

Awareness Related To Safe Shopping Practices Post Covid19 - A Cross Sectional Survey.

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ABSTRACT :

Background :This study states that COVID-19 started from one city of China in December 2019, but in a short span of time it covered almost all over the world. Nearly 216 countries are now victims of it . Some practises to decrease the spread of COVID-19 virus are social distancing, wearing a mask,etc..

Aim : The aim of the study is to analyse the awareness related to safe shopping practises post COVID 19 among the general public.

Materials and methods : A cross-sectional survey was conducted among the general population with a sample size of 105. A self administered structured questionnaire was prepared based on safe shopping practices post COVID-19, and it consisted of 15 questions. It was circulated to participants through an online platform (google forms). The statistics were performed using SPSS software, a chi-square test was used to check the association and P value of 0.05 was said to be statistically significant.

Results : 59% of the respondents were females and 41% were males,Among the respondents, a major population followed practices like wearing a mask,sanitizing and social distance while shopping.

Conclusion : This study sheds light on the current level of awareness regarding safe shopping practices post COVID-19.

KEYWORDS : Sanitising, Social distancing, Vaccination, Pandemic, Coronavirus, Innovative technique

INTRODUCTION :

COVID-19 started from one city in China in December 2019, but in a short span of time , it covered almost all over the world (1). Nearly 216 countries of the whole world are struggling for their civilization and livelihood against the coronavirus pandemic.(2). In the absence of approved vaccines or antivirals effective against COVID-19, plasma centric approaches remain key to dealing with the virus(3). Symptoms of COVID virus are fever, dry cough, shortness of breath, body aches, abdominal pain and diarrhoea. Asymptomatic cases increase the risk of transmission of infection(3). Globally a million confirmed cases of COVID-19 have been identified (4)

Some practices to decrease the spread of this virus are: the stores should be open for longer hours, we should avoid closed spaces and air conditioned stores to shop, chit based shopping should be practised, we should ask the stores to drop off the deliveries, goods purchased, sanitize your hands before and after shopping, sanitize the products you're purchasing , practise social distancing while shopping and always wear your mask. During the pandemic, small scale, home town businesses have been affected drastically, preferentially, we should promote such businesses. Some of the previous research done on this topic are cross-sectional studies on public awareness in preventing the spread of COVID-19 outbreak in India. Awareness and preparedness of COVID-19 outbreak among healthcare workers(4) . COVID-19 assessment of knowledge and awareness in Indian society(5) . Knowledge , attitude, awareness and practices towards COVID-19 among the public in the kingdom of Saudi Arabia (6)An analytical study on the awareness, attitude, and practice during the COVID-19 pandemic (7) . Countries are yet to find solutions to tackle the economic crisis during a pandemic. Lack of awareness among the poor regarding safe COVID practices increases the chances of spread . Coronavirus has caused a huge economical crisis where companies, small scale workers are facing great challenges to survive in the market (8). This research is particularly important to India because the country has various diversities, the research was conducted as a part of an awareness creating exercise regarding safe shopping practices post COVID-19 in an effort to instill safer shopping practices among the general public thereby reducing the spread of the pandemic. Therefore this study will ensure people are aware about safe shopping practices during a pandemic and decrease the economic crisis faced by the country. Our team has extensive knowledge and research experience that has translated into high quality publications (9-28). This study aims to create awareness related to safe shopping practices post COVID-19.

MATERIALS AND METHODS :

A cross sectional survey study through quantitative methods was done among 105 participants. The survey was conducted through online google forms in February 2021. The study had an easy reach and recruitment of participants. The limitation of the survey was that it was not representative of the entire population. Simple random sampling method was used to minimize sampling bias. Results were analyzed using SPSS software version 23.0 (IBM, Chicago, USA) and p value <0.05 was considered to be significant.

RESULTS :

This study presents the key findings of 102 respondents. Majority (59%) respondents are females and the rest are males (figure 1). 66.7% participants are fond of shopping, 20% responded maybe and 12.76% responded no (figure 2). 64.07% respondents opted yes for practising social distancing while shopping and rest did not practise social distancing (figure 3). 83.7% participants responded yes for wearing a mask while shopping (figure 4). 50% of participants prefer online shopping (figure 5).

