# A SURVEY AMONG STUDENTS REGARDING ROLE OF LOCAL GOVERNMENT RESPONSE IN COVID -19 OUTBREAK.

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**ABSTRACT** :
An unprecedented outbreak of pneumonia of unknown etiology in Wuhan city in China emerged in December 2019. A novel coronavirus was identified as a causative agent and termed as COVID-19 by the World Health Organisation. The first cause of COVID -29 in Tamil Nadu was reported on 7 March 2020. The department of health and family welfare took measures immediately in tackling COVID-19. The first lockdown was initiated on 25th March and still is continuing and the state government has responded to the outbreak by following a contact tracing, testing and surveillance model. The state government announced ₹3,280 crores relief packages and also included various financial support of ₹1,000 to all ration card holders, free rice and other essential needs for the wake of lockdown. Various apps and loans, tax payment has been expanded for three months to pay and many initiatives have been initiated by the local government. Material and methods: Cross-sectional study conducted among 200 students within

19 to 25 years. The questionnaire was circulated through google forms. It contains about 10 questions consisting of various measures initiated by the government and the uses of it, what still needs to be improved to tackle COVID - 19 was discussed among 200 students. Results were collected and analysed statistically. Results: It was observed that students are well known to various applications created by local government to tackle COVID-19 but not there Much aware of various measures which were not that much advertised in the media. Conclusion: From the study, it is concluded that local government took maximum efforts to prevent and decrease the COVID -19 cases in Tamil Nadu and there must be still more ways to know various preventive measures taken by the government which will improve knowledge about local government response among students.

**Keywords:** Government ; response ; lockdown ; covid -19; awareness; programmes; welfare.

**INTRODUCTION**:

An outbreak of pneumonia of unknown etiology in Wuhan city, China emerged in December 2019. A Novel coronavirus Was identified as a causative agent and was named as COVID -19 by the world health organization. The first outbreak in Tamil Nadu was identified on 7 March 2020. This outbreak is continuing to increase day by day. Soon, Tamil Nadu became the third-highest number of confirmed cases in Tamil Nadu(Kannan *et al.*, 2020). Tamilnadu health and family welfare measures department took various measures, it initiated the first lockdown on 25th March and still the lockdown is continuing. Coronavirus is a major symptom of dry cough, sore throat and some people developed an acute respiratory infection. But as per the health department, 80% of the patients are asymptomatic while most deaths are among elderly patients(Ahn *et al.*, 2020). This situation created more panic amping up the people of Tamil Nadu. The government took initiative to order more rapid test kits to test COVID - 19(Beeching, Fletcher and Beadsworth, 2020). It increases the number of coronavirus testing laboratories at present there are 61 Labs to diagnose COVID -19 (Peto, 2020). Not only, but it also increased the labs it bears all the expenses which was a great good step in tackling COVID -19. Additional ventilators were ordered and the Chennai trade centre in Nandhambakkam was also converted into COVID -19 quarantine ward consisting 550 beds(Jin *et al.*, 2020). The Government of Tamil Nadu has announced ₹3,280 crores relief package on 24 March (Kandel *et al.*, 2020). It is also financially supported by providing ₹1,000 to all ration card holders, free rice and other essential needs to wake off lockdown. The great steel was also initiated for an extension period of three months to make loan and tax payments for all citizens. It also announced an extension of one month to pay house rent for workers and students (Chellamuthu and Muthu, 2020). It also established various other apps, helplines for the public.

