	30	100
8	Recommends RZT for other cancer patients (a) Yes (b) No	30	100

The data presented in the above table depicts that the acceptance of RZT by the cancer patient undergoing chemotherapy reveals that 100% cancer patient felt relaxed with the RZT during the chemotherapy cycle. 100% patient experienced more comfort from previous to present chemotherapy cycle with RZT. For 96.66% patient the intensity of pain was highly reduced and 3.33% moderately reduced. 30% of patient felt moderate reduction and 70% felt high reduction in sensation of nausea and as well as in the level of fatigue. With regard to anxiety 36.66% of cancer patient reported to have no anxiety at all and 63.33% felt anxious to some extent. 100% acceptance was reported by the patients to have RZT in their next chemotherapy cycles and also 100% of patients recommended RZT for other cancer patients undergoing chemotherapy. Hence data reveals that majority of the patients in the experimental group who received RZT accepted it to comply in the next chemotherapy cycles.

### Discussion

Findings revealed that all patients in the experimental group were totally satisfied with the RZT. All of them accepted and also recommended the RZT for other cancer patients undergoing chemotherapy. These findings were strongly supported by other studies.<sup>(10,11)</sup> Thus the findings of the study suggested that there is a need to plan and implement this therapy during the chemotherapy treatment.

### Conclusion

RZT was one of the efficient forms of complementary therapy in reducing the distressing side effects of chemotherapy among cancer patients. Through which certain minor alignments of cancer can be treated and as cancer patients do come across certain coping problem which may be psychological and physiological, these therapies apart from the routine care may help to counter act.

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