

## V. SUMMARY AND CONCLUSION

Women are vital part of every family and they are the important members in preserving health of the family members and women contact the health care organization more than males for their health and for others health. Across the life span, a woman has to face specific health related issues and they are more possibly need to be detected in appropriate time. Cancer of cervix is reflected as an avoidable disease among women. Identifying risk factors plus creating awareness about the disease would help to prevent and improve the health seeking behaviour of the women. Quality of Life is compromised in chronic diseases like cancer. Specific complementary therapies play a substantial role in improving eminence of Life. The study entitled **“Analysis of the Risk factors and Interventions to Promote Better Quality of Life among Women with Cervical Cancer at Selected Hospitals, Chhattisgarh”** was framed with the following objectives to:

- A. Identify and explore the risk factors of women.
- B. Analyse the Quality of Life among women with cervical cancer before interventions in control and experimental groups.
- C. Implement the interventions to promote better Quality of Life of women with cervical cancer in experimental group.
- D. Assess the Quality of Life of women with cervical cancer before and after interventions in experimental group.
- E. Assess the Quality of Life of women with cervical cancer before and after in control group.
- F. Evaluate the Quality of Life of women with cervical cancer after interventions between control and experimental groups.

In the previous chapters it was attempted to recognize and evaluate the basic risk factors that have an impact on the life quality of the women affected by cancer of cervix at specific hospitals in Chhattisgarh. This chapter deals about the detailed analysis of the thesis which has been summarized and also the important results have also been explained.

The study was conducted in two phases namely,

- A. Survey to identify and explore the risk factors of cervical cancer.
- B. Interventions to promote better Quality of Life among women with cervical cancer.

### **A. Survey to Identify and Explore the Risk Factors of Women with Cervical Cancer**

The survey was done among women suffering from cervical cancer got admitted at selected hospitals in Chhattisgarh. Total 110 samples were selected for the survey. A structured interview schedule was used to collect the details of survey. The reliability and validity of the tool was assessed before the data collection. The interview schedule consists of Demographic Profile, Health History and Identification of Risk Factors of Cervical Cancer.

The findings of the survey are discussed under the following headings:

#### **1. Demographic Profile of Women**

- ❖ Majority of women (45 percent) were between the age group of 41-50 years and 12 percent of them were aged above 50 years.
- ❖ Majority of the women (89 percent) were married.
- ❖ In regards to the level of education most of the women (31 percent) were noted to be illiterate and seventeen percent (7 percent) became graduates.
- ❖ Majority of the women (84 percent) were Hindus.
- ❖ Regarding the Habitat, majority of the women (68 percent) living in rural area.
- ❖ Occupational status of the women revealed that 64 percent were employed in private sector organizations only 2 percent were professionals.
- ❖ Monthly income of the women, nearly half of them (45 percent), was less than Rs 5000 and only about 7 percent in the range of Rs 10,000 to Rs 20,000.
- ❖ Regarding the type of family, nearly half of the women (44 percent) were living as a joint family.
- ❖ As far as the number of children, almost (44 percent) of the women had two children and one woman had one child.

- ❖ Regarding the financial supportive system most of them (42 percent) were supported from the local community and only about 24 percent were supported by government organizations.

## **2. Health history**

- ❖ Most of the women (60 percent) were affected by squamous cell carcinomas and 13 percent of them were having adenosquamous carcinomas.
- ❖ More than half of the women (61 percent) fall in the Stage III category and 39 percent were found to be in the Stage II.
- ❖ Regarding the type of treatments received by women, more than half of them (51 percent) were treated by surgery, chemotherapy and radiation methods while only 49 percent of them were treated by chemotherapy and radiation.
- ❖ In stage III cancer 60 percent and in stage II, 37 percent were newly diagnosed.
- ❖ In stage III cancer more than half (60 percent) were admitted for the first time to the hospital and in stage II mostly half of them (56 percent) were admitted between 2-3<sup>rd</sup> time.

