

Chemotherapy killing half of cancer patients ?

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Chemotherapy killing half of cancer patients . Is that true ?

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By Dr Brighton Chireka

A lot of studies are thrown at me everyday by people who want to convince me to agree with them. It goes without saying that a good study adds credibility to the point being made . Just because something is quoted on the internet, does not mean it's true. For those who read the bible it is written that, "my people perish for the lack of knowledge." I am going to share with you some tips to help you evaluate the quality of research being used to support a theory. Dr "Google" is full of new researches but the challenge is on how to determine which of these studies is credible.

I am going to share with you the tips on how to quickly read a research paper and I will also look in detail at the story that went viral recently claiming that chemotherapy was killing half of cancer patients.

Evaluating research papers ourselves

We get manipulated when we do not know how to evaluate the quality of a study. Many of us think that we need to be statisticians to evaluate the quality of paper. The truth is that anyone can do simple things that are not difficult at all which enables us to evaluate the quality of research.

When we read articles that reference research we must ask a few questions about the study in discussion. The following questions must be asked ;

1- Who is reporting the results?

Media is there to sell news so they will try use attention grabbing headlines . In so doing they sometimes oversimplify the research or only use one part of it leaving the whole article. Be careful also when those reporting the results have a political or commercial agenda, as they may not fully or accurately summarise the original research. This will be fully explored below in report of the study about chemotherapy for cancer patients.

2 Who conducted the research?

Research produced or funded by organisations with a strong political or commercial agenda is less likely to be trustworthy, as these groups may have a vested interest in the study's findings supporting their viewpoint.

3.Are they making wrong assumptions?

Just because two things are related does not mean one caused the other . We need to ask about other factors that could be affecting the results. I know most of us, we were made to conclude that certain schools offer better education but when you look into the way they select their students you will find that they are not good after all . They are taking intelligent students for example those that have have at least 5 As at Ordinary level .

4- Has this study been carried out before?

A single study , no matter how good it may be , it needs to be reviewed in the context of other studies. We need to find out what other studies have shown as far as the topic in discussion is concerned. We know that results obtained at one time may not hold true for another time. We should not jump into conclusions on the basis of one study .

You may want to look at the quality of research

Sometimes the article reporting research raises a lot of questions for you like the one saying that chemotherapy is killing half of the patients it is meant to treat . The best thing to do is to click on the link and have a look at the study itself. If the reporting article does not give you the link then ask the author of the article for a link. Failure to get the link to the original study should make you raise questions about the truth of the research being reported.

When you look at the original study , you will find interesting and useful information not included in the articles referencing the study . You will be shocked at times to see how the results have been manipulated by the media etc.

You may want to look at the following to further evaluate the quality of the research

1- Are the researchers trustworthy?

Look at organisation that carried the research whether it's a reputable organisation. Institutions like Harvard or Oxford University are more more likely to be trustworthy because of their reputation in research.

2- How representative is the group that was studied?

The group that was studied must be generalised to a large population and for that to be the case then the sample must be large enough and represent the large population.

3 -Gathering of data

You need to know how the sample was selected and how the subjects were interviewed. Online surveys may not capture those that do not use Internet frequently. Look at the questions that were asked and make sure that there was no bias in the questioning.

4- How was data measured

Is the study just reporting numbers only . Is reliability and validity measured? Reliability means the study will produce the same results if you repeat it. Validity means it measures what it claims to measure.

5- Analysis of data

Are the reported differences significant. A difference between 10% and 25% might not mean anything at all. Differences must be statistically "significant" to be considered meaningful. A "significant " result is one that is unlikely to occur randomly or due to chance

6- Is the conclusion acceptable ?

When we look at the conclusion from study we need to ask the following questions;

Is the conclusion based on sufficient data ?

Are the reported differences significant?

Is the sample size large enough to generalise from?

Is the causation more than just correlation?

Do the results make sense from what you have have read ?

SHOCKING NEW STUDY SHOWS CHEMO KILLS HALF OF CANCER PATIENT ???

Before I look at this study let me remind you about chemotherapy.

What is Chemotherapy?

Chemotherapy is a type of cancer treatment, with medicine used to kill cancer cells.

It kills the cancer cells by damaging them, so they can't reproduce and spread.

Why chemotherapy is used ?

Chemotherapy is used if a cancer has spread or if there's a risk that it will. The main aim of treatment may be:

to try to cure cancer completely – this is known as curative chemotherapy. If patients are

selected wisely mortality rate after chemotherapy is very low.

to help make other treatments more effective – for example, chemotherapy can be combined with radiotherapy (where radiation is used to kill cancerous cells), or it can be used before surgery

to reduce the risk of the cancer returning after radiotherapy or surgery

to relieve symptoms – a cure may not be possible for advanced cancer, but chemotherapy may be used to relieve the symptoms and slow it down; this is known as palliative chemotherapy. In this group of patients mortality after chemotherapy is high as the disease will have spread to other parts of the body and most of these patients will be generally unwell.

The **naturalnews website** published an article on the 20th September titled "Shocking new study shows chemo kills half of cancer patients, not cancer itself" . The article went on to say that ;

"A new landmark study found that up to 50 percent of people who receive chemotherapy are killed by the treatment, not cancer itself. For the first time, researchers from Public Health England and Cancer Research U.K. examined the numbers of cancer patients who died within 30 days of starting chemotherapy"

Public Health England and Cancer Research UK are reputable organisations and if their studies shows that half of people receiving chemotherapy are dying then this is worrying and scary to everyone.

