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Research Article

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Factors associated with the cervical cancer patients: A comparative study on the rural and urban areas of Kamrup district, Assam

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ABSTRACTS

The most deadly and prevalent diseases in worldwide is Cervical cancer. It can go unnoticed and cause negative impacts on health. Lack of knowledge about these diseases in rural areas cause unwanted risks than urban areas. In a survey related to cervical cancer, we have reported that many women's in rural areas unable to detect at right time and unaware about its risks. Few of them know about the screening eligibility and interval in screening required for this disease. There were different impacts on the diagnosis on cervical cancer on quality of life such as depressions, anxiety, anger, confusions and fear. These factors were reported to be more observed in rural patients than urban patients except anger. Physical issues were also reported such as bowel dysfunction, fertility, incontinence, lymphoedema and odour were more in urban areas. Malnutrition was found to be more prevalent among physical issues in rural patients than urban ones. The age group between 45-59 years shows higher percentage of cervical cancer in both areas patients. While other age groups also reported to undergo this infections which found to be more in urban areas. The main contributing factors lead to these diseases was lack of awareness, financial constraints, unavailable of trained manpower and lack of national level programmes. All these factors were seems to be lack in rural areas. However, Government organizations and NGOs were come forward to fight against this deadly diseases.

Key words: Cervical cancer, screening, lymphoedema, awareness and malnutrition.

INTRODUCTION

Cervical cancer (cancer of the uterine cervix) is one of the leading types of gynecological cancers worldwide, which lead to morbidity and mortality [1]. It is one of the most common types of cancer in developing countries as well as in India. According to estimation made in the year 2005, the numbers of cervical cancer cases worldwide were about 520,000 out of which 443,000 were in the developing countries [2]. Currently, it is considered worldwide as the second most deadly cancer in women [3]. Cervical cancer is a malignant neoplasm of the cervix uteri or cervical area. It may be present with vaginal bleeding but symptoms may be absent until the cancer is in its advanced stages [4]. The principal sexually transmitted causative agent in the development of entire cervical cancer is the Human Papilloma Viruses (HPV) [5]. Almost all the women those suffer from cervical cancer are infected with an oncogenic HPV type; more commonly with type 16 or 18 and relatively to a lesser extent with other oncogenic types. In India, the high risk HPV 16 or 18 compiles in about greater than 90% of the cervical cancer cases [6]. In the past two decades, causal role of infection with high risk Human Papilloma Virus (HPV) strains in cervical cancer has been targeted. A number of Primary and Secondary preventive approaches have been developed to prevent and treat infection with HPV [7].Pap test is an important safeguard against cervical cancer. It involves scraping cells from the cervix during a vaginal speculum examination. Pap testing is involved in the steady declination of incidence and mortality of the cervical cancer in Canada for the last two decades [8].