## **3. Identification of Risk Factors of Cervical Cancer**

### **a. Personal Risk Factors of Women**

- ❖ Age at marriage of women revealed that half (50 percent) of the women were married at the age group between 14-18 and only 12 percent were falling into the 24-28 age group category.
- ❖ As for the income status of the family, the majority (59 percent) were earning Rs 5000-Rs 20000 per month as a family income and remaining 41 percent were having above Rs 25000 as family income.
- ❖ With regard to diet consumption, majority (54 percent) of the women were not able to take a balanced diet while about 46 percent of the patients were able to follow a balanced diet.

- ❖ Most of the women (50 percent) had no history of personal habits like tobacco and betel chewing, while about 37 percent and 6 percent of them had the habits of chewing tobacco and betel respectively.
- ❖ Regarding the marital status, most of the women (87 percent) were married.
- ❖ In relation to the number of marriages 95 percent of the women were married once and only 5 percent of them, married twice.
- ❖ Regarding husband's marital status 68 percent of women's husbands had first marriage and remaining 32 percent of them married twice.

**b. Family Welfare and Sexual Risk Factors of Women**

- ❖ Mostly half (47 percent) of the women delivered the first baby between the age group of 15-19 and 15 percent of them, between the age group of 25-29.
- ❖ Forty two percent of the women had two deliveries and one woman had six deliveries
- ❖ Most of the (85 percent) women had a normal delivery and 15 percent had caesarian section delivery.
- ❖ Majority of the women (63 percent) did not have a history of abortion and the rest 37 percent had.
- ❖ Regarding the temporary family planning measures, 77 percent were using oral contraceptives and only about 23 percent used Copper -T.
- ❖ Most of the women (72 percent) did not have a familial history of cancer and in the instances where there was a familial history, majority (65 percent) was of maternal type and 35 percent was of paternal.
- ❖ It is marked that 45 percent of them had communicable diseases through sexual transmission, and remaining 55 percent of them had no exposure to such type of infections.
- ❖ In regards with Pap smear almost all the women (96 percent) were not investigated for PAP smear test prior before diagnosis of cancer, only four percentage of them tested once before.

## **B. Interventions to Promote Better Quality of Life Among Women with Cervical Cancer**

1. The Quality of Life of women was assessed using EORTC Scale C30 and EORTC Scale CX24. The scales were calculated based on the Likert Scale.
2. EORTC C30 scale consists of Functioning Scale, Symptom Scale and Single Item Scale and Global Health Status.
3. EORTC CX24 consists of Multi-item scale and single item scale.
4. The effect of interventions was assessed in experimental group. In control group interventions were not given.
5. The paired 't' test was used to analyse the results of the findings in experimental and control groups. The 't' test was used to analyse the results of the findings between control and experimental groups.

### **1. Assess the Quality of Life of Women with Cervical Cancer before and after Interventions in Experimental Group. (EORTC Scale C-30).**

- ❖ In the Functioning Scale, the mean scores of physical functioning had improved from 10.30 to 76.12, the role functioning had increased from 25.76 to 84.85, the emotional functioning had increased from 16.96 to 74.55, the cognitive functioning has improved from 21.21 to 69.39 and the social functioning, from 11.82 to 68.94.
- ❖ In the Symptoms Scale, the symptoms had reduced remarkably as noted fatigue mean score had reduced from 95.76 to 22.43. Nausea, vomiting had decreased from 82.15 to 36.97 and the pain scale had reduced from 95.45 to 23.33. When the score decreases the symptoms decrease and the findings revealed that there was a notable decrease in Symptom Scale after intervention in experimental group.
- ❖ In Single Item Scale, the categories of dyspnea had decreased 89.09 to 22.43, insomnia had decreased from 84.24 to 25.45, loss of appetite had reduced from 91.52 to 29.70 and the problem of constipation had reduced from 81.82 to 29.70. The symptoms of diarrhea had reduced from 73.94 to 26.67 and financial difficulties gradually improved from 91.52 to 53.33.

- ❖ The Global Health Status Scale had improved from 10.30 to 78.91. It showed that there was a substantial enhancement in life quality. The scales were used to evaluate before and after intervention. There was a notable difference in mean score of functioning, symptoms, single-item, and global health status with P value  $p < 0.001$ . Hence this signifies the hypothesis  $H_{01}$ . Thus, the Hypothesis  **$H_{01}$** – “**There is no significant difference in EORTC score of quality of life among experimental group before and after interventions**” is rejected.

