CERVICAL CANCER EARLY DETECTION PROJECT

DOCUMENTATION OF BEST PRACTICE

FEBRUARY 2010

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OneWorld Foundation India
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EXECUTIVE SUMMARY

Cervical cancer is one of the most common cancers among women worldwide. Much progress has been made in the prevention and control of cervical cancer. Cancer of the cervix is primarily caused by the Human Papilloma Virus (HPV) infection, for which there is now a vaccination available. Early screening of the disease through Cytology has considerably reduced deaths in the developed world.

However, the applicability of these procedures in developing countries is questionable as these countries do not have the required resources; specifically, the vaccine is expensive, and cytology based screening requires sophisticated infrastructure, equipment and manpower. As a result, death and disability from this cancer are high in developing countries, including India.

Therefore, there is a need to highlight alternative innovative practices for the prevention and control of cervical cancer in developing countries.

This document highlights the Corporation of Chennai’s project to screen rural women for cervical cancer through visual inspection methods.

The Corporation of Chennai launched the programme in April 2008 to detect pre cancerous lesions in the cervix of women above 30 years of age. This Cancer Early Detection Project (CED) aims to promote simple, less expensive and less time consuming screening tests for accurate diagnosis and early detection.

The alternate techniques being used under the programme are Visual Inspection Using Acetic Acid (VIA) and Visual Inspection with Lugol’s Iodine (VILI). To encourage poor women to go for check-ups, the health scheme, ‘Well Women check-up’ was initiated, which includes a collection of tests for diabetes, high blood pressure, anaemia, screening for Reproductive Tract Infections and Sexually Transmitted infections (RTI/STI). VIA and VILI are also conducted as a part of the check-up process.

Screening is being implemented in all 93 health posts of the Chennai Corporation. These posts offer screening services to low-income families within the city and its suburbs. Women whose tests are positive are treated through Cryotherapy.

Under this programme, detection of cervical cancer through visual inspection has been determined to be less time-consuming, inexpensive and easy to install.
BACKGROUND

CERVICAL CANCER IN INDIA

Cervical cancer is the leading cancer amongst women in India; two out of 12 women in India have cervical cancer.¹

![Diagram showing the location of the cervix](image1)  ![Diagram showing an infected cervix](image2)

**Source:** indiasurgerytour.com

Furthermore, there is a wide disparity between the rich and poor in terms of access to meaningful screening and treatment of cervical cancer. While women in the upper economic strata undergo PAP smear tests² to detect cervical cancer, economically backward women are not able to afford it. Under such circumstances, they either go untreated or their disease is identified at a very advanced stage when it becomes difficult to cure. Thus, the burden of this disease is higher among the most disadvantaged sections of Indian society.

The growing risk of cervical cancer in India makes it necessary to develop methods for early detection of the disease and its subsequent treatment.

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¹ Source: National Cancer Registry Programme and World Health Organisation, Atlas of Cancer in India
CERVICAL CANCER VISUAL SCREENING IN CHENNAI

In order to check cervical cancer in the slums of Chennai, the Corporation of Chennai launched a project in the area of preventative health to detect pre-cancerous lesions in the cervix of women between 18 and 60 years old. The project uses simple visual screening tests for accurate diagnosis and early detection of cervical cancer. If cervical cancer is detected at an early stage, it is curable.

In order to encourage poor women to get checked, a health scheme called ‘Well Women check-up’ was initiated, which included a collection of tests for diabetes, high blood pressure, anaemia, screenings for Reproductive Tract Infections and Sexually Transmitted infections (RTI/STI) along with cervical cancer screening tests.

OBJECTIVE

The project aims to:

- Identify and treat cervical cancer at the precancerous stage among women in the slums of Chennai
- Use less expensive and less time consuming screening methods for accurate diagnosis

WORKING DESIGN

SCREENING METHODS

The techniques used for screening of cervical cancer are Visual Inspection Using Acetic Acid (VIA) and Visual Inspection with Lugol’s Iodine (VILI).

Under VIA, visual inspection of the cervix is carried out with the help of a magnification device called the Magna Vision. If no apparent lesions are seen, the cervix is swabbed with mild acetic acid, which whitens the affected areas, if any exist, helping in early detection. Alternatively, under VILI, the cervix is swabbed with iodine which turns the affected areas into a mustard yellow color.

Diagram showing visual inspection techniques /Source: indiasurgerytour.com
**TRAINING THE STAFF**

Around 113 doctors from the District Family Welfare Bureau, Corporation of Chennai were trained in the visual inspection procedure at the Kasturba Gandhi Government Hospital. Two master trainers were briefed and trained at the Chittaranjan Cancer Institute, Kolkata. Five hundred paramedical staff members were trained to go to the field and put on screening camps. In addition to initial training, the staff members are kept up-to-date on latest developments partly through regular ‘Continued Medical Education’ (CME) classes which are primarily setup to teach newer techniques.

**INFRASTRUCTURE**

The necessary infrastructure, including a room with facilities for running water, an examination couch, a Magna vision device and required stationery, were provided to all 93 health posts of the Chennai Corporation that conduct the visual screenings.

**CONDUCTING CHECK-UPS**

The Urban Health Nurse (UHN) identifies rural women above the age of 30 years and refers them to Chennai Corporation’s health posts -‘Women’s Welfare Clinics’.