Many articles said that Tamilnadu is preventing COVID -19 by Bhilwara model but it is not based on, it was based on collective action by government machinery. In past pandemic history such as the H1N1 virus outbreak in 2009, Tamilnadu took various multiple steps to control its spread (Webster and Govorkova, 2014). Many articles mentioned that great lessons were learnt from past pandemic histories and also mentioned to improve the preparedness and response(Fineberg, 2014). An article suggested that antibiotics such as vancomycin and methicillin will not be used to treat COVID -19 and any other viral infections(Ashwin and Muralidharan, 2015). Acinetobacter baumannii can commonly colonize the human without causing infection; it makes the body more suspected of viral disease and other such diseases(Girija *et al.*, 2019). Usage of chlorhexidine mouth wash is an effective antiseptic agent that retains antimicrobial activity and also has an antiviral activity which prevents various viral diseases(Selvakumar and Np, 2017). Doctors suggested that maintaining good oral hygiene and goggling with hot water prevents various bacterial and viral infections(Shahana and Muralidharan, 2016).An article documented that COVID -19 presents acute hepatitis as primary symptoms before developing respiratory symptoms(Pratha, Ashwatha Pratha and Geetha, 2017). Western blot analysis of purified TGEV revealed that levels of all viral structure proteins were revealed after E. faecium treatment(Marickar, Geetha and Neelakantan, 2014). A study suggested that breathing the steam from a mixture of boiling water, salt and orange peel will prevent viral disease such as coronavirus(Vaishali and Geetha, 2018). A study conducted on Laurus nobilis suggested that secondary metabolites can reduce virus loads and virus replication in humans(M, Geetha and Thangavelu, 2019).From an infection prevention perspective, the nature of Acinetobacter baumannii makes it an organism on the radar for prevention efforts against health. Care associated infections (Girija As and Priyadharsini J, 2019). A study conducted on Acinetobacter baumannii showed a prevalence of carbapenems resistance and there is the high frequency it is caused by blaVIM and blaGIm which may lead to further disease(Girija, Jayaseelan and Arumugam, 2018). Acinetobacter baumannii is likely to cause opportunistic infection and also weakens the body's immune systems so that more chances to get diseases in a pandemic outbreak and it is likely to be found on the skin, food, soil or water and also

spread through direct contact(Smiline, Vijayashree and Paramasivam, 2018)(Priyadharsini *et al.*, 2018).An article suggested that COVID is likely to induce vascular inflammation, myocarditis and cardiac arrhythmias(Paramasivam, Vijayashree Priyadharsini and Raghunandhakumar, 2020). Many diseases such as refractory periodontitis, COPD and pneumonia are likely to be caused by A.baumannii (Vijayashree Priyadharsini, Smiline Girija and Paramasivam, 2018). An article suggested that crude extract from the Acacianilotica has baseline potential use in drug development in pharmaceutical industries(Shahzan *et al.*, 2019).

It is enlightening that the role of local government is very effective and reduces the number of cases. It also ensures the proper safety of all citizens. Many articles say that only the role of government in COVID -19 but not mentioned how much it reaches the students and among the general public.

Aim of the study is to emphasize the role of local government in COVID -19 outbreak and knowledge about the response initiated by local government amongst students. Previous archives convey only that role or government and its preventive measure. But this article analyses the knowledge of students regarding various steps initiated by the local government in tackling COVID -19.

## MATERIALS AND METHODS:

It was a cross-sectional study conducted among 200 students within the age group of 19-25 years. The questionnaire was created through google forms and links were shared through various social apps. It contains about 10 questions consisting of various steps initiated by local government and knowledge about the intimations taken and analysed through the spss method. Using this spss method the graphs are plotted.

## INCLUSION CRITERIA :

Students of age between 19-25 years only participated in the study who know the various government steps initiated and many useful apps to tackle to COVID -19.

## EXCLUSION CRITERIA :

The general public was not included because the views and opinions may vary and not much awareness about apps created by the government.