The majority (60%) of the participants responded yes for sanitising after shopping (figure 6). 72% responded yes that they promote small scale businesses which were affected during pandemic (figure 7). 6.08% participants think that shopping practices have decreased due to COVID. About 47.06% of people think the quality of shopping has been affected due to COVID-19 (figure 8) and 48% of respondents said that there's no change in the stress and anxiety level. Half of the participants responded that they prefer getting goods delivered at their doorstep (figure 9). About 39.22% don't shop often while 20.19% shop once a month post covid. More females responded saying they sanitise after shopping than their counterparts (p value is 0.000 ($p < 0.05$) is statistically significant) (figure 10). About 33.6% females responded 'very much' for preferring online shopping post covid while only 16.35% males responded they prefer online shopping 'very much' (p value is 0.000 ($p < 0.05$) is statistically significant) (figure 11). Majority females (47.15%) responded 'no' for wearing hand gloves while shopping whereas only 22.12% males responded 'no; for wearing hand gloves while shopping (p value is 0.000 ($p < 0.05$) is statistically significant) (figure 12). About 36.54 % females and 11.54% males think shopping practice has decreased post covid (p value is 0.000 ($p < 0.05$) is statistically significant) (figure 13). About 29.8% females and 19.23% males think quality of shopping has been affected post covid (p value is 0.000 ($p < 0.05$) is statistically significant) (figure 14).

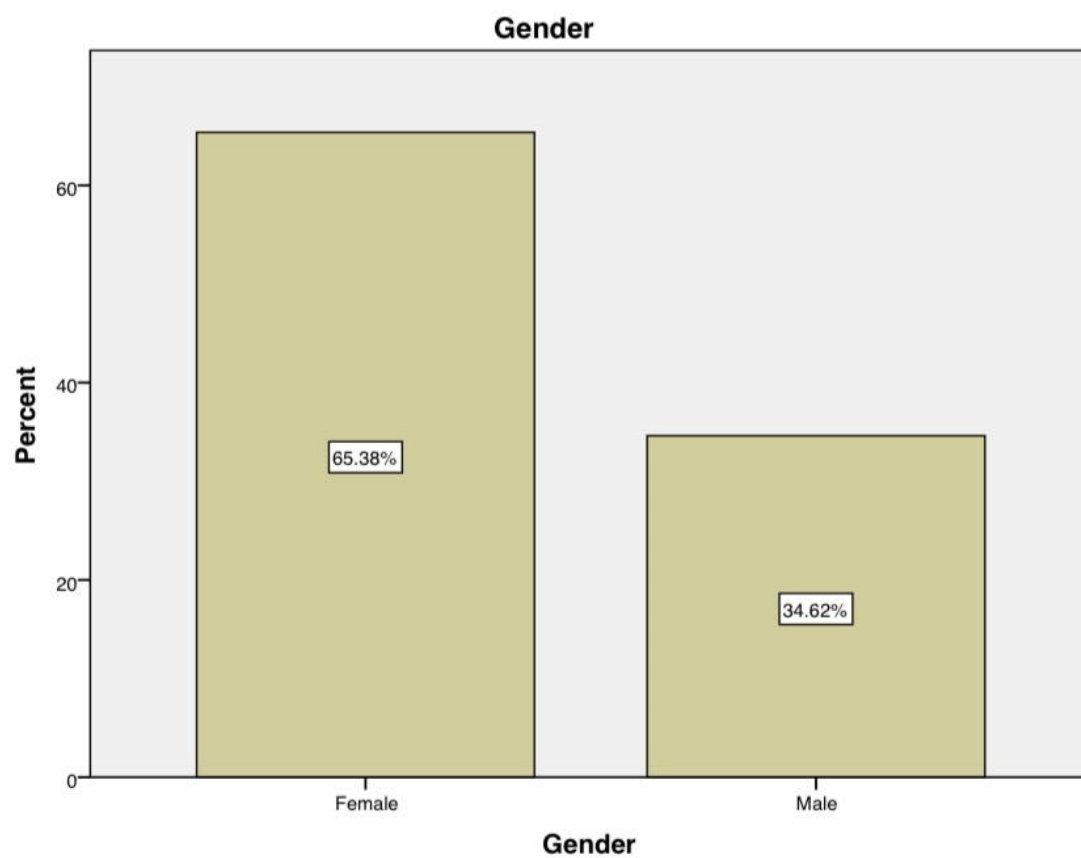


Figure 1 : Bar graph representing the percentage of male and female respondents in this survey.

