ISSN No: 2348-4845
International Journal & Magazine of Engineering, Technology, Management and Research
A Peer Reviewed Open Access International Journal

A Socio-Economic Study on Cervical Cancer

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Abstract:
It is observed that the risk of Cervical Cancer is found higher in women with poor financial and poor educational background. Cervical Cancer may be developed with the root cause of Human Papilloma Virus infection. It is observed that the Cervical Cancer is identified with the women with a history of sexually transmitted infections. It is also observed that the women who have experienced many time pregnancies are also evidently affected by Cervical Cancer. In general Cervical Cancer is identified with the common quality of women who don't have good socio-economic status. The latest developments have given a great relief with the vaccinations to prevent the HPV infections. This improvement has drastically reduced the risk of cervical cancer at 65 to 75 per cent. The treatment of Cervical Cancer us very expensive and the victims are poor women who have low socio-economic status. In this paper the socio economic conditions and diagnosis of Cervical Cancer are discussed in detail.

Key Words:
Cervical Cancer, Women, Poor living Conditions, HPV infections.

Introduction:

Cervical Cancer is one of the root cause of death among women with poor economic and social conditions in the world. It is basically observed in the women found in developing countries like Ethiopia, India, and Latin America etc. This is caused to the women based on their socioeconomic and cultural related factors associated with the poor economic conditions. The treatment is expensive but it affects only for the women with poor economic status.

Thus the governments of the developing countries should focus on the disease and provide the treatment and take necessary steps to prevent it. The women in developing countries are facing the challenges in identifying the disease and ignore the disease until it reaches the unmanaged state. Many research studies with innumerable case studies across the world have revealed that the ignorance and poverty is the main cause of lacking the diagnosis process [1]. Several studies have revealed that the Cervical Cancer can be treated with 100 per cent cure by removing the affected tissues when the disease is identified at early stages. It is essential to provide the screening programs to the women in poor conditions and suffering with the symptoms of Cervical Cancer.

The latest equipment like digital colposcopy for potential of scalability is used in computer aided diagnosis systems are available to perform the automated processing. This screening process is need to be conducted for the women living in poor conditions and slum areas. This computer aided automated diagnosis process has been discovered and in the force since a decade [2]. Human Papillomavirus (HPV) is a set of viruses commonly affect the women rather than men worldwide. HPV can be 100 types and only 13 types are only causing high risk type cancer. This dangerous HPV is transmitted through sexual contacts. HPV is identified in many cases after performing sexual activity and unhygienic conditions causing infections. It is observed and identified with the women living in less developed regions [3].

Cite this article as: Mrs. Godla Swarupa & Dr. Dhana Lakshmi, "A Socio-Economic Study on Cervical Cancer", International Journal & Magazine of Engineering, Technology, Management and Research, Volume 5, Issue 10, 2018, Page 17-21.

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According to the survey conducted by WHO nearly 445,000 women have affected with the Cervical Cancer and died nearly 270,000 in the year 2012 [3]. Screening and early detection of cancer is crucial to get the survival for the women. World Health Organization is also striving to identify the disease at early stages with the help of governments of developing countries [3] [4]. World Health Organization is insisting the governments of developing countries to utilize the automated diagnose process with screening techniques to identify the disease at early stages [4]. The latest diagnosis techniques in associated with the electromagnetic spectra data can provide the better accuracy in identifying the disease. The identification process can be conducted with cellular level approach and tissue level approach. The cellular level approach is conducted with the Pap smear, liquid based cytology, DNA testing and electromagnetic spectroscopes. The tissue level approach is conducted based on visual inspection after applying Lugol's iodine or acetic acid, cervicography and Hyper spectral diagnostic imaging (HSDI) [7].

Related Work:

World Health Organisation has focused with special interest to eradicate the Cervical Cancer from the developing countries in the world [6]. It has focused on cytology screening in middle-income countries. It has implemented the Visual Inspection with Acetic Acid Application program in the place of the Cytology screening program in Low-Income Countries. WHO has initiated the free campaigns to conduct the HPV tests in cervical screening programs with the help of the governments of developing countries. To perform the tests WHO has supplied a highly automated devices developed with the hybrid capture technology with the capacity of conducting 700 samples per day [6]. Once the diagnosis is completed the treatment is initiated with the newest amplification equipment to remove the affected or infected cells from the body. This could provide greater results in removing the cancer from the body [6].