## RESULT AND DISCUSSION :

From the analyzed data, the results were obtained. The survey was conducted among the students between the age of 19-25 years. This survey was held among the students of which 45% were female and 55% were male participants in the survey[Figure-1]. 90% students are aware about the symptoms of COVID -19 which is due to various initiatives taken by the government of Tamil Nadu. This awareness helps in reducing the number of COVID -19 cases in Tamil Nadu and reduces the risk of disease[Figure-2]. 85% of students are strictly following various steps initiated by the local government and this strict follow up of students helps prevent disease[Figure-3]. This structure will ultimately reduce the number of positive cases in Tamil Nadu. Police department plays an important role in strict lockdown which helps in the control of spread.From the [figure-4] it shows that nearly 80% of students were satisfied by the act of local government measures. Remaining 20 % students suggested that various other initiatives measures such as increasing number of ventilators, increasing the number of beds in hospitals, providing food to needy people who deserve who doesn't have a ration card, helping other state people to get back to their homes, availability of sanitizers, mouth mask and gloves should be increased. Increasing the safety of medical practitioners and strict lockdown. So, these were some of the ideas suggested by students to improve the preventive measure against COVID. Nearly 79% of students are aware of violence against healthcare workers and they think that local governments care for workers and took initiative to prevent them[Figure-5].The local government passed a law that physical violence against health care workers will lead to imprisonment safety of doctors who died of COVID -19 was also a great issue which the government took measures to address the issues by those who are against it and will Face severe consequences. The chief minister of Tamil Nadu appealed to the general public to cooperate during these times and also to respect the medical staff. 65% of students feel that the government took initiative to promote the safety and welfare of students by various initiative measures and the various measures ensure the livelihood of the people [Figure-6].25% of students think that safety and welfare measures have to be improved. They suggested that providing food to all people even the people who doesn't have a ration card and helping needy people with essential needs, creating more space for quarantine people to stay, strict following social

distancing in public places with help of police departments, freezing the rent for migrants and measures for all people to improve the livelihood. 75% of students are aware of the HCl technologies partnership in disaster management and they provide greater support in pandemic outbreak to improve the safety and welfare of the patient [Figure-7]. This step by the government of Tamilnadu helps in great financial support and also various mass media support. HCL technologies monitor and help in reducing the number of COVID -19 cases. HCL technologies partnered with the government when the outbreak was more rapidly spread across the country and state. As a leading global technology, HCL takes pride in its diversity, social responsibility, sustainability and education initiatives. It supports during a difficult time and helps to tackle COVID -19. In the survey 80% students think that there are enough of initiatives measures to fulfil the each and daily wages necessity, 20% students do not think that not enough and various steps like after lockdown there must be job offers to them for recreating their livelihood, the supply of medicine to improve the health of poor people and various measures to improve the livelihood of needy people[Figure-8]. From the figure-9 it shows that 55% of students are aware of Arogya Setu Interactive voice response app, but remaining students are unaware. This is due to lack of awareness and lack of information regarding their application. It is a voice response app which consists of doctors who are responding to various doubts arising regarding COVID -19. It is to remove the panic from their information. This app gives basic information regarding symptoms, causes and various doubts arising due to COVID -19. This consists of a group of doctors, psychologist to clear the problem faced by the general public. So, there must be more awareness created to know the uses of app Aarogya Setu Interactive voice response. 55% of students think the extension of three months to make loan and tax payment is needed whereas 25% of students do not find it useful in this time of lockdown[Figure-10]. This lack of awareness is due to the lack of information regarding this plan is social media, mass media. Students can easily get to know various plans of government majorly through social media and mass media(Costantini et al., 2020). So, the Government should take initiative to create awareness advertisements regarding various useful plans which creates more knowledge about the role of local government response im COVID -19 among the student population.

From the results, it is clear that students are aware of a various plan initiated by the government which are advertised and more specific information given in various news channels. This shows that information reaches the students easily through mass media and social media. Students are satisfied with the government response and suggested various methods to improve the response of the government against COVID -19.
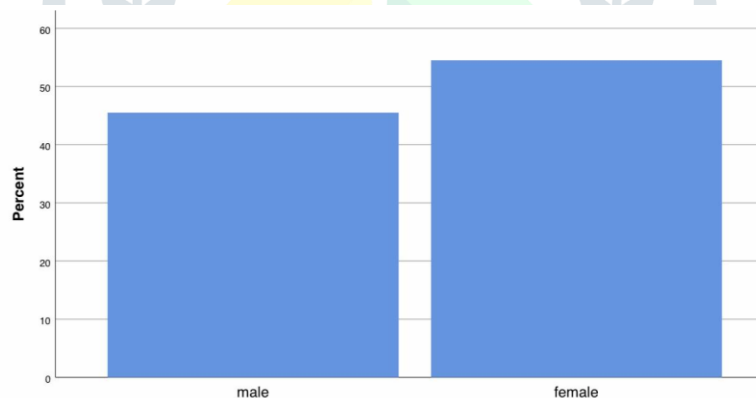