At the health post, a session on group health education is conducted and the women are counselled by a medical officer on issues related to cervical cancer. Thereafter, the women are screened using VIA and VILI methods. Along with these tests, they are also examined for breast cancer, anaemia, diabetes, and sexually transmitted infections. Furthermore, they are given lifestyle improvement advice and guidance.

**MAINTAINING RECORDS**

Details of all the women examined are entered into a case sheet. If tests are positive, a diagrammatic representation is made in the sheet; a follow-up register is maintained separately. If the results are negative, it is marked so and the patient is asked to return for another check-up after 5 years.

**TREATMENT AND FOLLOW-UP**

If a woman’s tests are positive, Cyrotherapy is pursued immediately. The treatment is followed up on a regular basis - the patient is asked to come back in six weeks, then after six months and then after a year. If she is still not cured, a biopsy is conducted and a histo-pathological report is compiled and referred to for suitable alternative hospital treatment.
**Methodology**

The Governance Knowledge Centre (GKC) team conducts extensive research to identify initiatives that contribute towards the betterment of public service delivery. The Cervical Cancer Early Detection Project, with its focus on providing locally appropriate screening and treatment methods to rural women in Chennai, is a unique and sustainable effort. The programme has been impacting the lives of an increasing number of women in the State.

After establishing the initiative as a best practice, the GKC research team conducted thorough secondary research using web sources to gather a detailed understanding of how it works. The next step was to contact the key stakeholders and seek their assistance in gaining deeper insight into the operations and impact of the initiative.

**Key Stakeholders**

**Chennai Corporation:** As the primary municipal institution of Chennai, it runs and operates the Cervical Cancer Early Detection Project through its Department of Maternal and Child Welfare.

**Urban Health Nurse:** Responsible for identifying the target group of women and guiding them to the health posts

**The Health Posts** of Chennai Corporation where screenings are conducted

**Lessons Learned**

**Using Simple Techniques**

The visual inspection techniques used for screening of cervical cancer are simple, requiring less technical expertise and time. They can be performed by trained paramedical staff and take only a few minutes to administer. A single visit to the health post makes it possible to determine whether a woman has cervical cancer. This eliminates lab costs, making it a great deal more affordable for poor women. Moreover, the screening equipment is simple to handle and not very expensive to procure.

**De-stigmatising Cancer**

Cancer is seen as a frightening, incurable disease and often becomes reason for stigmatising the affected person. With this initiative, the misconceptions associated with cervical cancer are being addressed, and poor women are being educated about what the disease actually entails and the fact that it is curable. By addressing their fears, the programme helps women to open up to the idea of regular check-ups and improving their lifestyles by leading a hygienic and healthy life.
EARLY DETECTION

Cervical cancer, if detected at its initial stages, is curable. Through these early detection screening procedures, more and more women are being cured before their cancer reaches threatening proportions. Those who test positive are guided with proper treatment and given appropriate follow-up facilities. Thus, the project is addressing the problem of cervical cancer, both at a preventative and curative level.

ENSURING PARITY IN TREATMENT

Cervical cancer is increasing among the rural poor. While women belonging to an upper economic stratum can resort to expensive treatment and tests, poor women are often left with no viable option. In fact, poor women are often ignorant about the symptoms and the necessary treatment. Cancer for them means an expensive treatment procedure which they are unable to meet. With visual screening tests and through the efforts of the Chennai Corporation, rural women are now being checked regularly and given proper guidance. They no longer have to be afraid of the costs involved nor have to bear the brunt of being stigmatised. This less expensive, less time consuming screening procedure is helping to bring much needed quality healthcare to the poor.

Research was carried out by the OneWorld Foundation, Governance Knowledge Centre (GKC) team.
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REFERENCES

http://infochangeindia.org/201006238355/Health/Features/Tamil-Nadu-pioneers-easy-cervical-cancer-screening.html
http://www.chennaicorporation.gov.in/departments/health/index.htm
APPENDIX A
Interview Questions

1. The Cancer Early Detection project aims to provide cervical cancer screening facilities to poor women in Chennai and its suburbs. When was the project started? Prior to the project what kind of facilities was available for screening rural poor women?

2. The Corporation of Chennai runs the project. Who are the other key stakeholders and what are their respective roles?

3. Under the project visual inspection techniques using acetic acid (VIA) and Lugol’s iodine(VILI) are used to detect cervical cancer at an early stage. How is this carried out? What advantages do these alternative techniques have over the PAP smear test? Are they as effective?

4. VIA and VILI are conducted under the “Well Women check-up” health scheme, implemented in the zonal hospitals and family welfare clinics of the Chennai Corporation. What are the main features of this scheme? Are poor women given economic benefits under the scheme?

5. How cost-effective are these alternative methods for screening of cervical cancer?

6. If a test comes positive, what is the next step in the treatment of the patient and what kind of assistance is she given?

7. Since the project began, what kind of impact has it generated? What have been its major advantages?

8. What were the major challenges faced during the implementation of the project? How were they overcome?

9. What other enhancements are in store for the future

10. Can you provide us with data that reflects impact:
   - Number of women screened
   - Number of detection and recovery cases
   - Number of hospitals where the scheme is being implemented.