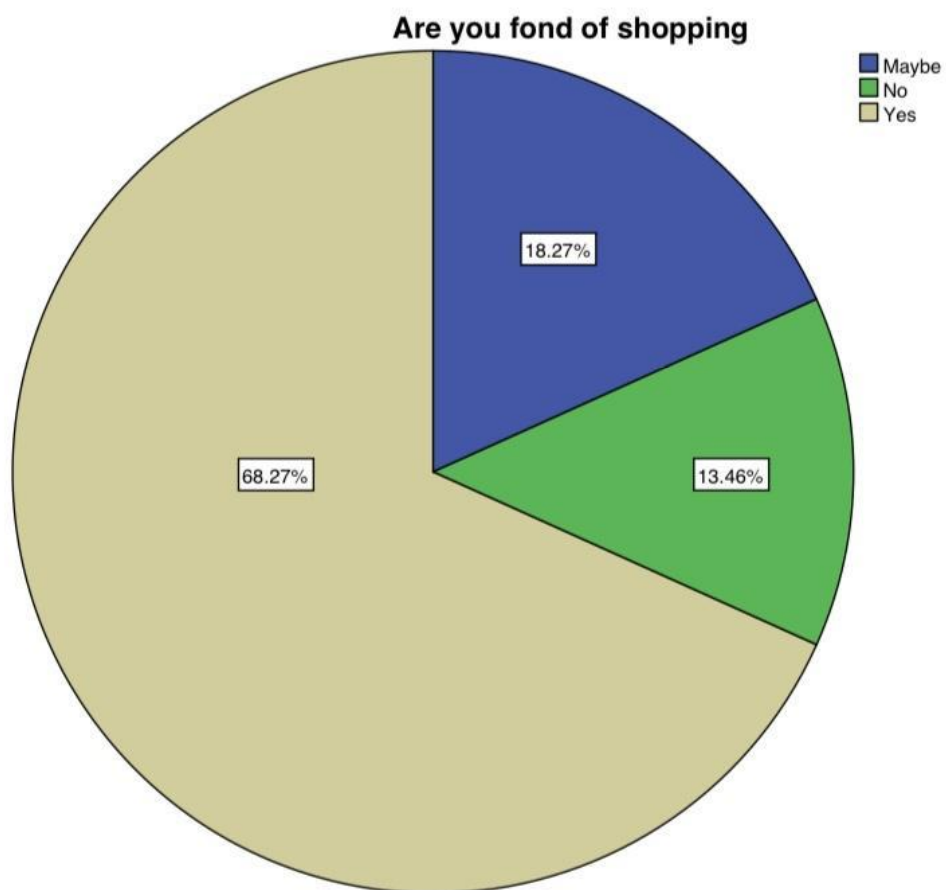


Figure 2: Pie chart showing the percentage of students fond of shopping. Majority of the participants (68%) responded yes (sandal), 18% responded maybe (blue) and the remaining 13.5% responded no (green).

