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Conceptual Study

A PERSPECTIVE STUDY ON QUALITY OF LIFE IN CANCER PATIENTS AND AYURVEDIC MEASURES AND TREATMENT MODALITIES.

A J V Sai Prasad¹, Ratna Manikyam², Babu G³.

Research Officer(Ay)¹, Medical Officer(Ay)², A D In charge³

Regional Ayurveda Research Institute for Skin Disorders (RARISD), New Rajeev Nagar, Vijayawada-15. ^{1,3}
Govt. Ayurveda Dispensary, Tealaprolu, Krishna District. ²

*Corresponding Author: Dr. A J V Sai Prasad, email: saiprasad_avvaru@yahoo.co.in

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ABSTRACT:

Quality of Life is a multidimensional concept deals the subjective nature of both positive and negative aspects of life. Qualities of life is the state of well being that is a composite of two components: the ability to perform everyday activities that reflect physical, psychological, and social well-being; and patient satisfaction with levels of functioning and control of the disease. Qualities of life (QOL) can greatly influence a person's well-being. A standardised method of evaluating the measurement of QOL in individuals with cancer can help to understand patient problems to the same degree as standard biological assessments do. This could provide an easy way to anticipate the main problems of the patient. Holistic approach of Ayurveda provides a solution to the improvement of QOL in Cancer patients. The social role of use of traditional system of Medicines in cancer patients has been examined. Ayurveda has pivoted role in the better symptoms management and improvement in quality of life. Ayurveda provides number of single, compound herbal/ herbomineral Rasayana drugs contributing unique Rasayana therapy having diversified actions on different systems of the body viz immune- modulation, anti oxidant action, adaptogenic action. Single and formulating drugs like *Brahmi*, *Satavari*, *Ashwagandha*, *Guduchi*, *Mandookaparni*, *Bhallataki*, etc play an important role in the improvement of Quality of life in Cancer patients.

KEY WORDS: *Quality of Life, Cancer, Ayurvedic Measures, Modalities, Rasayana Chikitsa.*

INTRODUCTION:

Arbuda which has been mentioned in *Ayurveda* can be correlated with cancer/ carcinoma of the Western medicine.¹ Carcinoma impacts the quality of Life. According to WHO Quality of Life is defined as individual perception of life, values, objectives, standards and interest in the frame work of the culture. QOL is increasingly been used as a primary tool of outcome measure in studies to evaluate the effectiveness of the treatment. Quality of Life is the state of well being that is a composite of two components: the ability to perform everyday activities that reflect physical, psychological, and

social well-being; and patient satisfaction with levels of functioning and control of the disease.²

QOL still persists in the form of physical and psychological symptoms in newly detected as well as in the long-term survivors of the cancer patients, who are victims to the adverse effects of systemic adjustment therapy-chemotherapy. QOL has different measures and scales. According to UN data a division of the United Nations, QOL is defined as a "notion of human welfare (well-being) measured by social indicators rather than by 'quantitative' measures of income and production.³ A standardizes

method of evaluating the measurement of QOL in Cancer patients can help to understand the variation of symptoms in different subjects. Various psychological parameters mention in *Manovikaras* and *Manasika pareeksaha* will benefit in the evaluating the standard Ayurvedic measures mentions under *Satatvaajaya Chikitsa*.

MATERIALS AND METHODS:

Ayurveda is science of life, which gives importance to both preventive and curative aspects of disease. "Swasthasya swasthya rakshanam aaturasya vikara prasamanam cha"(Ch. Chi.)

Swasthya: "Samadosha samagnischa samadhatu malahkriyah prasannatmendriya manah swasthyaichabhideeyate. WHO had quoted the state of Health that "Health is not only the absence of infirmity and disease, but also a state of physical, mental and social well-being."