## **2. Assess the Quality of Life of Women with Cervical Cancer before and after Interventions in Experimental Group (EORTC Scale CX-24).**

- ❖ In the Multi-Item Scales of symptoms experience the mean score had reduced from 81.38 to 18.46. The psychological worry about body image had decreased from 66.46 to 15.76 and there was no notable improvement seen in sexual and vaginal functioning. The mean score had changed from 15.36 to 20.
- ❖ In the Single-Item Scale, there was a notable amount of reduction in mean score of lymphedema (51.52 to 12.12) and peripheral neuropathy symptoms from 76.36 to 21.82. The menopausal symptoms had reduced as the mean score showed (65.45 to 26.67).
- ❖ The Quality of Life scales were used to evaluate before and after intervention. There was a noteworthy variation in mean score of Multi-Item scale and Single-Item Scale, and with P value  $p < 0.001$ . Hence this signifies the hypothesis  $H_{01}$ . Thus, the hypothesis  $H_{01}$  - “**There is no significant difference in EORTC score of quality of life among experimental group before and after interventions**” is rejected. Significance was not found in sexual /vaginal functioning and sexual enjoyment.

## **3. Assess the Quality of Life of Women with Cervical Cancer before and after in Control Group. (EORTC Scale C-30).**

In Control Group, the Quality of life scores (QLQ- C30) were assessed in Functioning Scale, Single Item Scale and Global Health Status with P value of  $p < 0.001$ . Hence this signifies the Hypothesis  **$H_{02}$** : **There is no significant difference in EORTC score of quality of life among control group before and after interventions is rejected.**

#### **4. Assess the Quality of Life of Women with Cervical Cancer before and after in Control Group. (EORTC scale CX-24).**

- ❖ In Control Group Quality of Life scores (QLQ - CX24) were evaluated using Multi-Scale and Single-Item Scale. The body image, vaginal and sexual functioning, sexual worry, sexual activity and sexual enjoyment were not significant. The majority of the scores were not significant statistically before and after the assessment. Thus, the Hypothesis **H<sub>0</sub>2 was accepted. There is no significant difference in EORTC score of quality of life among control group before and after interventions is accepted.** Significance was found only in symptom experience, lymphedema and peripheral neuropathy.

#### **5. Evaluate the Quality of Life of Women with Cervical Cancer after Interventions between Control and Experimental Groups (EORTC scale C-30).**

- ❖ In women with cervical cancer, between control and experimental group after interventions, using EORTC 30-item scale the Quality of Life was assessed. Here 't' test was used to evaluate the Quality of Life.
- ❖ In the Functioning Scale, the mean score between control and experimental group in physical functioning were 57.33 and 76.12, role functioning 65.76 and 84.85, the emotional functioning 27.42 and 74.55, cognitive functioning was 37.82 and 69.39, and the social functioning was 27.58 and 63.94. The women in experimental group showed improvement in functioning scale as compared with control group.
- ❖ In the Symptoms Scale, the mean score between control and experimental group in fatigue level 53.33 and 22.42, nausea, vomiting was 65.15 and 36.97. The pain score was 53.03 and 23.33. Higher the mean score the symptoms are more. The results showed that the mean score of symptom scale in control group is higher than the experimental group, hence experimental group had lesser symptoms than the control group.
- ❖ In Single Item Scale, the mean scores of both the groups were, in dyspnea 41.82 and 22.42, in insomnia 58.18 and 25.45, in loss of appetite 45.45 and 29.70 and

the issue of constipation was 31.54 and 29.70. The symptoms of diarrhea showed mean score of 50.30 and 26.67 and financial difficulties were 66.02 and 53.33. It is revealed that the women in the experimental group had a decreased level of breathing difficulties, improved level of sleep pattern, good appetite and considerable level of improvement in the diarrheal condition compared with control group with less duration of period. The constipation condition of the women did not have a significant difference, and also financially there was not much of difference as the disease was progressive and it had cost bearing effect on the patient's expenditure.

