

Knowledge and Awareness of Chemotherapy among South Indian Population

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ABSTRACT

The aim of the study is to evaluate the knowledge and awareness of chemotherapy among the South Indian population.

Materials and methods:

A cross section survey was conducted at all over the South Indian population at random, regardless of age. A total of 100 people's responses were recruited into the survey. The data was collected by using the pre-constructed questionnaire. After data collection, the data was analysed and made into pie charts.

Results:

From this study, we concluded that 67% of the population are aware of Chemotherapy and 33% are not. Only 32% are aware of the side effects of Chemotherapy. 73% think that Chemotherapy is an effective treatment. 82% of people agree that there is not enough education on Chemotherapy. Most people think that the success rate of Chemotherapy is high.

Conclusion:

There is still poor awareness of the chemotherapy and its side effects among the South Indian population. However, most of the respondents had positive attitude towards the use of chemotherapy

KEYWORDS: chemotherapy, awareness, South Indian, cancer, drugs.

INTRODUCTION

Chemotherapy is the use of drugs to kill cancer cells. Because cancer cells generally grow and divide faster than normal cells, they are more susceptible to the action of these drugs.(1) However, damage to healthy cells is unavoidable, and this damage accounts for the side effects linked to these drugs.(2) Chemotherapy is of great benefit to patients in the treatment of malignant and nonmalignant tumors. Its use is rapidly expanding with increasing complexity in schedules as opposed to other regular medications. (3). These drugs are known to be potentially hazardous due to their unique pharmacological properties that interfere with cell division.

The American Society of Health-System Pharmacists defined hazardous drugs as those which manifest genotoxicity, carcinogenicity, teratogenicity, fertility impairment, serious organ, or any toxic manifestation at low doses in animals and humans.(4),(5) Researchers have confirmed that side effects associated with cancer chemotherapeutic agents can occur both in patients and those

within the treatment chain, depending on the chemical and physical properties of the drugs, the quantity administered, and the available collective and personal protective measures.(6)

Other factors such as the practitioners' knowledge and skills also significantly determine the level of contamination and risk.(7) It follows that repeated exposure to even low doses for a long period of time may produce profound effects.

Chemotherapy is not always worth the side effects. For some cancers, especially those that don't spread rapidly, the likelihood that chemotherapy will improve the patient's outcome may be small.(8) In general, cancer treatment is moving toward the use of more targeted therapies, which means targeting specific cancer cells and avoiding damage of healthy cells.(9) Some of these therapies will be able to recognize the molecular structures or genetic mutations that are unique to specific tumor cells.

MATERIALS AND METHODS

A cross-sectional survey was conducted at all over the South Indian population at random, regardless of age. A researcher-developed questionnaire based on literature review was used for data collection. The questionnaire was subjected to expert review to ensure content and face validity. Approval for the study was obtained from the Institutional Review Board before study. Data collection lasted for 3 weeks and completed questionnaires were retrieved. The questionnaire was prepared asking general details of the person and then questions based on Chemotherapy. A total of 100 people's responses were recruited into the survey using a website called survey planet. The data was collected by using the pre-constructed questionnaire. After data collection, the data was analysed and made into pie charts.

RESULTS AND DISCUSSION

The question how people are aware about chemotherapy is randomly asked to the South Indian people and 67% of people were aware of chemotherapy and 33% were not.[Figure.1] And 32% people are aware of side effects of Chemotherapy and 68% are not ,the result shown in the graph.[Figure.2] Also the people who are aware of the common side effects like hair loss, constipation and neuropathy are also examined. Here 12% people are aware about these side effects and 88% were not.[Figure.3] Question about education on Chemotherapy is analysed from the people and 82% people told education is not enough and the remaining 18% are

against.[Figure.4] People asked that Chemotherapy is effective and the results reflected as in the graph. 73% were saying yes and 27% were told Chemotherapy is not effective.[Figure.5] Also questions about the success rate of Chemotherapy randomly asked to the South Indian people. 84% of people said positively about the treatment and 16% were not.[Figure.6].