**Fig-1: The bar chart represents the Number of male and female students participated in the survey regarding the role of local government response.**
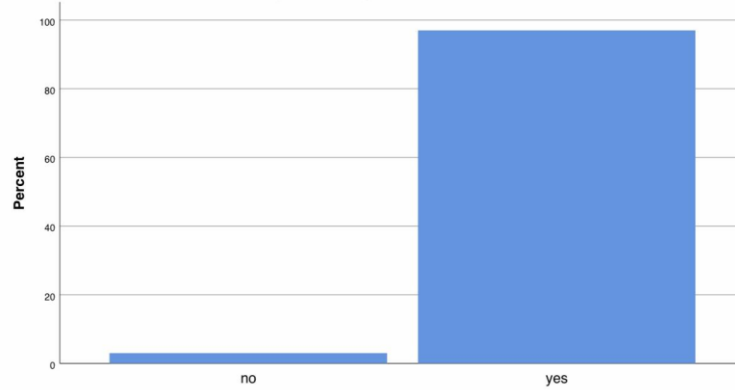
**Fig-2: The bar chart represents the awareness about symptoms of COVID -19 among the student population.**
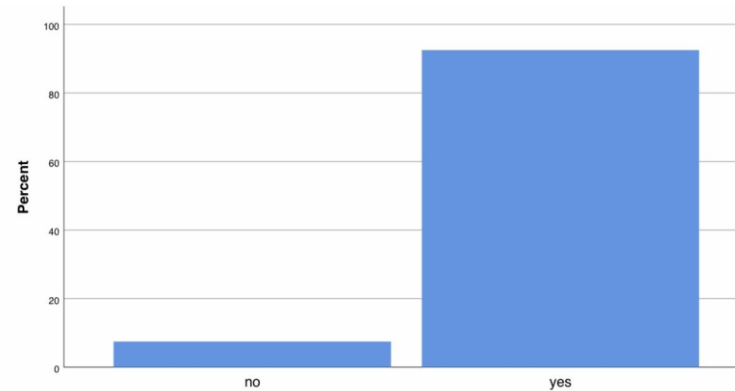


**Fig-3: The bar chart represents the students awareness and knowledge regarding various steps taken by local government to prevent COVID-19 .**
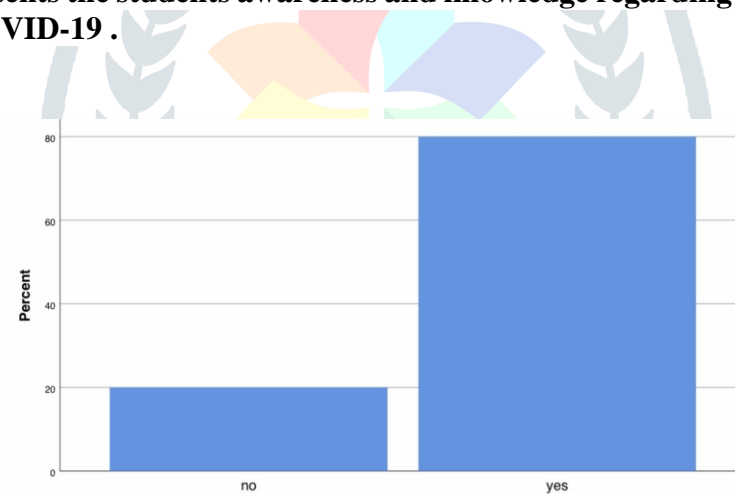