- ❖ The Global Health Status Scale of both the groups were 65.76 and 78.91. It showed that there was a significant improvement of standard of life in the experimental group.
- ❖ The Quality of Life scores (QLQ- C30) were assessed between control and experimental group using Functioning Scale, Symptom Scale, Single Item Scale and Global Health Status and the result shows that there is a significant difference in mean scores at 0.05 percent level with P value of  $p < 0.001$ . Hence this signifies the Hypothesis  $H_03$ . **Thus, the hypothesis “There is no significant difference in EORTC score of quality of life between control and experimental group after interventions” is rejected.**

#### **6. Evaluate the Quality of Life of Women with Cervical Cancer after Interventions between Control and Experimental Groups (EORTC scale CX-24).**

- ❖ The findings showed in Multi Item scales the mean scores between control and experimental groups were with categories of symptom experience 49.31 and 18.46, body image 27.07 and 15.76, sexual and vaginal functioning 7.10 and 20.00. The symptoms had improved very much after the treatment in experimental group. There is no significant difference in sexual and vaginal functioning between the groups.
- ❖ In the Single-Item Scale, the mean scores in both groups, lymphedema were 46.67 and 12.12 and peripheral neuropathy symptoms 45.45 and 21.82. The menopausal symptoms showed 67.88 and 26.67. Sexual worry scores were 8.48

and 7.27, sexual activity scores were 8.48 and 7.27, and the sexual enjoyment scores were 10.10 and 7.15. The women in the experimental group had shown an excellent improvement with perspective to the lymphedema, peripheral neuropathy and menopausal symptoms. Significance was not found in sexual and vaginal functioning, sexual activity, sexual functioning and sexual enjoyment between the groups.

- ❖ The Quality of Life scores (QLQ- CX24) were evaluated between control and experimental group and the results showed there was a substantial amount of difference in mean scores at 0.05 percent level with P value of  $p < 0.001$  in Single Item and Multi Item Scale. Hence this signifies the Hypothesis  $H_03$ . **Thus, the hypothesis “There is no significant difference in EORTC score of quality of life between control and experimental group after interventions” is rejected.**

## **RECOMMENDATIONS OF THE STUDY ARE AS FOLLOWS:**

### **A. For Women:**

- ❖ Women need to be stressed on the importance of a healthy lifestyle. The awareness of emerging diseases and its preventive strategies will help them very much to lead a healthy life. Maintaining a balanced diet will always enable them to lead and maintain a comprehensive health.
- ❖ Women above 30s should undergo regular screening procedures such as PAP smear and other relevant investigations as a preventive measure of cervical cancer.
- ❖ Women with cancer of cervix need to be encouraged to utilize the different methods of alternative and complementary therapies to improve the life quality. Enhancement of the life quality will increase the survival rate of women.
- ❖ Women need to be educated on various health issues that would arise during the reproductive age. Gynecological problems can be addressed by themselves and always an early approach to the health system is recommended.

## **B. For Society:**

- ❖ The society should be made to understand that the cancer of cervix can be preventable when detected at initial stages. Hence the women need to be encouraged to go regular PAP smear investigation to prevent the disease, since it is the only method by which an early detection is possible.
- ❖ The family members need to be counselled on the health problems faced by women during the chronic stage and need to be taught of various strategies to cope up the devastating condition of the cancer.
- ❖ National Cancer Control Programme and various National Societies conduct awareness programmes, conferences to bring up the preventive and coping strategies in practice.
- ❖ The corporate sectors, educational institutions, NGOs and other organized sector could arrange periodical check-up for the members of the organization which would create a rippling effect on the other women.
- ❖ The service clubs like, Scouts, NSS, NCC could observe a day for “Reproductive Health Education Drives,” during their camps. It would sensitize the students too, who would be the future mother and fathers.
- ❖ Women need to be educated on awareness of HPV vaccination to prevent cervical cancer.