Quality of Life: ⁴

- **Quality of Life** is the state of well being that is a composite of two components: the ability to perform everyday activities that reflect physical, psychological, and social well-being; and patient satisfaction with levels of functioning and control of the disease.
- **Quality of Life** is the subjective evaluation of the good and satisfactory character of life as a whole.
- **Quality of Life** is the gap between the patient's expectations and achievements. The smaller the gap, the higher the quality of life.
- **Quality of Life** Represents the functional effect of an illness and its consequent therapy upon the patient as perceived by the patient.⁵
- **Quality of Life** is defined as an individual's overall satisfaction with life and general sense of personal well-being.
- **Quality of Life** is patient perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns.

Why are we interested in Quality of Life (QOL)?

The FDA has stated that efficacy with respect to overall survival and/or improvements in QOL might provide the basis for drug approval.⁶

A person's QOL is impacted from the beginning of the oncology experience, during which he or she encounters many unplanned, life-altering events

Adaptation Model: ⁷

The Adaptation Model is an applicable theory for addressing oncology patients and their QOL. Adaptation is defined as the "process and outcome whereby thinking and feeling persons use conscious awareness and choice to create human and environmental integration." The patient is in constant interaction with the environment in which there are three types of stimuli that provoke a response: focal stimuli, contextual stimuli, and residual stimuli.

According to this model, the patient adapts in four modes based on basic needs to maintain integrity: the physiologic-physical mode, the self-concept mode, the role function mode, and the interdependence mode

Mode 1: Physiologic-physical

Initially, changes in the cancer patient's QOL occur in the physiologic-physical mode. Pain is common in cancer patients and can be related to the disease process and/or treatment modalities.

Another effect of the chemotherapy that alters patients QOL was alopecia. Nursing staff will prepare the patients to loss of hair and care of cold weather and apply of sunscreen and wear of warm cloths and wear of wigs.

Mode 2: Self-concept

It concern with hair loss impacted her body image. Nursing interventions dealing with alopecia, as it relates self-concept, include resources for wigs and support groups. Sexuality is also a physical domain of the self-concept that affects QOL.

Mode 3: Role function

Patients who place a great deal of emphasis on their role will experience greater disturbances in QOL, which can lead to depression. According to the National Cancer Institute (NCI), 15% to 25% of all cancer patient experience depression. ¹⁰The NCI noted that some patients are at higher risk for depression than others. Risk factors may be cancer related or noncancer related.

Mode 4: Interdependence

Finding the balance between dependence and independence in relationships can be a struggle for oncology patients. The support system of the family and significant others can make a difference. If patients feel secure in their relationships, they adjust and adapt better to the cancer experience. If

not, they may experience loneliness, increased emotional distress, and hopelessness.

Measurement of the quality of life in cancer:

A QOL instrument was developed to measure the specific concerns of long term cancer. Multiple domains include: physical, cognitive, emotional and social functioning, pain, sexual functioning, health perceptions, and symptoms about nausea and fatigue. Early instruments for measuring QoL were disease-specific. Later instruments, "general health status" include POMS = Profile of Mood and SIP =

Sickness Impact Profile. Fundamental principle in measuring the QOL is assessed by the patient itself. the qlq-c30 version 1.0 with functional / symptom scales indicated: which is a validated, cancer-specific, 30-item questionnaire measuring QOL on: one global health status scale, seven functioning scales and 21 symptom scales. The primary endpoint of this study was the global health status scale. The secondary endpoints were scores on the functioning scales: physical, role, cognitive, emotional and social functioning.