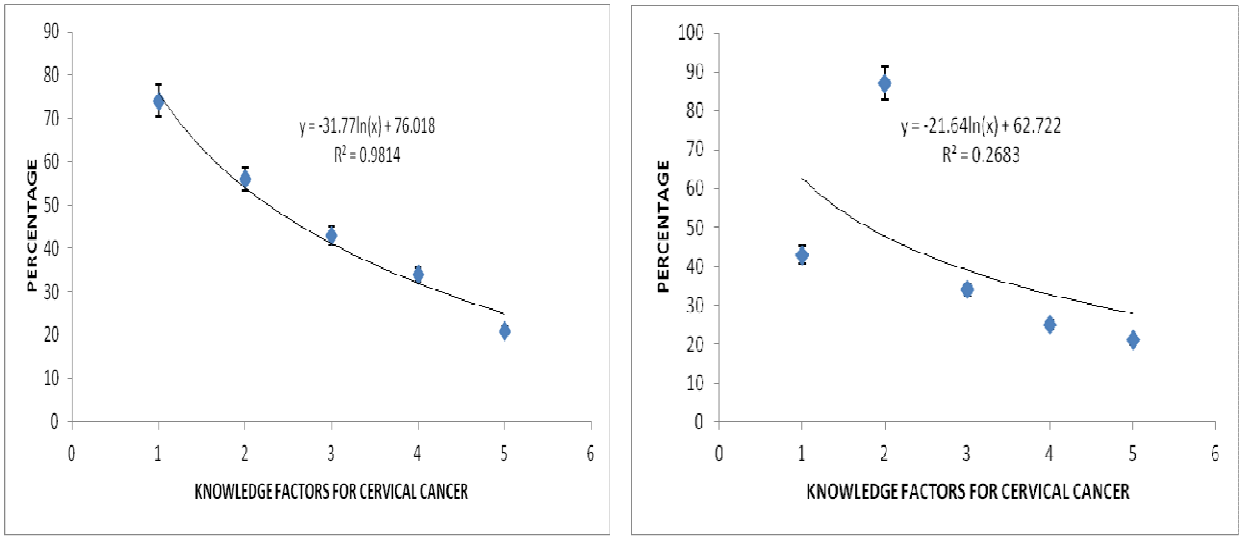
In comparison to other cancers, cervical cancer is easily preventable when effective programs are implemented to detect and treat its precursor lesions [9]. In the prevention of cervical cancer, prevention of HPV infections is very important. The advent of HPV vaccine is a good approach. Many studies have been done worldwide recently on the knowledge and awareness about HPV vaccine [3]. In general, a huge numbers of countries worldwide, the knowledge about HPV, cervical cancer and benefits of vaccination are low in women [10]. Over the past decade, scientists, researchers, clinicians and many frontline health workers have worked very hardly to bring the scourge of cervical cancer to the world's attention. They have also tried to develop and apply necessary knowledge and technologies to reduce the disease in most developing countries. Cities like Mumbai, Mexico, Kampala, Kathmandu and many others, innovative programs and technologies have learned for the successful delivery of effective prevention programs of cervical cancer to the women and girls who need them most [11]. Red algae such as *Kappaphycus alvarezii* has an antioxidant property, which can determine by estimations of vitamin C, vitamin E and heavy metals such as selenium and magnesium. It was found that the primary metabolites found in that organism may be potential bioactive compounds used in the pharmaceutical company [12]. The anti-nociceptive effect of methanolic extract of leaves of *G. pentaphylla* was found to be significant inhibition in the late phase of formalin induced pain [13]. It was also found that the methanol extract of *Capparis zeylanica Linn* root was evaluated for its wound healing properties [14]. Another authors also reported about wound healing activity of the chloroform leaf extract of *Mimosa pudica* in albino rats using excision and incision wound models [15].

EXPERIMENTAL SECTION

Questionnaire was prepared to study the different factors responsible for cervical cancer in women's. The study areas comprises of both urban and rural areas of Kamrup district, Assam. About 105 participants were responds to their query out of 110 in both rural and urban area. Out of 110 questionnaires, 3 participants did not submitted and other 2 submitted blank paper. Out of 105, 65 participants were from urban areas whereas rest 40 was from rural areas.

