Awareness on Alzheimer's Diseases among College Students

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Abstract

Alzheimer's disease is the common form of dementia and possibly contributes about 60-70%. of Cases .There is no cure for Alzheimer's disease and drug therapy for disease is still in its infancy. Approved medication for the treatment of probable Alzheimer disease helps control the Symptoms of Alzheimer's disease **.** This study involves college students in the age of 17 to 20 years. A well Structured questionnaire comprising questions covering socio-demographic information , knowledge, altitude, perception was framed and adminstrested to these participants through an Online survey. The results were collected and were represented in pie charts. The association between groups was assessed by Chi Square test where $p < 0.05$ was considered statistically significant. More awareness may be created on the risk factor and complications of Alzheimer's diseases among the younger generation.

Keywords *:Awareness; Alzheimer's disease; dementia; online survey*

Introduction

Alzheimer's disease is a common form of dementia that possibly contributes about 60-70% of Cases. Other types of vascular dementia , dementia with Lewy bodies in which a group of diseases that contribute to frontotemporal dementia. The boundaries between subtypes are in distinct and mixed forms mostly co-exist [1]. There is no cure for Alzheimer's disease and drug therapy for the disease is still in its infancy . Approved medication for the treatment Alzheimer's disease, helps control Symptoms of Alzheimer's disease but does not slow down the process progression or reverse [2]. Alzheimer's disease is characterized with mild cognitive impairment and dementia· Pathological changes that underlie Alzheimer's disease begin to accumulate for years or even decades, before emotional, physical or cognitive Symptoms occurs, at which the onset of a gradual and progressive decline in cognition occurs [3] Many physicians do not screen for cognitive problems in their practices unless they receive complaints from either the patient of their family [4] previous studies has demonstrated that quality care of the person with dementia is feasible in acute care setting. When attention to the special needs of patients with dementia is given [5]Currently, only symptomatic treatment can be given to patients with Alzheimer's diseases, and concentrate on potential prophylactic strategies[6]. Recent studies explain that dementia,mainly in men, may be declining in western countries. it is unclear which is the reason behind the dementia that are declining and this could be underpinned by better management of vascular risk [7]

Alzheimer's disease is substantially increased among aged 15 years and more with a progressive decline in memory, thinking , language and learning capacity etc. Alzheimer's diseases should be different compared to normal age - related decline in cognitive function, Which is more graduate and associated

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with less disability. Disease often begins with mild symptoms and ends with severe brain damage. People with dementia lose their ability at various rates [1] . The German psychiatrist Du. Alois Alzheimer was credited for the first time a dementing condition which later becomes known as Alzheimer's disease In landmark 1906 conference lecture and subsequent 1907 article put alzheimer's described the case of Auguste D, a 51-year old women with a peculiar disease of cerebral corter who had presented with progressive and language impairment, disorientation , behavioural symptoms like hallucinations, delusions, parabola and psychosocial impairment [2]. Alzheimer's disease (AD), a very common dementia in elders is a chronic neurodegenerative disease affecting approximately 30 million people worldwide in 2015 [8] Previous studies state that someone in the country will develop Alzheimer's disease every 66 sec . By the year 2050, every case of Alzheimer's is expected to develop within 33 seconds, concluding nearly 1 million new cases per year. In the year 2013, official death certificates recorded 84,767 death cases of Alzheimer's disease, making it the sixth largest cause of death in the United States .The fifth largest cause of death in Americans who age more than 65 year [9] The treatment is currently targeted towards symptomatic therapy although trials are underway Alzheimer's diseases [10]. Researchers indicates the that people are very concerned about the status of their cognitive health and development of AD [11]

In the past, Alzheimer's disease dementia was difficult to differentiate from other dementia causing pathogens, however with the advent of advanced medical imagéng techniques, including molecular imaging have given clinicians and researchers much greater insight into the neuropathological process of their patients aiding in diagnosis. Regardless of these advances, the recognitication of Alzheimer's disease remains one primarily formed on the clinical history and presentation of the patients as examined by the physician , According to the most recent diagnostic Criteria , the clinical onset of Alzheimer's disease dementia one can be divided into 3 broad periods : preclinical, MCI and Alzheimer's disease can be divided dementia and the lengths of time elapsed during these different periods of disease is on the order of decades [12]. Several of these pathologic changes may occur decades before symptom onset, leaving ample time for implementing prevention strategies that target the earliest stages of the disease. [13] .The current population has seen the rise of unaging and other biomarkers to characterize preclinical disease before the development of significant cognitive decline . At last, we suggest future directions and predictions for dementia - related research and potential therapeutic interventions. One of the biggest challenges faced by neuropsychologists over the past oo years is to understand the cognitive and behavioral manifestation of dementia and at their relationship between brain pathology [14]