We can conclude from the study that approximately 3/4th of the people were aware of chemotherapy and its side effects.(10) However, almost 88% of the people who answered the survey did not know that hair loss and constipation were side effects of chemotherapy.(11)Although there are reports on chemotherapy-related adverse side effects, treatment difficulties concerning side effects, and increased treatment cost due to management of side effects, there is apparently none that examined patients' preferences regarding chemotherapy-related side effects. Hence, our findings indicate that the patients are not specifically aware of the side effects of chemotherapy. (12)

Safe handling of chemotherapy also requires that the drugs should be prepared in designated treatment areas. Hair loss is perhaps the most infamous side effect of chemo treatments. Many chemotherapy drugs affect hair follicles and can cause hair loss (alopecia) within a few weeks of the first treatment.(13) Hair loss can occur anywhere on the body, from eyebrows and eyelashes to your legs. Hair loss is temporary. New hair growth usually begins several weeks after the final treatment. Minor skin irritations like dryness, itchiness, and rash are also possible.

Chemotherapy can cause constipation. This means not having a bowel movement often enough or having difficult bowel movements.(14) Other medicines, such as pain medication, can also cause constipation. You can lower your risk of constipation by drinking enough fluids, eating balanced meals, and getting enough exercise. Chemotherapy can cause nausea (feeling sick to your stomach) and vomiting (throwing up). Whether you have these side effects, and how much, depends on the specific drugs and dose.(15) The right medications given before and after each dose of chemotherapy can usually prevent nausea and vomiting. Some chemotherapy causes loose or watery bowel movements. Preventing diarrhea or treating it early helps keep you from getting dehydrated (losing too much body fluid). It also helps prevent other health problems.

82% agreed that there was not enough education on chemotherapy, making it known that chemotherapy must be made aware in schools and institutions In our findings, 73% of people believed that chemotherapy is an effective treatment while the remaining smaller percentage

disagreed. (16)Most, almost 84% agreed that chemotherapy success rate is high. However, in India, the success rate of chemotherapy is low, according to this study.

Nurses who provide care to patients receiving chemotherapy require specialized knowledge to ensure safety of patients and themselves as well as the environment. This particularly impacts care. Several studies reported findings which suggest that nurses' knowledge of chemotherapy was insufficient. However, the level of knowledge significantly increased with educational training in that study.

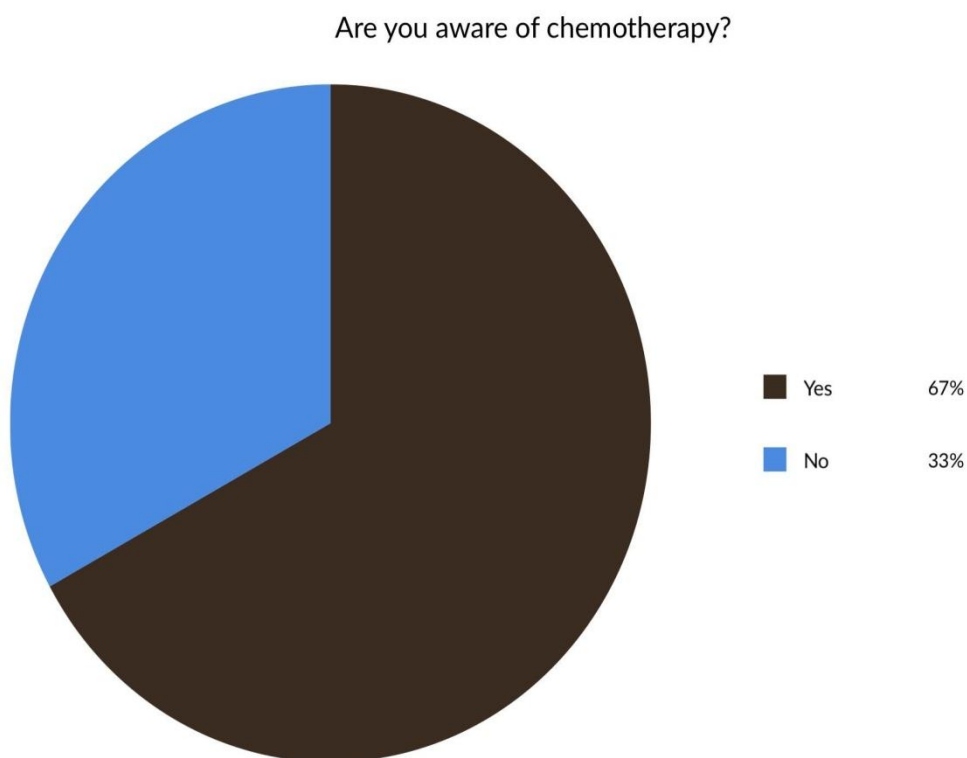


Figure 1: The question was randomly asked to the South Indian population about Chemotherapy. From the graph, we know that 67% people were aware of Chemotherapy and the remaining 33% were not. In this graph, brown colour denotes that people who answered yes and blue color denotes that who answered no.