RESULTS AND DISCUSSION

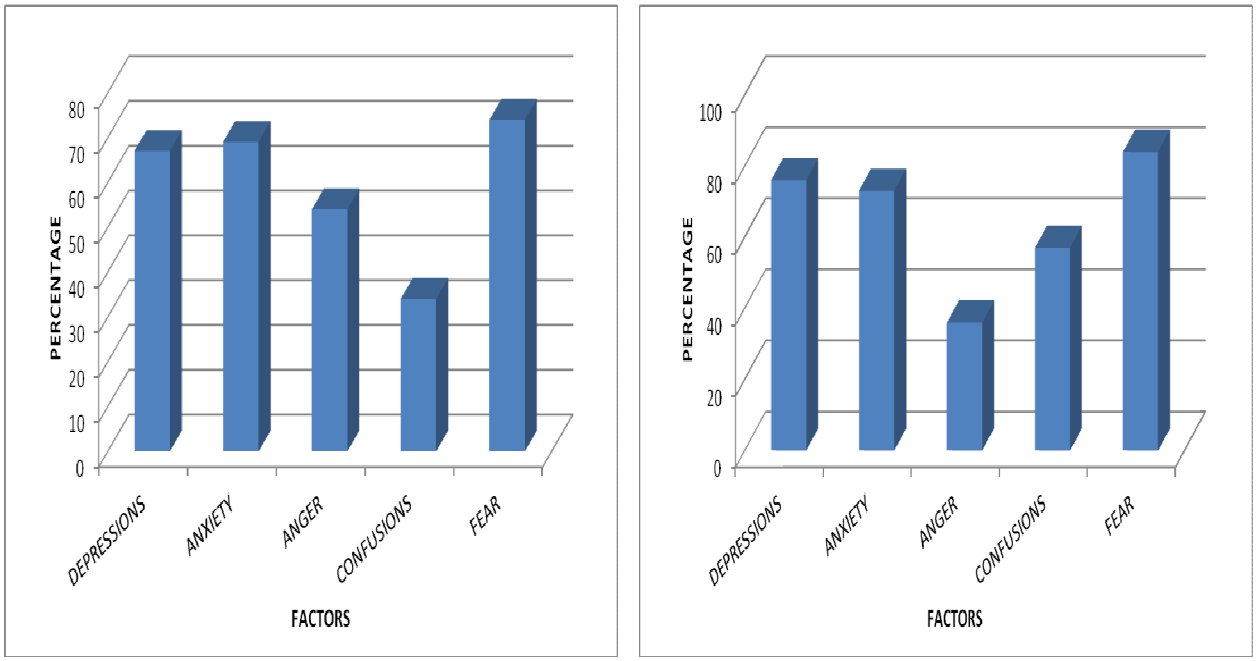
Cervical cancer totally dominates and cause threat to the health effects worldwide. Lots of new cases were reported which leads to second most deadly diseases in world. However there was variable percentage of detections rate in both rural and urban areas. Knowledge about these diseases was found to be less in rural areas than urban. Most urban women think that it is a curable whereas about 43% of rural women support it. Awareness of these hardcore diseases is found to be more in rural areas than urban ones. The decline percentages of its risk among urban women may be due to some awareness campaign conducting by Government and NGOs activities. However detections of cervical cancer were comparatively lower in both areas which were due to unable to detect at proper times, unknown about the screening eligibility and its interval. It indicates proper knowledge about these diseases is required not only in urban areas but in remote rural places also. There should be awareness programme at different intervals, so that it can detect early and prevents it from negative impact on women's health.



A **B**

Fig 1: Comparative studies of Knowledge factors about cervical cancer in A-Urban and B-Rural womens (1-Curable, 2-Risk, 3- Detections, 4-Screening eligibility and 5-Screening interval).

The survey also suggests that there were few other different factors which reported during cervical cancers. The rural patients were undergoes depressions which was found to be slight increase of about 9 % than urban patients. On other hand anxiety also found to be more in rural effected women than urban effected womens by only 4 %. However, intrestingly anger was observed more in case of urban womens which were effected by cervical cancer. Confusions and fear about this deadly diseases was more prevalent among the rural womens than urban ones. Proper utilizations of medicines and timely detections can lead to decrease these factors among theses womens to fight against this diseases.



A **B**

Fig 2: Different factors observed in cervical cancer patients A-Urban and B-Rural womens.

There were certain other physical issues which were reported during cervical cancer. Bowel dysfunctions were more prevalent in urban women's than rural women's. On other hand, malnutrition problem was found to be more in rural women's than urban. Other factors such as fertility, incontinence, lymphoedema and odour were reported more in urban than rural areas patients. These physical issues were reported when they visited doctors after detections of the disease.