Patients who have subjective cognitive decline have been found out as a useful population in whom we need to look for preclinical Alzheimer's disease [15] Recent research on childhood obesity [16],natural products in health and diseases [17,18,19,20,21] ,nanoparticles [22,23,24,25], studies on cancer cells [26,27,28,29,30] improved my passion for research and chose this topic to create awareness on Alzheimer's diseases in the society.The aim of this study is to create awareness and knowledge and to determine the attitude and practice towards Alzheimer's disease among College Students

Materials and Methods

This study involved both male and female in the age group of 19-23 years among College students. A well-structured questionnaire comprises 15 questions. This was conducted through an online survey. The online survey Software used was Google forms software. This is a cross sectional descriptive survey that is conducted among 100 students College Students . The results were collected and Tabulated. The descriptive statistics were done using the SPSS software. The results were analysed using statistical analysis.

Results and Discussion

In the survey conducted among 100 college Students 66.3% were female and 33 .7% were males. 81.2% were aware of Alzheimer's disease whereas 18.8% were not aware of Alzheimer's disease. 45.5% of the participants think Alzheimer's disease is curable and about 54.5% say it not curable. 76.2% think memory loss is the symptom for Alzheimer's disease. 43.6% think Alzheimer's disease and dementia are the same and about 56.4% think it is not the same. 47.5% thinks there is no cure for Alzheimer's disease.

37.6% agreed that they have disorientated time and place, often forgetting days of a week. About 50.5% agreed that they have memory loss and 49.5% agreed that they don't have memory loss. 36.6% agreed that memory loss get's worse day by day and 63.4% agreed that it doesn't get worse day by day. 79.2% agreed that they gain information from this survey.

We have seen the association between gender and awareness on symptoms of Alzheimer's disease [Fig 1], awareness on differentiation between Alzheimer's disease and dementia [Fig 2], awareness on treatment for Alzheimer's disease [Fig 3], awareness on Alzheimer's disease [Fig 4], awareness on memory loss getting worse everyday [Fig 5], awareness on gaining information about Alzheimer's diseases after doing this survey [Fig 6].

In the Study done by Wendy Smyth et al 2012 regarding the opinion of the participant thinking if Alzheimer's diseases and dementia are the same 62% agreed that yes and 38% agreed that No [5]. In the Study done by Miri Kim et al, 2020 majority of the participants agreed that younger people are affected more [8] And in Study done by Maria .S. Sabbagh et al, 2011 , 45.7% agreed that younger people are affected more[4].