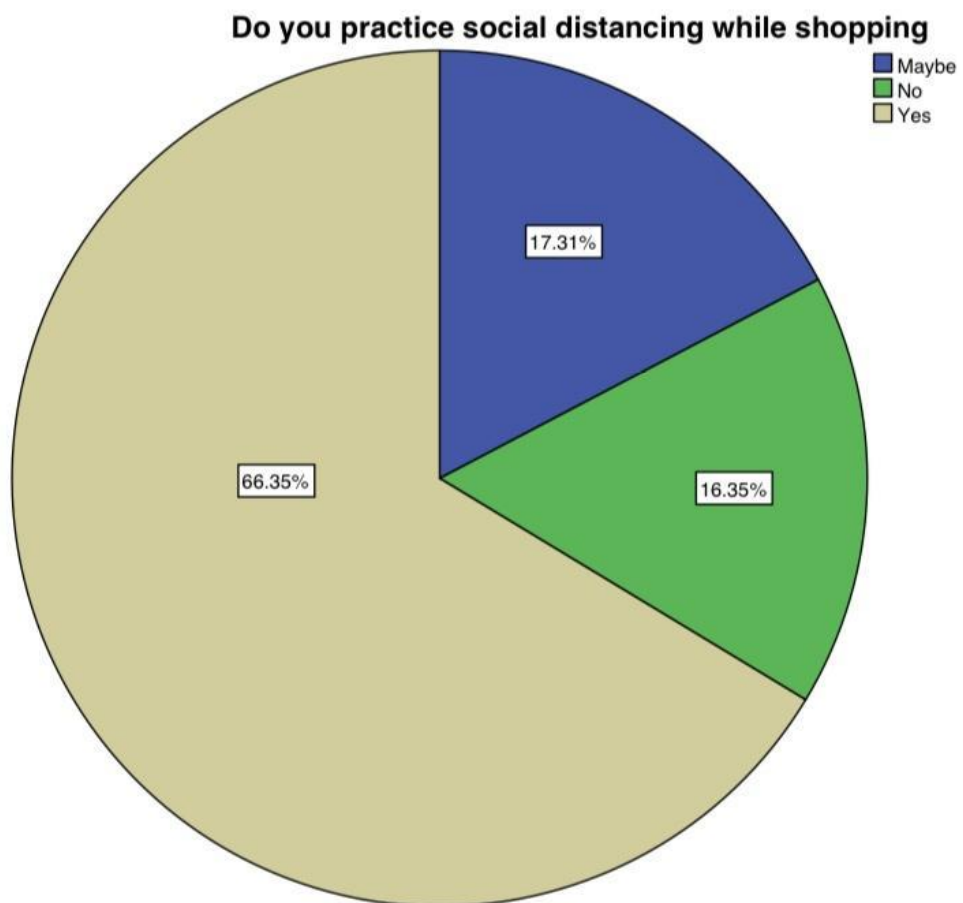


Figure 3 : Pie chart showing the percentage of students practising social distancing while shopping. Majority of the participants (66.5%) responded yes (sandal), 18% responded maybe (blue) and the remaining 16% responded no (green).

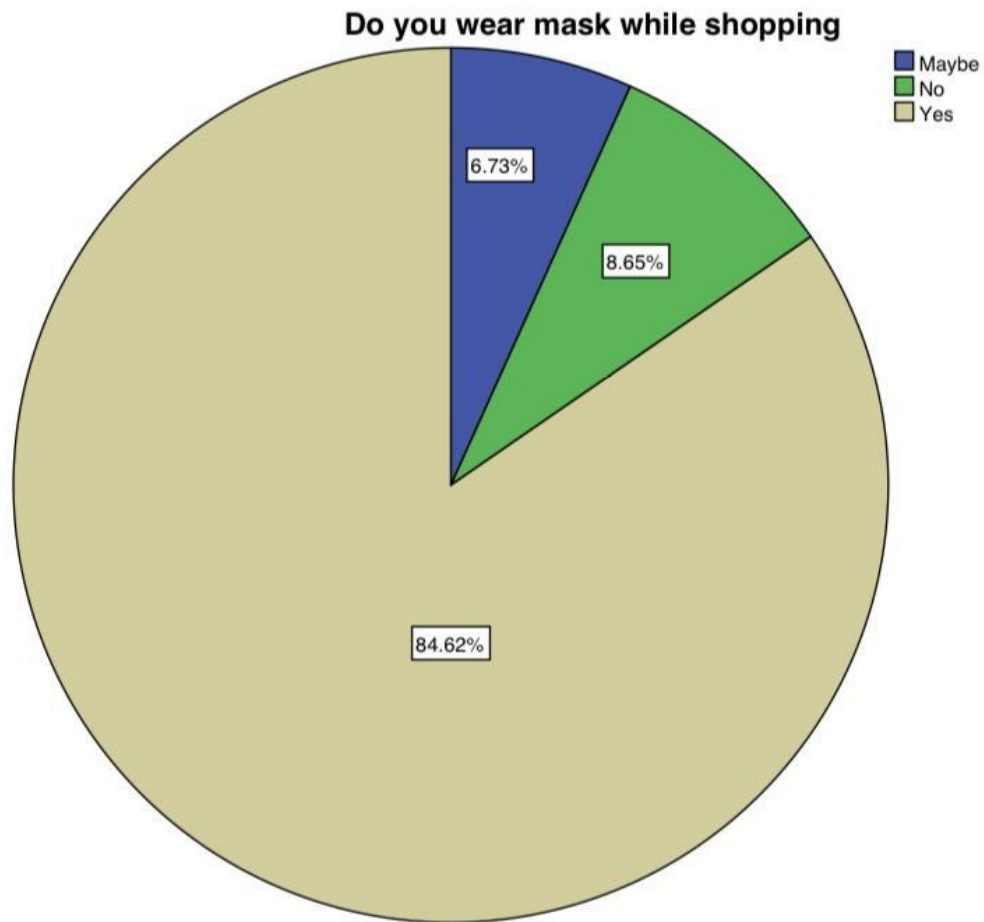


Figure 4: Pie chart showing the percentage of students wearing masks while shopping .Majority of the participants (84%) responded yes (sandal),6.7% responded maybe(blue) and the remaining 8.5% responded no (green).