**Fig-4: The bar chart represents the students' satisfaction in acts taken by local government during COVID-19 is sufficient or needs to be improvised.**
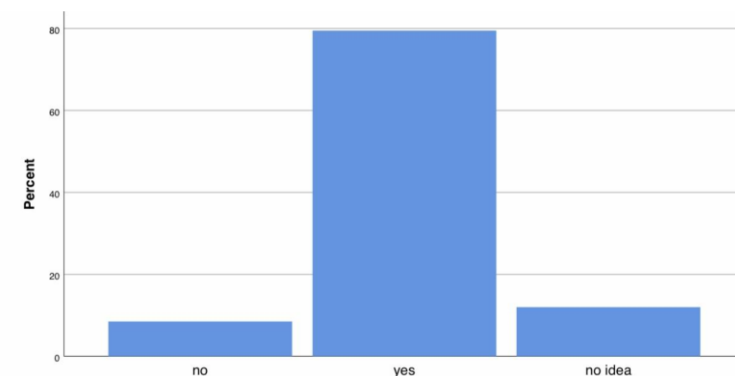
**Fig-5: The bar chart represents the view of students in physical violence against the health care workers are reduced after the law actions taken by the government.**
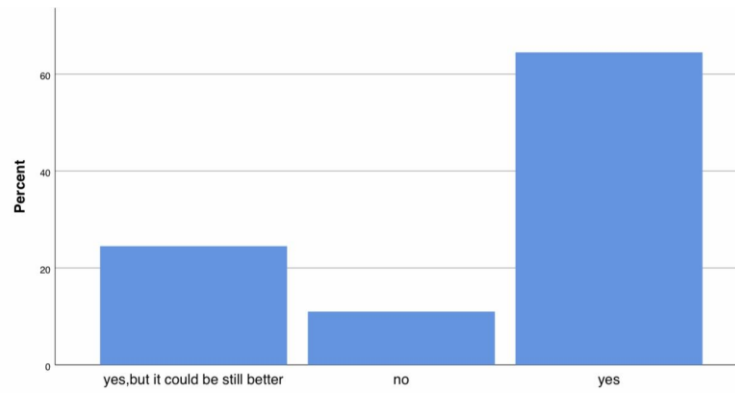


**Fig-6: The bar chart represents the students knowledge about local government safety and welfare for the people.**
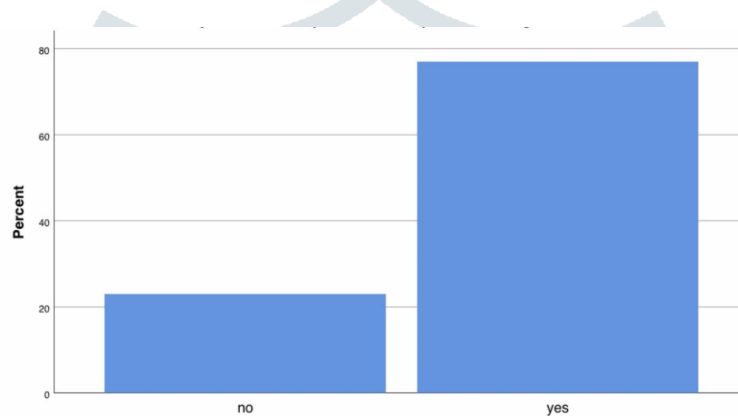


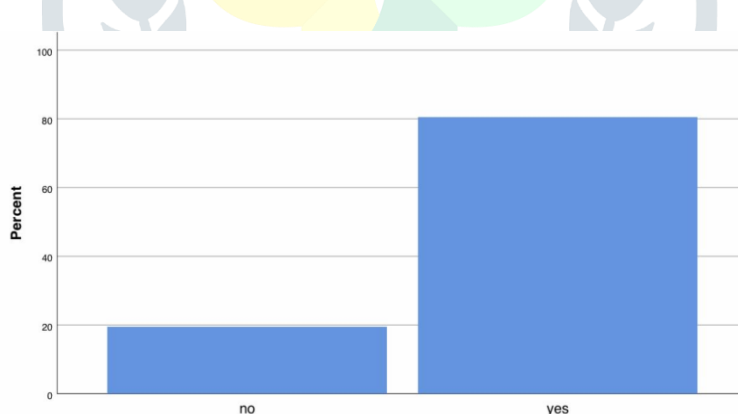**Fig-7: The bar chart represents the Awareness about HCL partnerships in disaster management among the student population.**