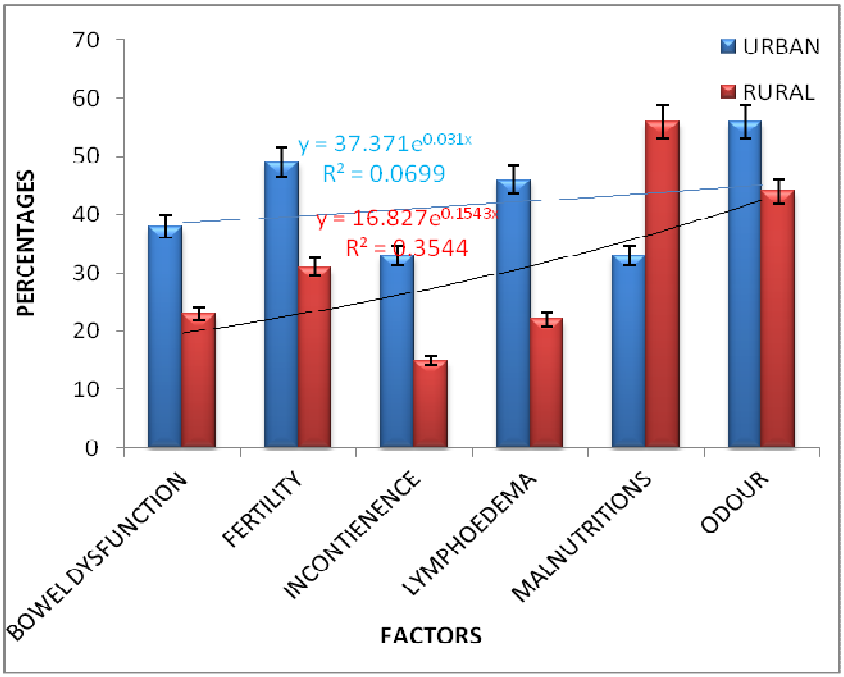


Fig 3: Percentages of factors reported during the cervical cancer patients of both Urban and Rural areas.

It was interesting to see that there were variable age groups which also varies in urban and rural areas. The early age group between 0-14 years shows low percentage in occurrence of these diseases. However in every age groups we were able to find that the percentage of infections of cervical cancer was more in urban womens than rural. 56 % of pepoles were reported this diseases in urban areas wheras 43 % in rural areas of 15-29 years group. 65 % and 54 % of detections was recorded in urban areas at age group of 30-44 years and 60+ years respectively. The same age group shows detections of about 48 % and 32 % in rural areas. The highest reported of infections was found to be at age between 45-59 years where 75 % and 56 % in urban and rural women patients respectively.