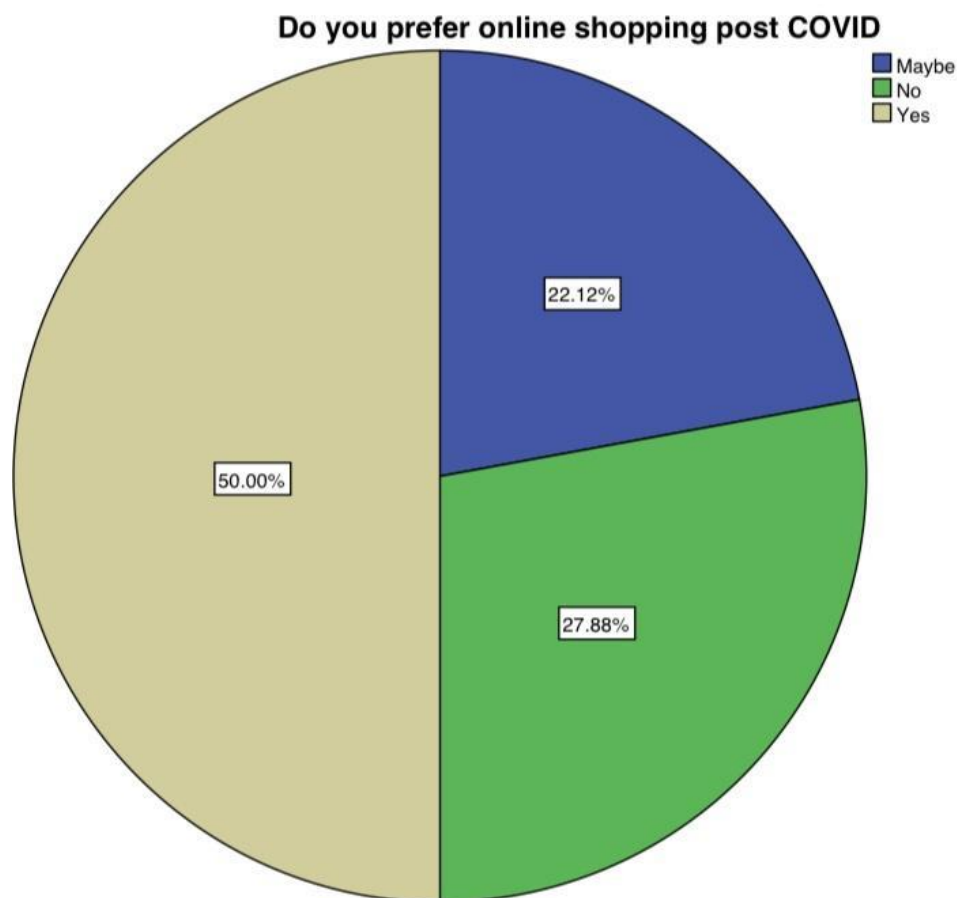


Figure 5: Pie chart showing the percentage of students who prefer online shopping .Majority of the participants (50%) responded yes (sandal),22% responded and maybe(blue) and the remaining 27.88% responded no (green).