THE QLQ-C30 VERSION 1.0 WITH FUNCTIONAL / SYMPTOM SCALES INDICATED D.⁸

	SCALE		NO	YES	
1. Do you have any trouble doing strenuous activities, like carrying a heavy shopping bag or a suitcase?	Physical		1	2	
2. Do you have any trouble taking a long walk?	Physical		1	2	
3. Do you have any trouble take a short walk outside of the house?	Physical		1	2	
4. Do have to stay in bed or a chair for most of the day?	Physical		1	2	
5. Do you need help with eating, dressing, washing yourself or using the toilet?	Physical		1	2	
6. Are you limited in any way in doing either your work or doing household jobs?	Role		1	2	
7. Are you completely unable to work at a job or to do household jobs?	Role		1	2	

During the past week:	SCALE	Not at all	A little	Quite a bit	Very much
8. Were you short of breath?	Dyspnoea	1	2	3	4
9. Have you had pain?	Pain	1	2	3	4
10. Did you need rest?	Fatigue	1	2	3	4
11. Have you had trouble sleeping?	Insomnia	1	2	3	4
12. Have you felt weak?	Fatigue	1	2	3	4
13. Have you lacked appetite?	Appetite Loss	1	2	3	4
14. Have you felt nauseated?	Nausea and Vomiting	1	2	3	4

15. Have you vomited?	Nausea and Vomiting	1	2	3	4
During the past week:	SCALE	Not at all	A little	Quite bit	Very much
16. Have you been constipated?	Constipation	1	2	3	4
17. Have you had diarrhoea?	Diarrhoea	1	2	3	4
18. Were you tired?	Fatigue	1	2	3	4
19. Did pain interfere with you daily activities?	Pain	1	2	3	4
20. Have you had difficulty in concentrating on things, like reading a newspaper or watching television?	Cognitive	1	2	3	4
21. Did you feel tense?	Emotional	1	2	3	4
22. Did you worry?	Emotional	1	2	3	4
23. Did you feel irritable?	Emotional	1	2	3	4
24. Did you feel depressed?	Emotional	1	2	3	4
25. Have you had difficulty remembering things?	Cognitive	1	2	3	4
26. Has your physical condition or medical treatment interfered with your family life?	Social	1	2	3	4
27. Has your physical condition or medical treatment interfered with your social activities?	Social	1	2	3	4
28. Has your physical condition or medical treatment caused you financial difficulties?	Financial Difficulties	1	2	3	4

GLOBAL HEALTH STATUS						
29. How would you rate your overall physical condition during the past week?						
1 Very poor	2	3	4	5	6	7 Excellent
30. How would you rate your overall quality of life during the past week?						
1 Very poor	2	3	4	5	6	7 Excellent

Other measuring scales for QOL are ^{9&10}

1. HRQoL was assessed with the use of the Danish version of the European Organisation for Research and Treatment of Cancer Core Quality of Life Questionnaire V.3.0 (EORTC QLQ-C30)
2. EORTC QLQ-C30 scores were calculated according to the scoring manual.¹⁸ Thus, a continuous scale score ranging from 0 to 100 was calculated if the patient had answered at least half of the items of the scale. A score of 100 indicated the highest functioning. For interpretation of EORTC QLQ-C30 results we set 10 units as the minimally relevant scale contrast regardless of the subscale.^{19,20}
3. CARES-SF (Schag 1991) - 59 item scale which measures rehabilitation and quality of life in patients with cancer. This has been modified to the HIV Overview of Problems Evaluation Systems (HOPES, Schag 1992).
4. City of Hope Quality of Life, Cancer Patient Version (Ferrell 1995) - a 41 item ordinal scale representing the four domains of quality of life including physical well being, psychological well being, and spiritual well being.
5. Daily Diary Card-QOL (Gower 1995) - a self-administered card for use in cancer clinical trials that has been shown to demonstrate short-term changes in quality of life related to symptoms induced by chemotherapy.
6. EORTC QOL-30 (Aaronson 1993) - this instrument is composed of modules to assess quality of life for specific cancers in clinical trials. The current instrument is 30 items with physical function, role function, cognitive function, emotional function, social function, symptoms, and financial impact.
7. FACT-G (Cella 1993) - a 33 item scale developed to measure quality of life in patients undergoing cancer treatment.
8. FLIC (Finkelstein 1988) - a 22 item instrument which measures quality of life in the following domains: physical/occupational function, psychological state, sociability, and somatic discomfort. This scale was originally proposed as an adjunct measure to cancer clinical trials.
9. Southwest Oncology Group Quality of Life Questionnaire (Moinpour 1990) - a scale developed for cancer patients incorporating questions from various function, symptoms, and global quality of lifemeasures.¹¹

