

## **SIDE EFFECTS OF CHEMOTHERAPY AMONG WOMEN WITH BREAST CANCER – A SAMPLE ANALYSIS FROM ACCRA, GHANA.**

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### **Introduction**

**Chemotherapy** (chemo) is the use of chemical agents to treat or control disease. **Chemo for breast cancer** (read <https://pentvars.edu.gh/breast-health-among-women-at-eikwe-western-region-ghana-breast-cancer-awareness-month/> on a write-up of breast cancer) uses anti-cancer drugs that may be given **intramuscularly** (as an injection), **intravenously** (injected into your vein) or **orally** (by mouth) to destroy the breast cancer cells. The drugs travel through the bloodstream to reach the cancer cells in the breast. Chemo can be used as the main treatment for women whose breast cancer has spread outside the breast and underarm area to distant organs like the liver or lungs. Chemo has the greatest effect when more than one drug is used at a time. Thus, combinations of 2 or 3 chemo drugs are often used. **Chemo is given in cycles**, followed by a rest period to allow time to recover from the effects of the drugs. Chemo cycles are usually 2 or 3 weeks long. The schedule varies depending on the drugs used. With some drugs, chemo is given only on the first day of the cycle. With others, it is given one day a week for a few weeks or every other week. At the end of a cycle, a rest is allowed and then the cycle begins again.

### **Side effects of chemotherapy**

Chemo drugs can cause **side effects**, depending on the **type of drugs given**, **dose of drugs given** and the **length of treatment**. Side effects of chemo are grouped into **short-term effects** (*persisting over a limited period*) and **long-term effects** (*persisting over a relatively long time*). However, some of the common possible side effects include:

- Hair loss
- Nail changes
- Mouth sores
- Loss of appetite or weight changes
- Nausea and vomiting
- Diarrhea
- Fatigue
- Hot flashes and/or vaginal dryness
- Nerve damage

- Increased chance of infections (from reduced white blood cell counts)
- Easy bruising or bleeding (from reduced blood platelet counts)
- Fatigue (from reduced red blood cell counts and other reasons)

## Research

A recent study (Unpublished data August, 2022) was carried out by some faculty members and student from the Department of Nursing and Midwifery, Pentecost University and Medical Department, Korle Bu Teaching Hospital, to find out the **side effects of chemotherapy on female breast cancer patients at the chemotherapy unit of the Korle-Bu Teaching Hospital, Accra, Ghana and to hear about the coping strategies adopted by these women in this difficult time.** Female breast cancer patients who had been receiving cycles of chemotherapy for more than a month were sampled. In all, 60 women were sampled.

## Results

The youngest woman in our sample diagnosed with breast cancer was 21 years and the oldest woman was 68 years old. The mean age and standard deviation of the women were 44 years ( $\pm 13.68$ ). The median age was 46 years and the modal age was 49 years. The number of women experiencing short-term and long-term side effects of chemo and the type of short-term and long-term side effects of chemo are shown in Table 1 & 2 below.

**Table 1: Short term side effects of chemo**

Short term side effects	<i>f</i>	%
1. Loss of appetite	59	98.3
2. Nausea and vomiting	58	96.7
3. Fatigue	57	95
4. Hair loss	54	90
5. Mouth soreness	48	80
6. Anxiety or feeling alone	47	78.3
7. Infections	34	56.7
8. Diarrhoea	29	48.3
9. Skin and nail changes	27	45
10. Trouble paying attention and remembering things	24	40
11. Menstrual changes and fertility issues	18	30
12. Increased bleeding	16	26.7
13. Weight gain	13	21.7
14. Constipation	13	21.7

15. Nerve damage	10	16.7
16. Hand-foot syndrome	4	6.7

**Table 2: Long term side effects of chemo**

<b>Long term side effects</b>	<b><i>f</i></b>	<b>%</b>
1. Oral health issues	32	53.3
2. Digestive troubles	27	45
3. Hormone issues	20	33
4. Heart problems	15	25
5. Bone, joint, and soft tissue damage	14	23.3
6. Brain and nervous system issues	12	20
7. Secondary cancers	8	13.3
8. Lung damage	6	10

The **coping strategies** adopted by the women included **social support** which comprised support from family members, children, friends, spouses, church members and breast cancer support groups; **spiritual activities** which comprised praying and reading the bible; **divine intervention** which comprised waiting on God for healing and **diversional therapy** which comprised reading and listening to music.

### **Way forward**

The side effects of breast cancer are real. The corner stone to prevention of breast cancer is early detection through **breast self-examination (BSE)** (see Figure 1), **clinical breast examination (CBE)** and **mammography**. These practices offer women the best opportunity for reducing breast cancer deaths globally.

We send this clarion call to every woman;

1. Be informed
2. Practice regular breast self-examinations
3. Get screened at any nearby health facility



With your arms relaxed by your side, look for changes in shape and color or if the nipple has changed direction.



Place your hands on your hips and press firmly. Bend forwards and backwards looking for any changes.



Standing and with one hand behind your head, explore your entire breast, starting with the armpit and finishing with the nipple.



With the tips of the fingers together, feel your breast up and downwards. Also in round movements, starting from the outer part and pull inward toward the nipple.



Lying with a cushion under your back, repeat all previous movements.



Place your thumb and forefinger on the tissue around the nipple and press. Look for any abnormal discharge.

**Figure 1: Breast self-examination**

Thank you.