**Fig-8: The bar chart represents students' awareness about local government steps for the welfare of the needy and daily wages basic necessity.**
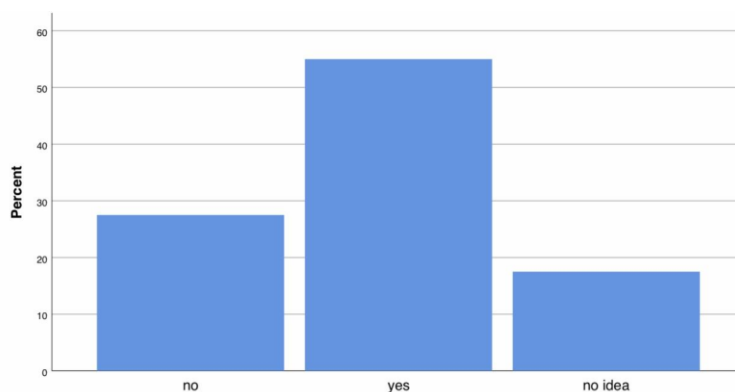


**Fig-9: The bar chart represents the knowledge about Arogya Setu Interactive voice response app among the student population.**
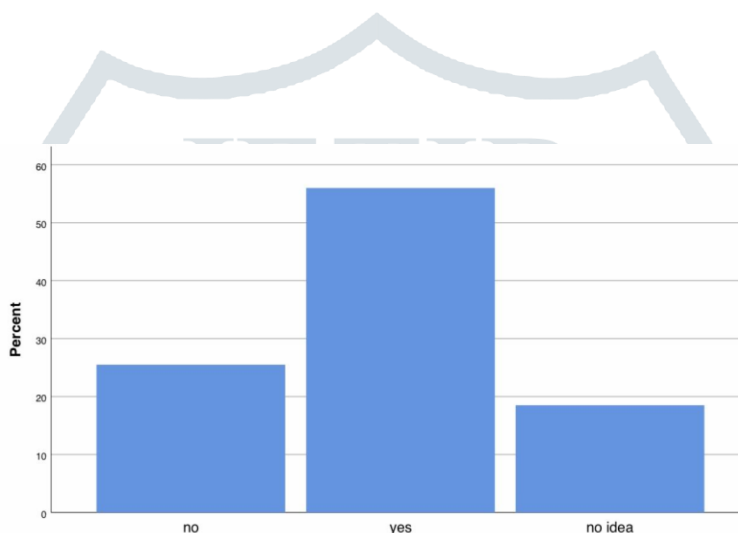