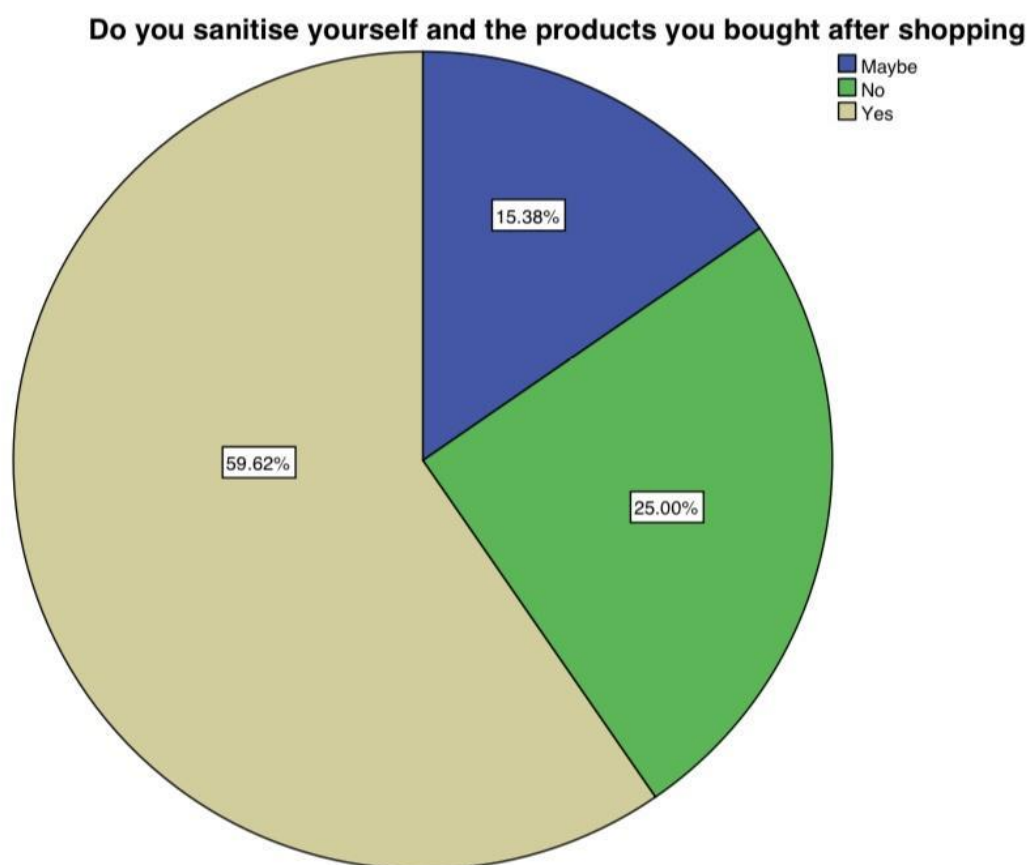


Figure 6: Pie chart showing the percentage of students sanitising after shopping .Majority of the participants (60%) responded yes (sandal), (15.38%) responded and maybe(blue) and remaining (25%) responded no (green).