Ayurvedic measures- QOL in Cancer: Holistic approach of *Ayurveda* provides a solution to the improvement of QOL in Cancer patients. *Ayurveda* emphasizes the unique of psychosomatic approach and the importance of the mind as an integral part of the life. Various psychological parameters mentions in *Mavovikaras* and *manasika pareeksah* will benefit in the evaluating the standard Ayurvedic measures mentions under *satatvaajaya chikitsa*. **National Institute of Mental Health Sciences (NIMHANS)** Bangalore had made an *Ayurvedic* methodology in clinical examination of mental disorders and also prepared a special proforma for mental status examination on *Ayurvedic* basis.¹²

Ayurvedic Scheme of Mental Examination:

- *Sila* (Habits, Temperament etc.)
 - a. Habits
 - b. Temperament
 - c. Physiological functions
 - d. Leisuretime activity
- *Chesta* (Psychomotor activity)
 - a) General motor activity
 - b) Speech
 - c) Facial expression
 - d) Posture
- *Acarah* (Conduct)
 - a) Personal standards
 - b) Social standards
- ✓ *Manaha* (Mind)
- ✓ *Indriyabhigraha* (Perception and Motor control)
 - a) *Manonigraha* (mental control)
 - b) *Uha* (guess)
 - c) *Vicarah* (Thought)
- ✓ *Buddhihi* (Decision)
- ✓ *Smritih* (Memory)
- ✓ *Samjnajnanam* (Orientation and responsiveness)

Orientation to:

 - a) *Desah* (Place)
 - b) *Kalaha* (Time)
 - c) *Atmajnana* (person)
 - d) Responsiveness to external stimuli
- *Bhaktih* (Desire) Desire in relation to:
 - a) *Aharah* (Food)
 - b) *Vyavayah* (sex)
 - c) *Vesham* (Dress)
 - d) *Ranjanam* (Entertainment)

➤ Anya (Others)

“Unmadam punarmanobuddhi samijnajana smrti bhakti Sila cestacara vibhramsam vidyat” Ch Ni. 7.

Gradation of Manasa bhavas: include

❖ **NEGATIVE EMOTIONS**

a. *Krodha – Abhidrohena*, i.e. *Parapidartha Pravrittih (chakrapani)*

b. No violent tendencies - 0

c. Violent thoughts very rarely - 1

d. Violent, sadistic functions quite often - 2

e. Frequent thoughts and functions of violence and sadistic - 3

• *Bhayam - Vishadena*

a. Pressed mood only in reasonable cause - 1

b. Depressed mood even in reasonable cause - 2

c. Always in depressed and fearful emotions - 3

• *Shoka Dainyena*, i.e., “*Rodanadi (chakrapani)*”

a. No feeling of Sorrowness - 0

b. Feels inferiority and sorrow at occasion - 1

c. Inferiority complexes and greedy oftenly - 2

Weeps and feels inferior very frequently - 3

❖ *Shoka Dainyena*, i.e., “*Rodanadi (chakrapani)*”

a) No feeling of Sorrowness - 0

b) Feels inferiority and sorrow at occasion - 1

c) Inferiority complexes and greedy oftenly - 2

d) Weeps and feels inferior very frequently - 3

❖ *Dvesha – Pratishedhena*, i.e. *Vyavrutya (chakrapani)*

a) No revenging tendency at all - 0

b) Thoughts of revenge only at few events - 1

c) Thoughts and acts of revenge oftenly - 2

d) Always thoughts and acts of revenge - 3

❖ *Rajah-Sangena*, i.e. *Naryadisangena Tatkaranam Rajoanumiyate (chakrapani)* (opposite affection)