NaturalNews

Natural News is a science-based natural health advocacy organization led by activist-turned-scientist Mike Adams, the Health Ranger. I do like this website but was disappointed on the way they try to manipulate the results of this study to advance their agenda.

[MISLEADING NATURAL NEWS ARTICLE ON CHEMO](#)

Just because reputable organisations are mentioned does not mean that it is true. As explained above the best way is to go to the original study and read it for ourselves.

The article was published in the lancet which is a reputable medical journal and the conclusions are different to the once presented by Natural news.

[ACTUAL STUDY IN LANCET](#)

The original article was also published by Public health England and it gives details of all the Hospitals that were involved .

[PUBLIC HEALTH FULL REPORT OF THE STUDY](#)

The original study involved 28 400 women with breast cancer and over 15000 patients with lung cancer receiving Systemic AntiCancer Therapy(SACT) in 2014 at 147 English NHS trusts (hospitals). The analyses was based on routine data from SACT datasets. NHS hospitals trust began submitting data in April 2012 , and submission became mandatory for all NHS hospitals trust in England from April 2014.

Why focus on 30 days after chemotherapy?

Patients dying within 30 days after beginning treatment with SACT are unlikely to have gained the survival or palliative benefits of the treatment, and in view of the side-effects sometimes caused by SACT, are more likely to have suffered harm. In particular, the risk of neutropenic sepsis (infection resulting from low blood neutrophil count, probably the most important cause of SACT-related death) is highest in the 30 days after SACT, peaking at around 11–15 days after treatment.5 SACT cycles are typically 21 or, less commonly, 28 days long, so death from neutropenic sepsis from the previous treatment is captured within the 30-day mortality metric.

The results showed that for palliatively treated breast cancer patients 30-day mortality was 7.5% while for palliatively treated lung cancer patients (small and non-small cell lung cancer combined) it was 10.0%.

For curatively treated breast cancer patients 30- day mortality was 0.3% while for curatively treated lung cancer patients (small and non- small cell lung cancer combined) it was 2.9%. As expected these figures are lower than those for palliative treatment.

The results showed that 30-day mortality varies depending on the reason for the treatment (palliative versus curative) , age of patient , general outlook of the patient and whether patient had received any previous chemotherapy.

It was noted that there are also some NHS hospital trusts with 30-day mortality rates that appear significantly higher or lower than the English national average.

One hospital which was unfairly targeted was Milton Keynes Hospital . It's results were manipulated by the media to suit their own agenda.

NaturalNews reported that

*"The mortality rate at Lancashire Teaching Hospitals for those undergoing palliative chemotherapy for lung cancer, for instance, was 28 percent. But in Milton Keynes the **death rate** for lung cancer treatment went up to 50.9 percent."*

One can see from the above data that mortality rate from the whole study was not more than 10% so where did the media get the 50% that was their main headline. I will show you how they twisted the figures supplied by Milton Keynes Hospital . I am not a spokesperson of the hospital but I was disappointed when I looked at the results and how the media twisted the facts.

Milton Keynes Hospital Results for 30-day post chemotherapy mortality for patients with Non Small Cell Lung Cancer (NSCLC) treated with curative intent in 2014 shows that only 6 patients were treated and only 1 died which gives us a crude mortality rate of 16.7 %. The data was also analysed to calculate a "risk adjusted mortality rate " which is reported as 50.9 % .

Risk adjusted mortality rate is the number of observed mortality divided by the expected mortality

Here we see the dangers of a small sample size that is only 6 patients . One death gives us mortality rate of 16.7% . The media then chose to publish the risk as if it was the actual mortality rate instead of the actual mortality observed which is only 16.7 %

The hospital also responded to the report and their response is given below

Whichever way you look at it there is no evidence that half of patients being treated are dying . We have 147 hospitals that were analysed and several thousands of patients studied which only gives us the following:

palliatively treated breast cancer patients 30-day mortality was 7.5%
palliatively treated lung cancer patients (small and non-small cell lung cancer combined) it was 10.0%.
curatively treated breast cancer patients 30- day mortality was 0.3%
curatively treated lung cancer patients (small and non- small cell lung cancer combined) it was 2.9%.

Media is there to sell news so they decided to target one hospital out of the 147 and used that data to be representative of the whole research. This is mischief on the part of those that have an agenda to promote their views. Here the message by **NaturalNews** is to try and say chemotherapy is dangerous and it's killing more people than it is helping. We know that chemotherapy does have terrible side effects but when used appropriately it is a life saver in a lot of people that are diagnosed early .

The aim of the study was to establish a national 30-day mortality benchmark for breast and lung cancer patients receiving chemotherapy (SACT) in England and to start identify where patient care could be improved. The conclusion was that several factors affect the risk of early mortality of breast and lung cancer patients in England and that some groups are at substantially increased risk of 30 day mortality. Never was it reported or is there evidence that half of patients are dying of treatment.

I hope after reading this article you are now wiser and you will never be gullible to these "new studies " that are reported on the internet.

This article was compiled by **Dr Brighton Chireka** , who is a GP and a blogger based in Kent in the United Kingdom. Feel free to contact him at **info@docbeecee.co.uk** and you can read more of his work on his blog at **[DR CHIREKA'S BLOG](#)**

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