**Fig-10: The bar chart represents the view of students regarding extension of three months to pay the loans and tax is useful or not .**
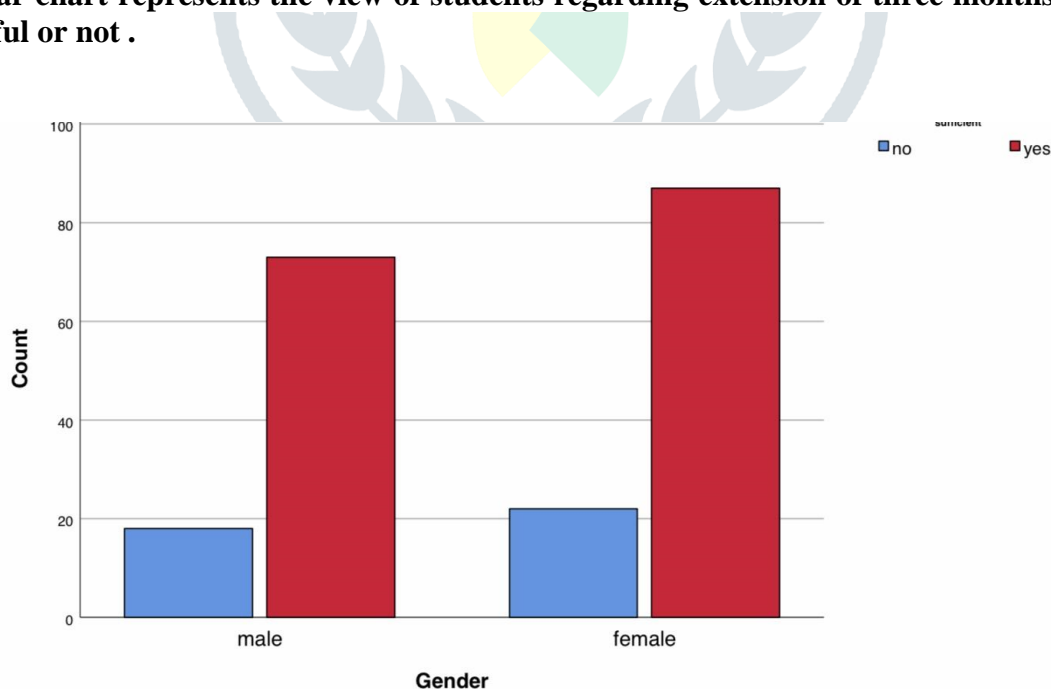