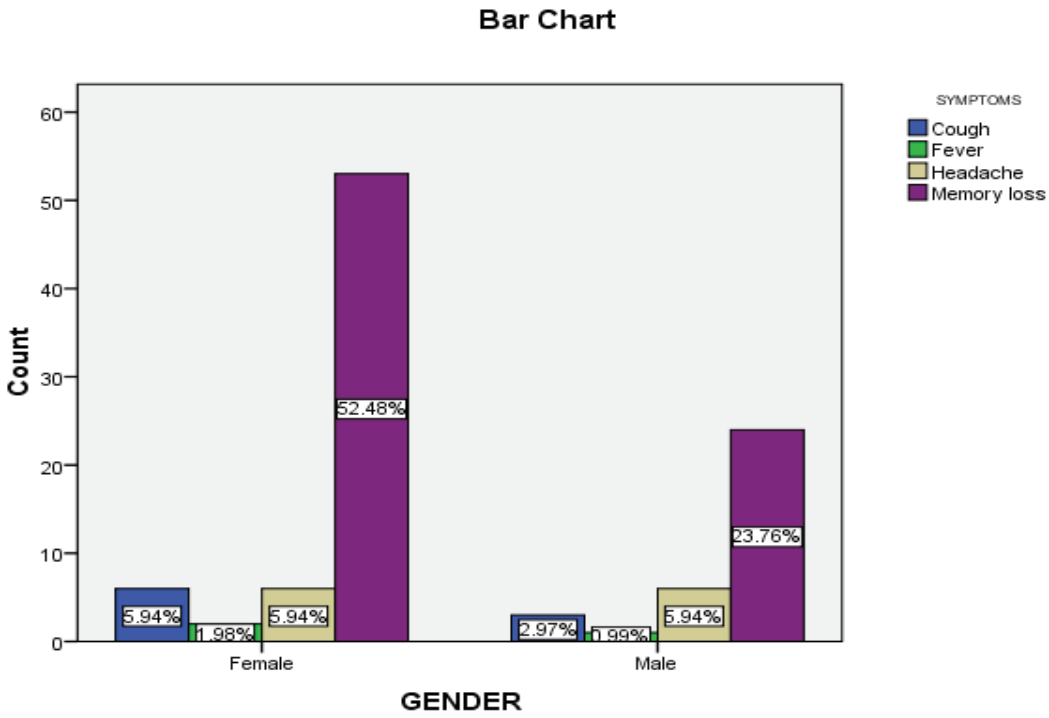

Figure 1:Bar Chart depicts the association between gender (X axis) and responses of awareness on symptoms of Alzheimer's disease (Y axis). 52.48% of female and 23.78 % of male agree that memory loss is a symptom . Blue colour denotes Female and green colour denotes Male .The majority of the female population (52.48%) agree that memory loss is a symptom of Alzheimer's disease . The association was found by chi square test (Chi square value= 1.649) which shows (p value=0.648) no statistical significance.

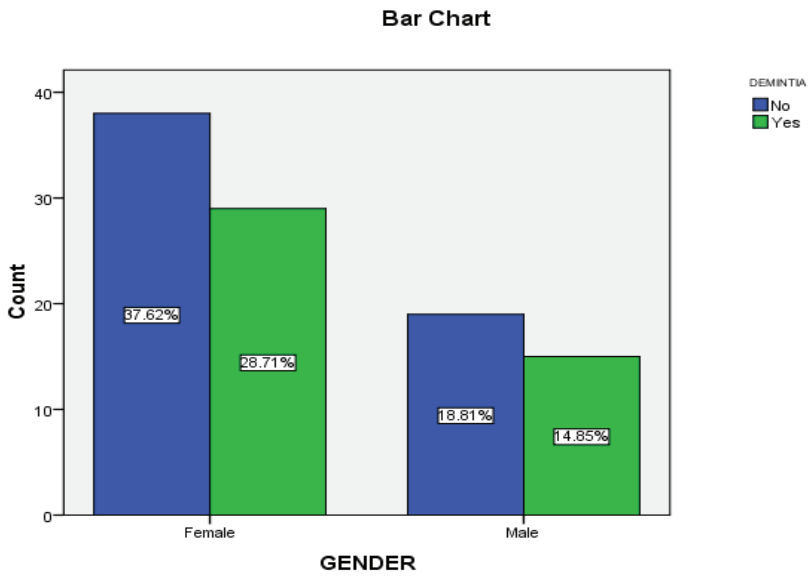

Figure 2:Bar Chart depicts the association between gender (X axis) and response of awareness on differentiation between Alzheimer's disease and dementia (Y axis). 28.71% of female and 14.85% of male accept dementia and Alzhemier's disease are the similarity .Blue colour denotes Female and green colour denotes Male. The majority of the female population (37.62%) agree that dementia and Alzheimer's disease are not similar. The association was found by chi square test (Chi square value= 0.004) which shows (p value = 0.936) no statistical significance.

