Choice of different types of drinking water and its impact on the people in Chennai

Karishma Devi¹, R. Gayatri Devi²*, A. Jyothipriya³

ABSTRACT

Introduction: Drinking water, also known as potable water, is water that is safe to drink or use for other purposes. Drinking water is a major source for intake of necessary elements into the human body. That is why it is important to consume the right type of drinking water that is suitable for us. It plays an important role in facilitating vital functions of the human body. The aim of this study was to find out the choices of drinking water among people of Chennai and its impact on their health.

Materials and Methods: This study was done by conducting a survey. The survey was taken by circulating a questionnaire. The sample size was randomly taken as 100. This included 100 people that reside in Chennai. The questionnaire consisted of 11 questions. Results: The average amount of water consumed per day by the people of Chennai is 2–3 L. The people of Chennai majorly prefer consuming filtered water. Most of the people are unsure if the water they drink is pure or not. Conclusion: Not many people have reported waterborne diseases. Hence, we can safely say that filtered water is safe for consumption in Chennai.

KEY WORDS: Drinking water, Quality, Quantity

INTRODUCTION

Drinking water, also known as potable water, is water that is safe to drink or use for other purposes. The amount of water consumed varies from person to person. It depends on various factors such as age, physical activity, and health issues.[1] Consumption of clean drinking water is definitely a necessity. Water is an indispensable and irreplaceable factor in the normally functioning organism.[2] It forms a major percentage (about 75) of body weight in humans. Water is crucial for life and other vital functions. A constant water and mineral balance should be maintained for a health living.[3] It is also known that the most studied material on planet Earth is water.[4] Drinking water is a major source for intake of necessary elements into the human body.[5] That is why it is important to consume the right type of drinking water that is suitable for us. It plays an important role in facilitating the vital functions of the human body.

The quality of drinking water has been deteriorating constantly. The various sources of drinking water get polluted. There are various factors that contribute to the deterioration of water quality. Among various factors, the major ones affecting the quality of water are industrial pollutants.[6] The pollutants from factories and industries are released into water bodies without pre-treatment, which leads to pollution of the water with certain chemicals; hence, when this water is consumed by the people, it has an adverse effect on them. It is known that the availability of fresh and pure drinking water is pivotal for the survival of human beings.[7]

One of the recent trends seen in people of Chennai is the shift from natural water supplies to bottled water. They prefer to consume bottled drinking water rather than water from the municipal sources. The people have shown this replacement to avoid the contaminants and chemicals used to treat the water from municipal sources. They presume that bottled water is healthier when compared to other sources.[8] However, the outcome is that individuals still continue to fall sick due to the type of water they drink. They may develop a serious illness due to contaminated water that contains...
harmful chemicals and foreign substances, which in some cases may be fatal.\textsuperscript{9} Waterborne diseases include dysentery, cholera, typhoid, diarrhea, and malaria among various other diseases. These diseases kill more than a million people each year, including many children in developing countries.\textsuperscript{10} Cholera and diarrhea are the leading waterborne infectious diseases attributed to unsafe water, sanitation, and hygiene. A significant number of diseases could be prevented by giving people access to pure and safe water supply, general sanitation facilities, and awareness about hygiene practices.\textsuperscript{11}

MATERIALS AND METHODS

This study was done by conducting a survey. The survey was taken by circulating a questionnaire. The sample size was randomly taken as 100. This included 100 people that reside in Chennai. The questionnaire consisted of 11 questions. These questions helped to understand the choice of drinking water and its consequences faced by the people of Chennai. The questionnaire helped to analyze the choices of people in Chennai and if it impacts their health majorly.

RESULTS

The results were carefully analyzed, and then a conclusion was drawn.

DISCUSSION

From the results obtained, we can observe that about 33\% of the people in Chennai prefer the consumption of filtered water on a daily basis when compared to other types, such as well water and bottled water [Figure 1]. The results obtained by Li et al., in 2018,\textsuperscript{12} suggested that most people in the considered population consumed tap water, whereas, in this study, the considered population mostly consumes filtered water only.

The average amount of water consumed per day by the people of Chennai is 2–3 L [Figure 2], which is a bit higher than the results obtained by Sara Quattrini, Barbara Pampaloni, and Maria Luisa Brandi in September–December 2016.\textsuperscript{13} Many of them are satisfied in their drinking water [Figure 3] and so only a few of them were affected with waterborne disease [Figure 4].

CONCLUSION

From the results obtained, we can conclude that most of the people consume filtered water on a daily basis. This choice of drinking water can also be considered as a safe option for the people of Chennai because the percentage of reported waterborne diseases is
very less, just 26% have reported an encounter with waterborne diseases.

REFERENCES


Source of support: Nil; Conflict of interest: None Declared