a) Normal affection - 0

b) Gradual decreased affection - 1

c) Loss of affection occasionally - 2

d) Frequently and totally loss of affection - 3

❖ *Moha – Avijnanena*

a) Normal functioning capacity - 0

b) Gradual affliction towards objects - 1

c) Increased affliction, oftenly towards objects - 2

d) Totally involvement and affliction with objects - 3

Positive emotions: include

➤ *Dhairyam-Avishadena*,

i.e. *Manaso Adeinyam (chakrapani)*

a. No fear or sorrow at any cause - 3

b. Fearful only at reasonable at any cause - 2

- c. Fearful occasionally - 1
- d. Always in fearful and depressed emotions - 0
- *Harsha-Amadena*,
i.e. *Nrityagitavaditradutsavakaranama (chakrapani)*
 - a. Totally cheerful on all occasion - 3
 - b. Cheerful and initiative with good circumstances - 2
 - c. Cheerful and active in that, only at occasion - 1
 - d. No feeling of cheerfulness - 0
- *Priti-Tosena*, i.e. *Mukhanayanprasadadih (chakrapani)*
 - a. Always happy and pleased - 3
 - b. Happy and pleased occasionally - 2
 - c. Express happy mood oftenly - 1
 - d. No feeling of happiness at all - 0
- *Viryam - Utthanena*, i.e. *Kriyarambhena (chakrapani)*
 - a. Starts and works very quickly - 3
 - b. Works with less interest - 2
 - c. Delayed and decreased in working capacity - 1
 - d. Not able to start any work - 0
- *Shraddha - Abhiprayena*, i.e. *Abhyarthanena*
 - a. Always very good in attitude and interest - 3
 - b. Occasionally good in attitude and interest - 2
 - c. Impaired attitude and interest - 1
 - d. Totally loss of attitude and interest - 0
- *Medha - Grahanena*, i.e. *Granthadidharanena (chakrapani)*
 - a) Always grasps the events at an instance - 3
 - b) Grasps the event but confused - 2
 - c) Delayed in grasping the events with confusion - 1
 - d) Unable to grasp or understand - 0

Cancer treatment: The types of treatment that you have will depend on the type of cancer and how advanced it is. Some people with cancer will have only one treatment. But most people have a combination of treatments, such as surgery with chemotherapy and/or radiation therapy. Also have immunotherapy, targeted therapy, or hormone therapy.

1. Palliative care: Palliative care is a specialized approach in healthcare for serious, chronic, life-limiting illnesses. The focus is on relieving and preventing suffering of patients, which improves QOL. Palliative care teams have a multidisciplinary approach, addressing the physical, emotional, social, and spiritual needs

of the patients—all of the aspects in the four modes of the Adaptation Model. Palliative care starts at the time the patient is diagnosed and continues until the end of life.^{13 & 14}

Ayurvedic Treatment modalities:^{15,16 & 17}

Ayurveda has pivoted role in the better symptoms management and improvement in quality of life. Ayurveda provides number of single, compound herbal/ herbomineral *Rasayana* drugs contributing unique *Rasayana* therapy having diversified actions on different systems of the body viz immune- modulation, anti oxidant action, adaptogenic action. Single and formulating drugs like *Brahmi*, *Satavari*, *Ashwagandha*, *Guduchi*, *Mandookaparni*, *Bhallataki*, etc play an

important role in the improvement of Quality of life in Cancer patients.