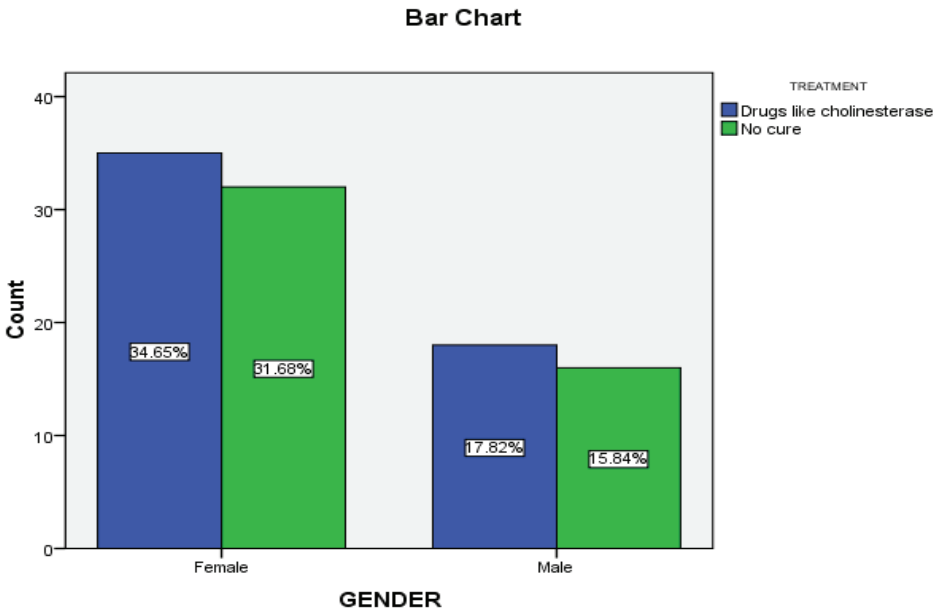

Figure 3 : Bar Chart depicts the association between gender (X axis) and responses of awareness on treatment for Alzheimer's disease (Y axis).34.65% of female and 17.82% of male admit cholinesterase as one of the best treatments for Alzheimer's disease .Blue colour denotes Female and green colour denotes Male. The majority of the female population (34.65%) responses that drug like cholinesterase is the best treatment for Alzheimer's diseases .The association was found by chi square test (Chi square value= 0.004) which shows (p value = 0.947) no statistical significance

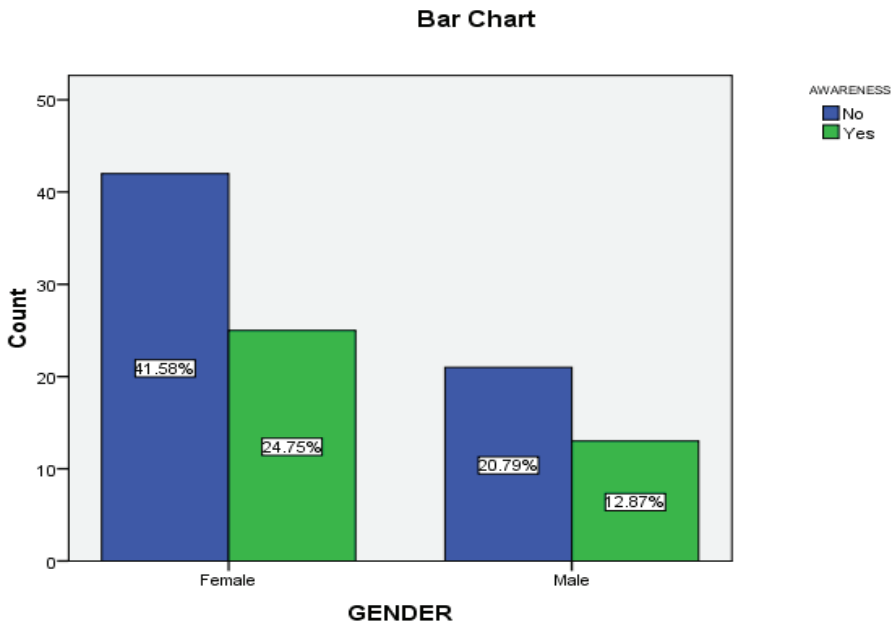

Figure 4 :Bar Chart depicts the association between gender (X axis) and responses of awareness on Alzheimer's disease (Y axis). 24.75% of female and 12.87% of male have enough awareness about Alzheimer's disease.Blue colour denotes Female and green colour denotes Male .The majority of the female population (34.65%) agrees that there is no enough awareness on Alzheimer's diseases . The association was found by chi square test (Chi square value= 0.008) which shows (p value = 0.928) no statistical significance.