## **C. For Government:**

1. Health and Family Welfare Department need to strengthen the policies of reproductive health which influence the women’s health during their age of reproduction, by conducting awareness and screening programmes.
2. The complementary and alternative systems need to be incorporated in case of gynecological cancers.
3. Government need to have hospice and palliative care centres for cancer women, hence therapies other than pharmacological can be incorporated effectively to improve the survival of women with gynecological cancers.
4. Followup service camps should be organized for the women who are in the Stage I and Stage II cervical cancers.

## **SUGGESTIONS FOR FUTURE RESEARCH:**

- A. A related study can be done to compare between early stage of cervical cancer and advanced stage of cancer.
- B. Influence of the vaccination for HPV on prevention of cancer of cervix can be studied.
- C. A similar study can be conducted to educate the adolescent girl children about Prevention of Cervical Cancer.

## **CONCLUSION:**

This 21<sup>st</sup> Century has brought a new leash of hope and life and has given immense power to the women. Unlike those days, where the women were always behind the screen, in today's era women are mostly in the limelight in all activities of daily living. Women's role has become an undisputable part of the society. The role of the women has significantly changed nowadays. They have become financially independent, self-sustained and play a leading part in every aspect of life. Whatever field, academics, sports, art, politics, they excel in everything. Since women play such an important role in the society, the need to maintain a good health becomes very vital. The reason for major mortality rates in women is gynecological cancer. Among various types of cancers in women, the cervical cancer is most dangerous and if detected early it is preventable. This message needs to be conveyed to the women to improvise and take care of their health in a better way.

The study result signifies that a large part of the women with cancer of cervix (96 percent) have not undergone PAP smear investigation. It is considered as a major risk factor and hence Human Papilloma virus infection is the major reason for origin of cervical cancer. Early discovery and management of HPV infection will prevent turning of precancerous cells to become cancer cells. Women with cervical cancer are compromised with quality of life. Specific complementary therapies showed statistical significance in improving the life quality of women.

Identification of risk factors motivate the women to undergo for screening in a routine way. Through early discovery the prevalence of the disease can be reduced and many cancer women have a high possibility of cure. Knowledge about causative aspects and avoidance of cervical malignancy is very less in developing countries like India. The country should

strengthen the steps to improvise the knowledge for protection and important strategies to decrease the exposure to causative agents among young adult women.

The women are dealing with sequelae related to their disease. Better understanding of well-being of life in cervical cancer is an integral part to improvise the survival rate of women. The life quality of women is compromised due to the disease condition. Focused interventions will enhance the life quality of women who are under treatment. In the recent days, the complementary therapies are playing a key role along with the routine assessments in enhancing the well-being of women. The use of comprehensive interventions will manage the psychological, social, physical and sexual problems that normally influence the life quality of the women with cervical cancer. These therapies connect the evolution of patients from health care organizations to home. The counsellors of health care should sport an effective role to address the needs of the women by encouraging the utilization of these findings to enhance the life quality.

The observations of the study, highlighted about the sufferings faced by the women with cervical cancer. It is clearly understood that the Quality of Life is compromised severely during disease process. The implementation of specific complementary therapies proved that it had a significant effect in improvement of the quality of life of women with cervical cancer. Sexuality and sexual health need to be strengthened more, since stigma related to these concepts did not allow the women to reveal the information. Strengthening of the family supportive system is necessary due to the threat created by the disease which affects the whole standard of life of a family. Many women were able to notice the risk factors earlier but they did not take it seriously for e.g., STDs, heavy bleeding, etc., and were reluctant to approach the health care system. Young aged women had fear, anxiety about death and lot of doubts about remission and relapsing of the disease. Upon comparison to Stage III cancer, the women in the Stage II were better catering their physical demands. The women affected by the disease since quite a long duration had more tolerance and acceptance of the disease than the newly diagnosed women. Even though medical sciences have a role in treating the cancer, complementary interventions will help to improve the quality of life and also promote better living environment, through this the rate of survival of women could increase.

On the account of paramount achievements women have attained these days, only better health will allow them to enjoy a healthy and long life and serve the society in a better manner. If we say that women are like a cogwheel in the family cart, it is not an exaggeration.