Rajib Hasan et.al have introduced the intelligent screening intervention framework to identify the cancer symptoms and guage the severity of the disease. This could help many women to diagnosis the cancer from women with great ease [7]. Vargas et.al has depicted in the international journal about the screening and prevention of Cervical Cancer. In this study the risk factors in associated with Hr-HPV is focused. Cervical Cancer can be given rise with the habits of young age intercourse, multi pregnancy, smoking and consumption of contraceptive pills usage more than 5 years. In the experimental results the HPV is identified with the women who have experienced sex with multiple partners and consumption of tobacco and smoking. Especially these habits are identified in the women with low educational level, lower awareness of health problems and preventive behaviors (12). The root cause of the disease occurrence is inadequate hygienic conditions. This can be identified more in poor socio economic conditions of the families dwelling in slum areas of developing countries [8].

Cervical Cancer:

Cervical Cancer is one of the most addressing problems in the health care field. World Health Organisation has identified the intensity of the disease and addressed in every developing country with possible measures. This is basically identified in the developing countries where the families are struggling to survive to have their bread and butter. Most of the women in slum areas are not well educated and not with well economic status. The ignorance of the women generation dwelling in the slums are forced to go with sexual interventions in the early ages and sometimes forced to go with prostitution. The ignorance of awareness of this disease caused by the multiple pregnancies at early ages also victimizing the women with Cervical Cancer. The early identification of this disease is curable. If the disease identification is delayed leads infiltrating cancer and leads to death. It is mostly identified with the women with the age of 45 years onwards.

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The following picture demonstrate the Cervical Cancer severity which could be possible to cure at early stage. The cure can be incorporated by removing the cancer infected cells [9].

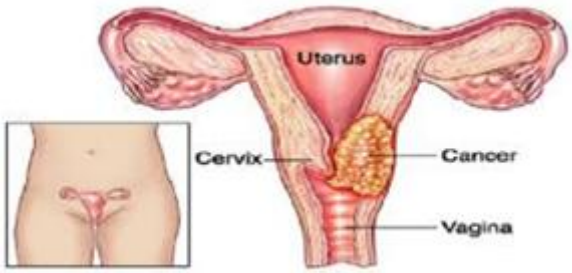

Figure 1 Understanding Cervical Cancer

The above figure 1 is demonstrating the Cervical Cancer position. It is identified in the women aged more than 45 years [10].

Figure 2 samples collected from patients of Cervical Cancer

Cervical Intraepithelial neoplasia (CIN) is identified with three grades. First one is Low grade lesion, the next one is high grade lesion and the final one is Carcinoma. The final grade is leading to Cervical Cancer. To identify the disease Computer Tomography or Digital Subtraction Angiography or Magnetic Resonance Imaging can be applied to identify the intensity of the disease. If the disease is in the first and second stages. It can be highly curable. The third stage is identified as a difficult stage to make the patient survive[13]. The treatment has three options. These are surgery, radiation therapy and chemotherapy. The treatment is given based on the intensity and severity of the disease. The treatment could be decided based on the severity of the disease and spread into the body. Cancer treatment can also destroy other healthy cell of the body. The treatment also give side effects to the healthy body. The side effects like losing the hair in chemotherapy is observed in many cases.

The latest advancements in health care industry with radiation therapy have given point to point and cell to cell removal laser equipment to terminate the cancer cells from the body. This has given greater relief for the deaths caused by Cervical Cancer [16].

Figure 3Radiation Therapy

Radiation therapy is the sophisticated treatment given to Cervical Cancer patients. The success rate is 100 per cent with survival [14]. This treatment is expensive but he governments of developing countries are providing the treatment to the patients with poor and middle income background. It is evidently observed in Andhra Pradesh the patients have been treated with radiation therapy through Arogya Sri Scheme. The government is providing the free of cost treatment in corporate hospitals [15].

Preventive Measures:

The preventive measures can be incorporated to the women dwelling in poor conditions by providing the suggestions and educating lessons to the poor background women. The preventive measures and intraepithelial sessions on cancer should be initiated to the women associations in slum areas of developing countries. It is inevitable to implement the national immunization program in developing countries by providing the vaccine to the women aged 9 to 45 years of women to prevent HPV-16 or HPV-18[11].

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Figure 4 preventive measures save life

WHO associated with the governments of improving countries are taking effective measures to educate the low and medium income group women to prevent the disease.

Conclusion:

Cervical Cancer is a curse to the women segment who are struggling to survive in the poor socio economic background. The root cause of the disease is discussed in the paper in detail. The treatment options are provided. The socio economic background of the women with ignorance is the rise of the disease in the developing countries. The disease has cure with different treatments. The cure is possible if the disease is identified at early stages. The latest advancements in cancer treatment has given safe survival with minimal side effects. Instead of treatment the preventive measures would be better. WHO is focusing on the preventive measures with the association of local government bodies of the developing countries.

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