Ayurveda for psychological problems:

Ayurveda texts highlight the close association between body and mind. According to Ayurveda, a disease means imbalance that occurs both in body and mind. *Bhutavidya or Manasika Roga Chikitsa*. It is the treatment of the Manas (mind) of an individual. The mind is an important essence of life and controls the physical activities. Threefold treatment of Ayurvedic Psychotherapy. *Yukti Vyapasraya Chikitsa*- Logical treatment is a treatment based on a logical approach. This logical treatment consists of measures of purification and psychotherapy. *Deiva Vyapaas Raya Chikitsa*- providential treatment of heavenly forces. "*Satvaavajaya Chikitsa*" can be equated with the modern psychotherapy- Control of mind is practiced by applying certain medication as well as yoga practices. Ayurveda has a special branch for the treatments of mental disorders. It is one of the eight classical branches of Ayurveda called *Bhutavidya or Manasika Roga Chikitsa*. It is the treatment of the *Manas* (mind) of an individual. The mind is an important essence of life and controls the physical activities. Ayurveda texts highlight the close association between body and mind. According to Ayurveda, a disease means imbalance that occurs both in body and mind.

Threefold treatment of Ayurvedic Psychotherapy:

Ayurvedic approach in treating a psychological disorder is threefold. The disorders of the mind are divided into two parts in Ayurveda. They are problems with physical basis which are caused by the imbalance in the three *Doshas* and the second one is purely mental in origin. Logical treatment or is a treatment based on a logical approach. The treatments of psychic disorders use modalities of *Yukti Vyapasraya Chikitsa*, consists of measures of purification and psychotherapy. Purification treatment includes *Panchakarma* and *yoga*.²⁾ In addition to the above treatments, Ayurveda also incorporates the providential treatment of heavenly forces which is called *Deiva Vyapaasraya Chikitsa*. Ayurveda believes in the influence of the cosmic forces and divine providence.³⁾ Control of mind is practiced by applying certain medication as well as yoga practices. Ayurveda has a huge collection of texts for specific treatment of

psychological disorders. The Ayurvedic text called "*Satvaavajaya Chikitsa*" can be equated with the modern psychotherapy.¹⁸

Rasayana Chikitsa:

Rasayana chikitsa delay the ageing, prevent diseases and useful for positive health-*Sarangadhara*. "*Rasayana chikitsa* for immunotherapy is a very crucial element of Ayurvedic management of cancer as it revives the body's support systems. *Rasayana* therapy, when started ahead for a cancer patient help him/her tolerate radiation and chemotherapy better and can mitigate the toxic side effects.¹⁹ Single drugs and compound formulations having of *Rasayana* property and also used in *manovikaras* are *Guduchi*, *Sankha pusph*, *Aswagandha*, *Jyotismati*, *CyavanaprasaLehya*, *Asvagandhavalehya*, *Brahmi Rasayana*, *Satavari leha*, *Kusmanda rasayana*, *Sarasvatarista Smritisagara rasa Asvagandharist*, *Brahmyadi yoga*, *Sarasvata curna*, *Brahmi ghrta*, *Manasamitra vataka*, *Mandookaparni* and *Agasthy Hareetaki avalehya* etc.

Summary & Conclusion:

The present study which has focussed on the *Quality of Life in a carcinoma patients is a multidimensional concept deals the subjective nature of both positive and negative aspects of life. Different adoptive models has been elaborately described by different authors give a better management and measures to improve the quality of life in cancer.* Holistic approach of Ayurveda provides a solution to the improvement of QOL in Cancer patients. *Manovikaras* and its examination methods and different parameters for assessing the quality of life not only improve the standards but also for scaling the parameters. Ayurvedic approach in dealing the cancer patients in view of *Manasika Roga Chikitsa* and *Rasayana chikitsa* is an ideal method of improving the QOL. Ayurveda emphasizes the unique of psychosomatic approach and the importance of the mind as an integral part of the life. Various psychological parameters mentions in *Manovikaras* and *manasika pareeksah* will benefit in the evaluating the standard Ayurvedic measures mentions under *satvaavajaya chikitsa* Ayurveda has pivoted role in the better symptoms management and improvement in quality of life. Ayurveda provides number of single, compound herbal/

herbomineral *Rasayana* drugs contributing unique *Rasayana* therapy having diversified actions on different systems of the body viz immune- modulation, anti oxidant action, adaptogenic action.

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