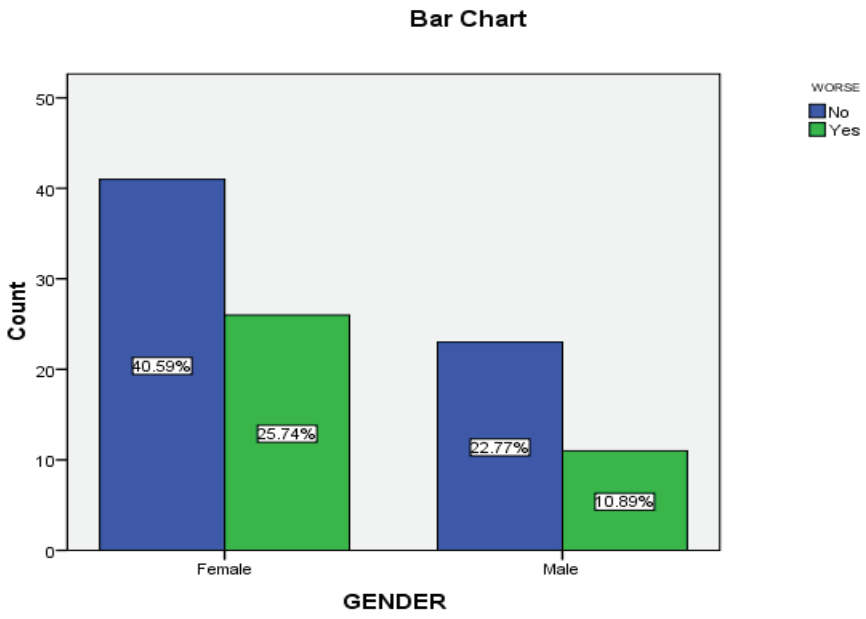

Figure 5:Bar Chart depicts the association between gender (X axis) and response of awareness on memory loss getting worse everyday (Y axis). 25.74% of female and 10.89% of male population says memory loss gets worse day by day. Blue colour denotes Female and green colour denotes Male.The majority of the female population (34.65%) responded that the memory loss doesn't get worse . The association was found by chi square test (Chi square value= 0.242) which shows (p value = 0.525) no statistical significance.

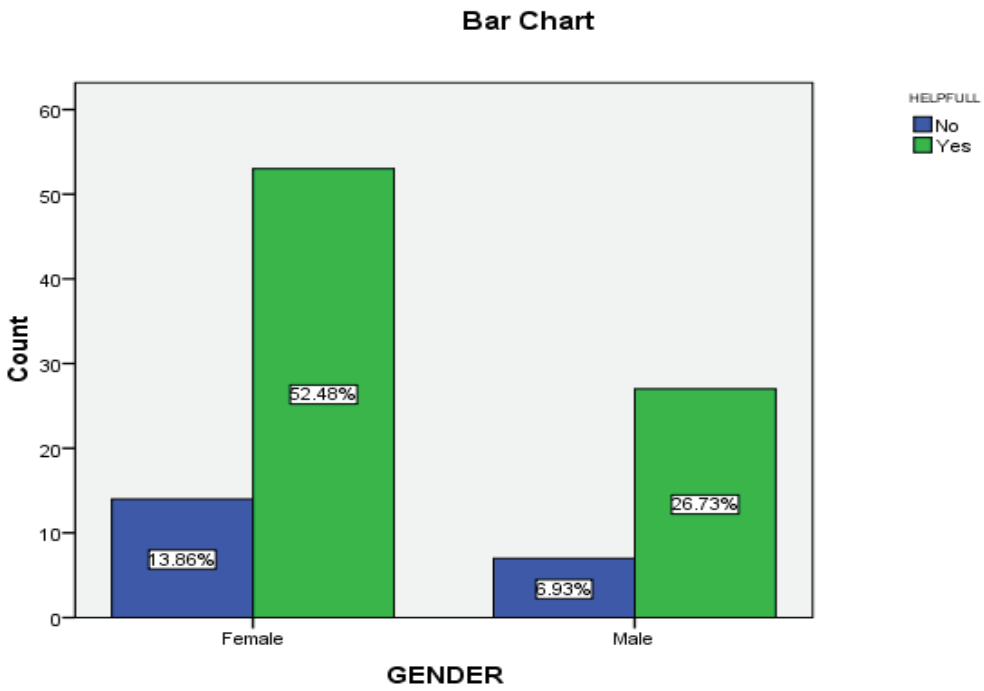

Figure 6 :Bar Chart depicts the association between gender (X axis) and response of awareness on gaining information about Alzheimer's diseases after doing this survey (Y axis).52.48% of female and 26.73% of male agree that this survey was helpful.Blue colour denotes Female and green colour denotes Male .The majority of the female population (52.48%) respond that this survey was helpful to learn more about Alzheimer Diseases . The association was found by chi square test (Chi square value= 0.405) which shows (p value = 0.971) no statistical significance.

Conclusion

From our study we can conclude that students are having good knowledge and awareness of Alzheimer's disease and its symptoms, treatment etc, but still few participants are not fully aware of Alzheimer's disease. Seminars in educational institutions, active lifestyle modifications and memory workshops may be required to bring awareness on Azheimer's disease among the community.

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Conflict of interest - All the authors declare no conflict of interest in the study.

Ethical Clearance: Not Required

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