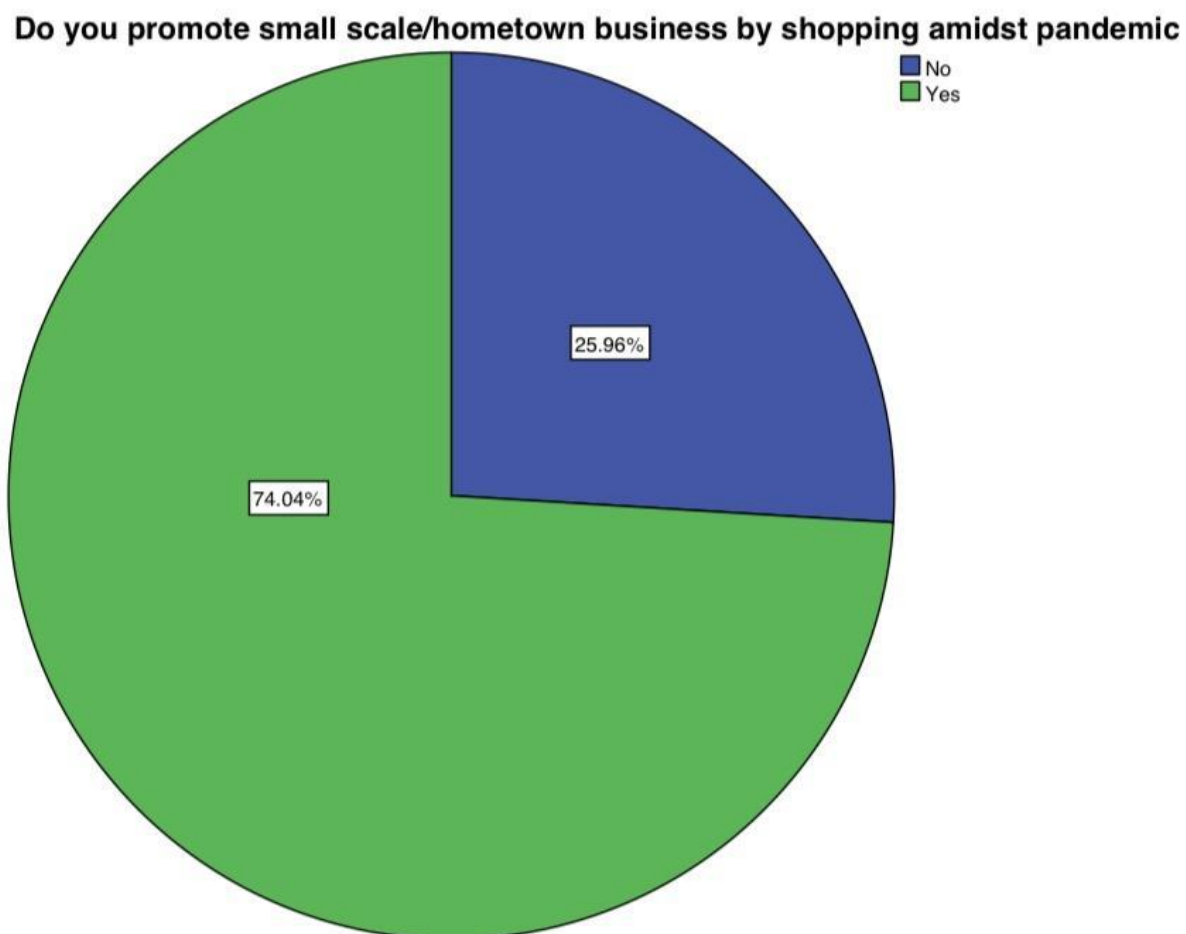


Figure7: Pie chart showing the percentage of students promoting small scale business. Majority of the participants (74%) responded yes (green) and remaining (25%) responded no (blue).