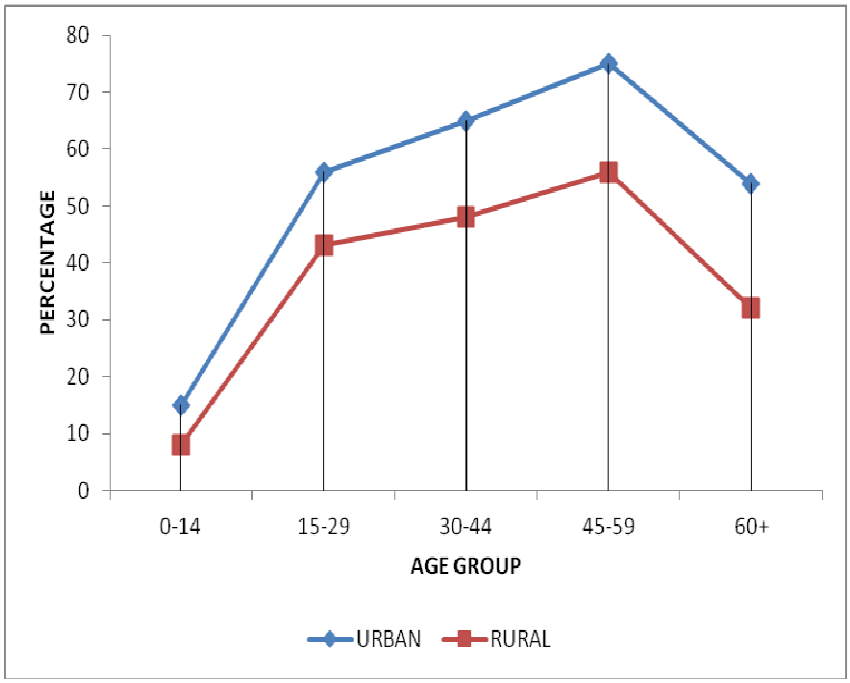
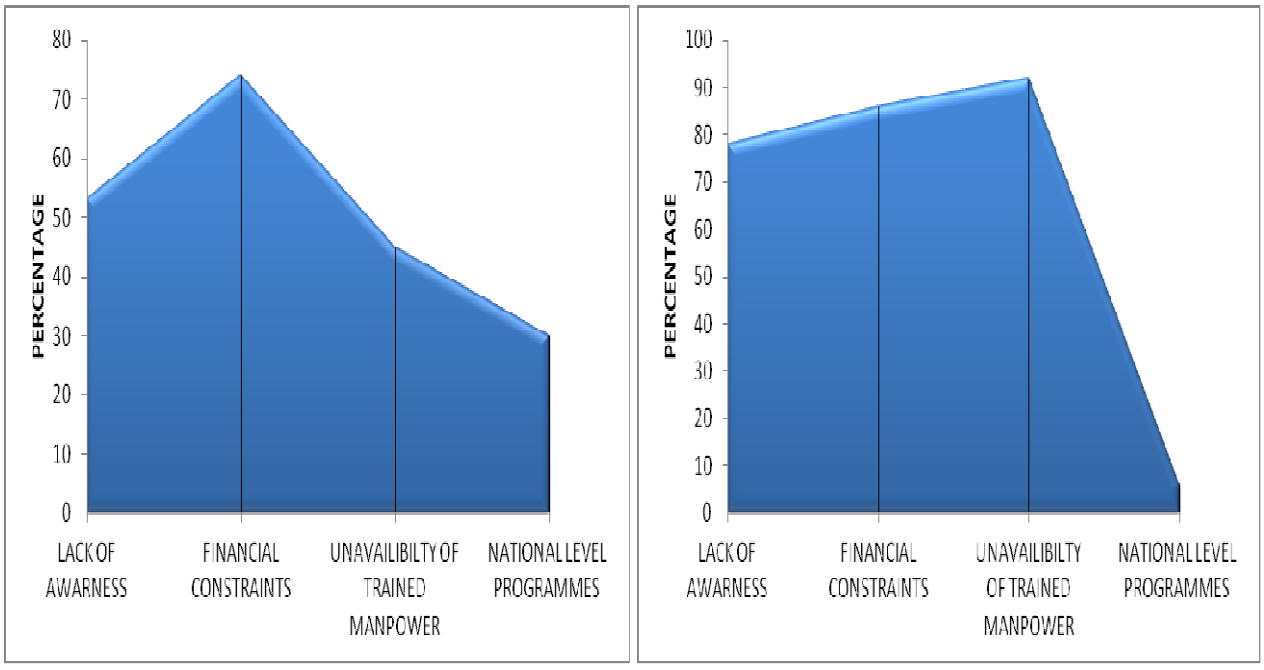


Fig 4: Different age groups shows variable percentage of cervical cancer.

The others factors which leads to occurrence of this deadly diseases were lack of awarness among pepoles, due to financial constraints, lack of trained manpower and organizing national level programmes against this diseases.



A **B**

Fig 5: Factors which increase the rate of cervical cancer in A-Urban and B-Rural womens.

Lack of awareness about these deadly diseases was found to be in more percent in rural areas than urban areas. There should be more awareness programmes in rural areas, so that peoples can know about the ultimate consequences of these deadly diseases. In remote rural areas efforts should be done that peoples should more participate in national level programme for awareness purpose. There should be more trained peoples in rural areas so that it minimized the infections rates. Other problem often seen in rural areas is the financial problems. Efforts should be done that there were free medical advice and free medicine to sort out the problems. Many NGOs and Government organizations were coming forward to raise awareness of these deadly diseases.

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