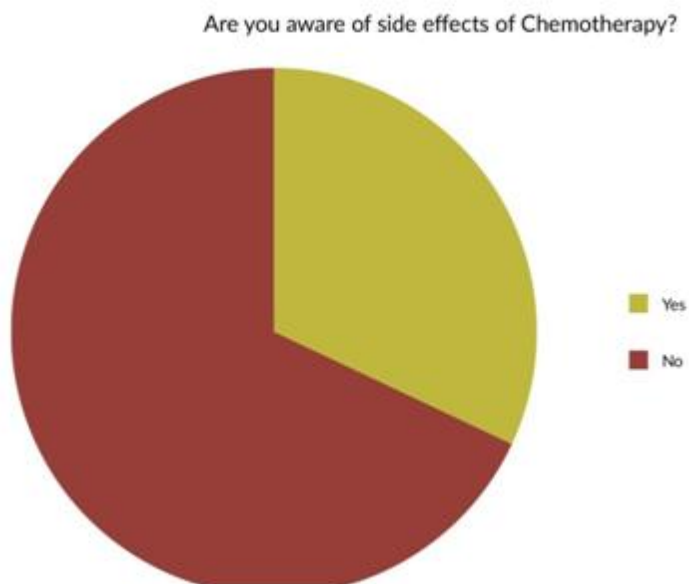


Figure 2: The graph shows that the awareness about the side effects of Chemotherapy which was randomly asked to the South Indian population. Green denotes yes and Brown denotes no. From the graph we know that 32% people aware of side effects of Chemotherapy and 67% were not.

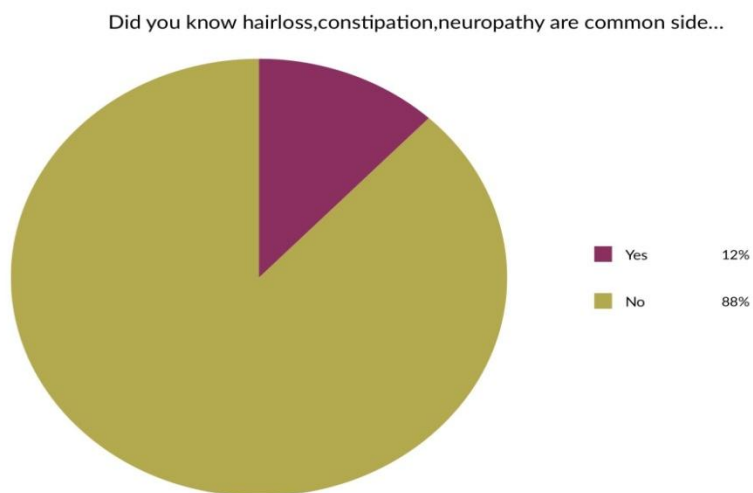


Figure 3: The question in the above graph was asked to the South Indian people randomly. Here Violet denotes yes and Green denotes no. From the graph only 12% people are know these side effects and 88% were says no to this question.

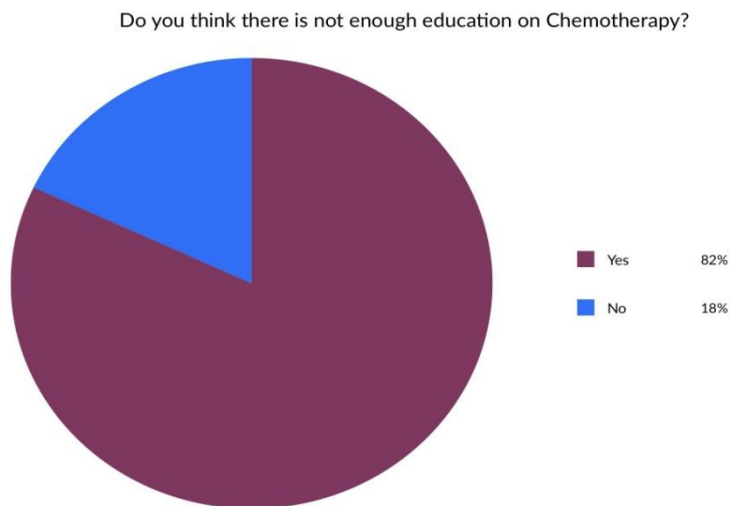


Figure 4: The question about education on Chemotherapy is randomly asked to the South Indian people and the results were shown in the graph. Purple denotes yes and Blue denotes no as the answer. From the graph we conclude that 82% people say yes and the remaining 18% said no.