**Fig-11:The bar chart representing correlation between Gender and awareness about government response in COVID-19.**

*Correlation between Gender and awareness was done by chi square test P value 0.943 (p>0.05) statistically insignificant.* 100 Female participants say 87% local government steps are not sufficient in COVID-19 and 22% sufficient steps have been taken by the government.
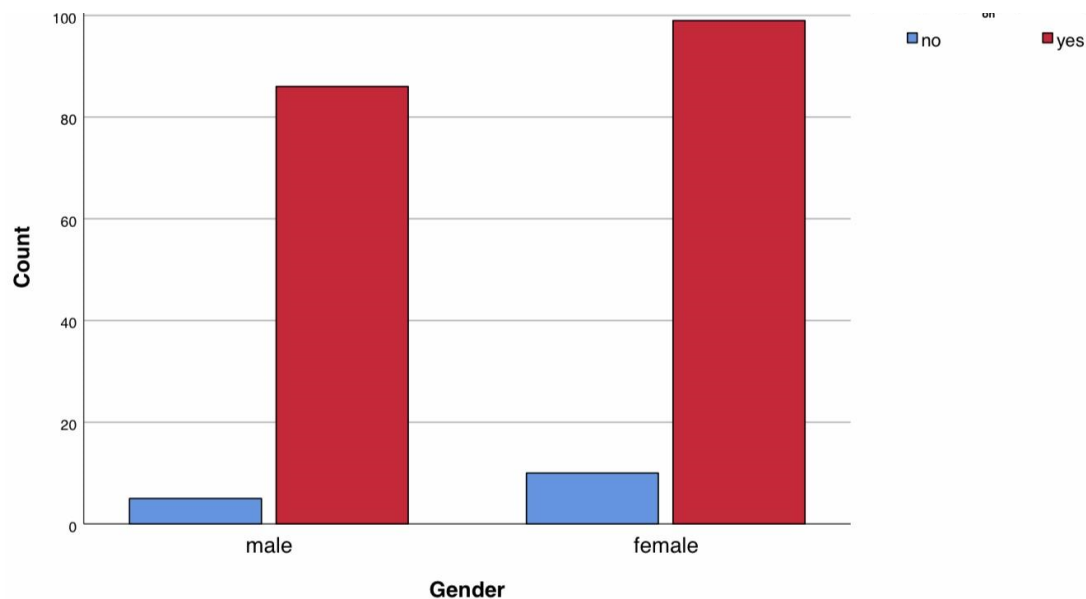
**Fig-12: The bar chart representing correlation between Gender and awareness among students regarding follow up of rules initiated by the government.**
*Correlation between Gender and awareness about strict follow up of government rules was done by chi square test P value 0.325 (p>0.05) statistically insignificant.* 100 Female participants say 99% by strict follow up of rules helps in preventing the disease and decreasing the risk of being affected .
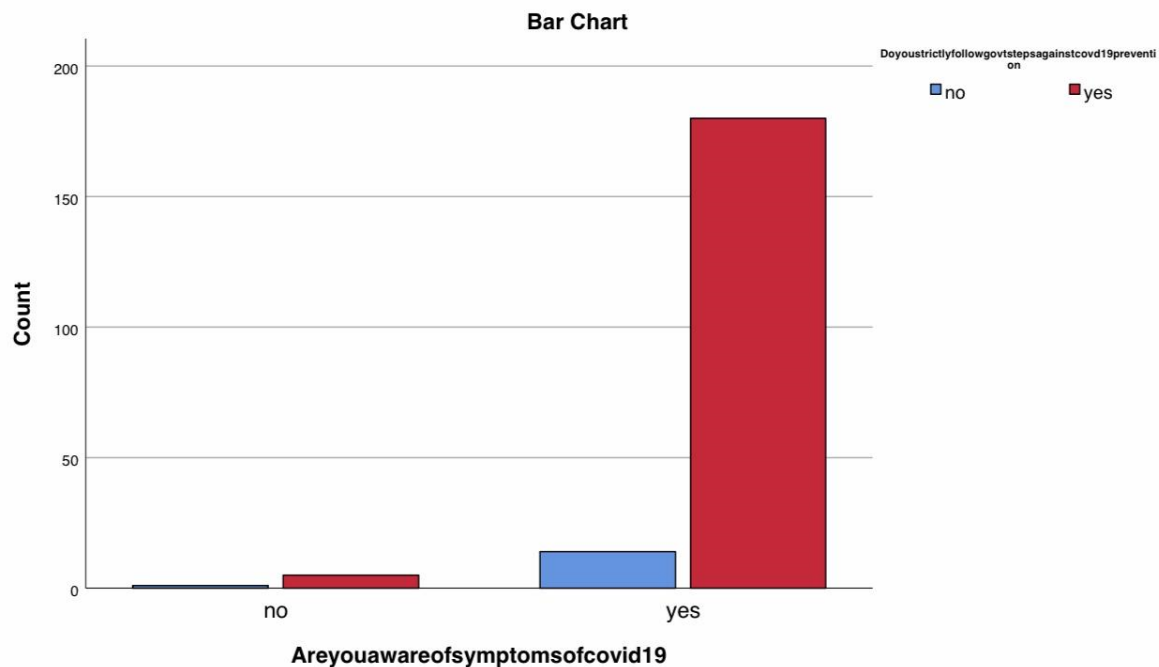


**Fig-13: The bar chart represents correlation between awareness about symptoms of COVID -19 and Awareness about strict follow up government rules.**
*Correlation between awareness about symptoms of COVID -19 and awareness about strict follow up government rules was done by chi square test P value 0.387(p>0.05) statistically insignificant.* 200 students say 80% by knowing the risk of COVID and its symptoms, Students are strictly following government rules and 20% did not insist on this .

**CONCLUSION** :

    This study shows that students are knowledgeable about various plans implemented by the government to tackle COVID -19 but very few responses taken by the government are not known to go students because of lack of information regarding it. So, to improve the knowledge about various steps taken by the government to tackle COVID -19' has to be advertised in social media, mass media which reaches the students easily and even the general public would benefit. Various other suggestions are also put forth by students which are to be concerned by the government and helps in improving the response. Students are suggested to be aware of various programmes, apps, measures taken by the government to tackle COVID -19, which helps them to be aware of the situation and to create preparedness in future.

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