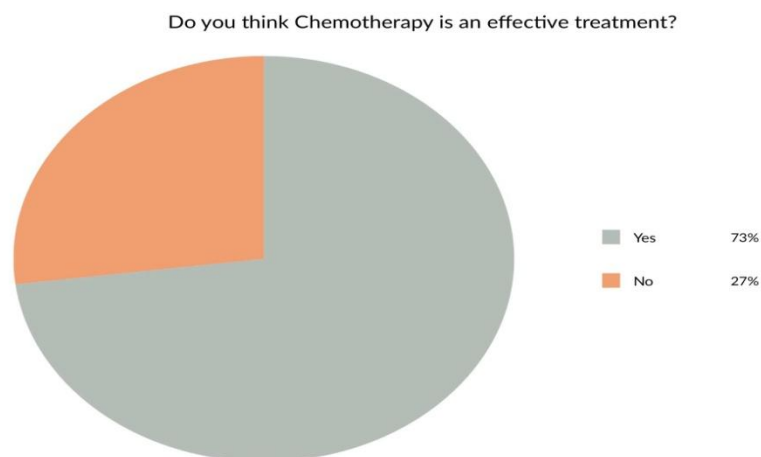


Figure 5: The question Chemotherapy is an effective treatment is asked to the South Indian people and the results were shown in the graph. Grey colour denotes yes and orange denotes no. Among 73% people says that Chemotherapy is an effective treatment and 27% says no.

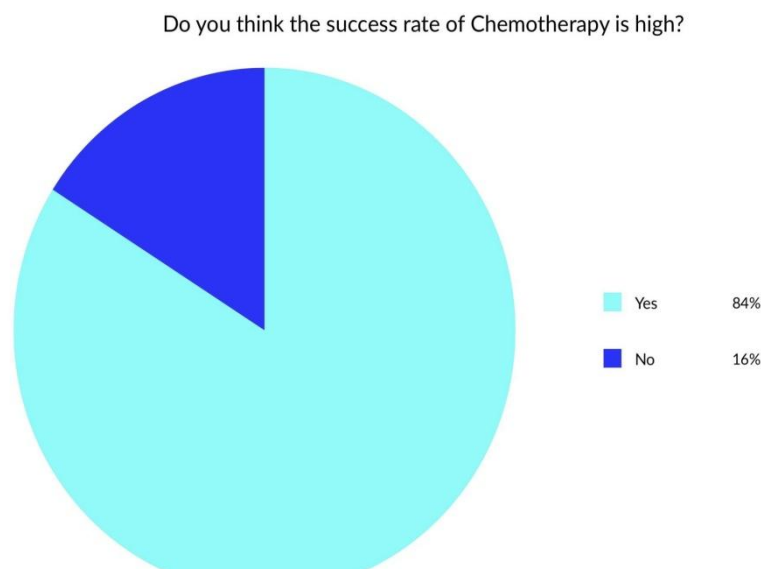


Figure 6: Success rate of Chemotherapy is analysed from the question asked to the South Indian people. Here sea blue denotes yes and dark blue denotes no to the question. From the graph we conclude that 84% people were told which successful treatment and the remaining 16% were not.

CONCLUSION

Chemotherapy is now a broadly accepted form of therapy, and there is growing interest in its use in earlier stages of the disease when combined with local therapy. Meanwhile, natural compounds have been used to treat various diseases and are becoming a significant research area for drug discovery. Using natural agents along with chemotherapy drugs in patients with advanced and/or refractory solid tumours could reduce the toxicity risk produced by chemotherapy, and this could be an accessible approach to cancer control and management.

More awareness on the side effects of chemotherapy should be brought forward by schools and institutions.

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