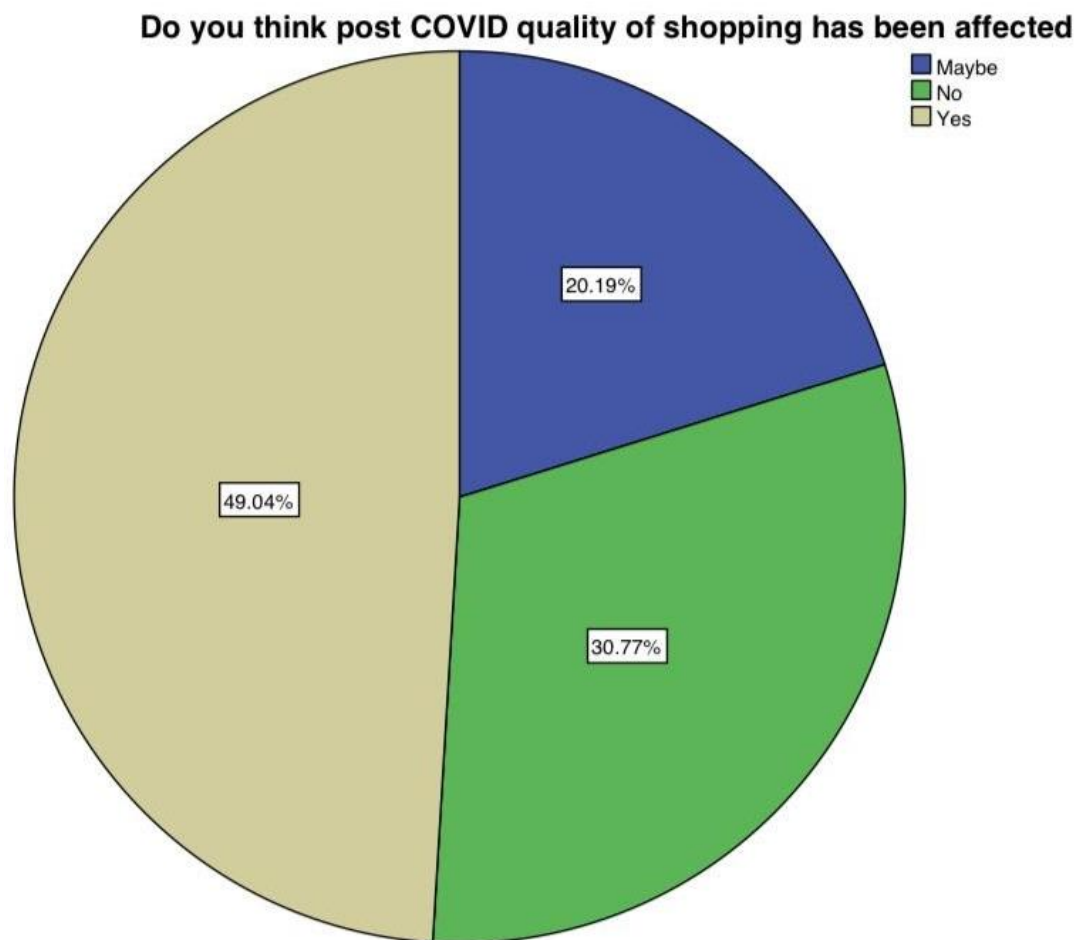


Figure 8 : Pie chart showing the percentage of participants thinking quality of shopping has been affected post COVID. Majority of the participants (49.04%) responded yes (sandal) and remaining 20.19% responded maybe (blue) and 30.77% responded no (green).

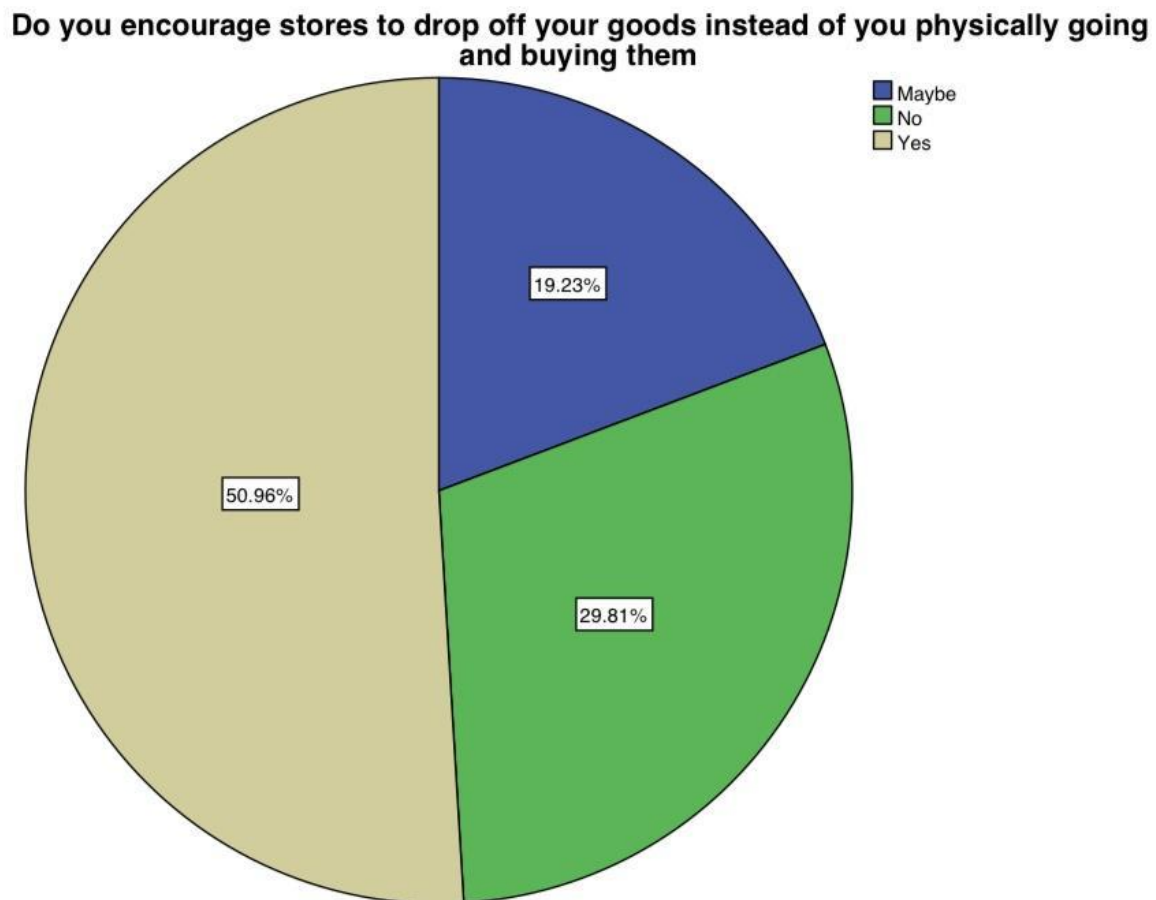


Figure 9: Pie chart showing the percentage of students encouraging stores to drop off goods at door step .Majority of the participants (50%) responded yes (sandal),19.38% responded maybe(blue) and remaining 29% responded no (green).

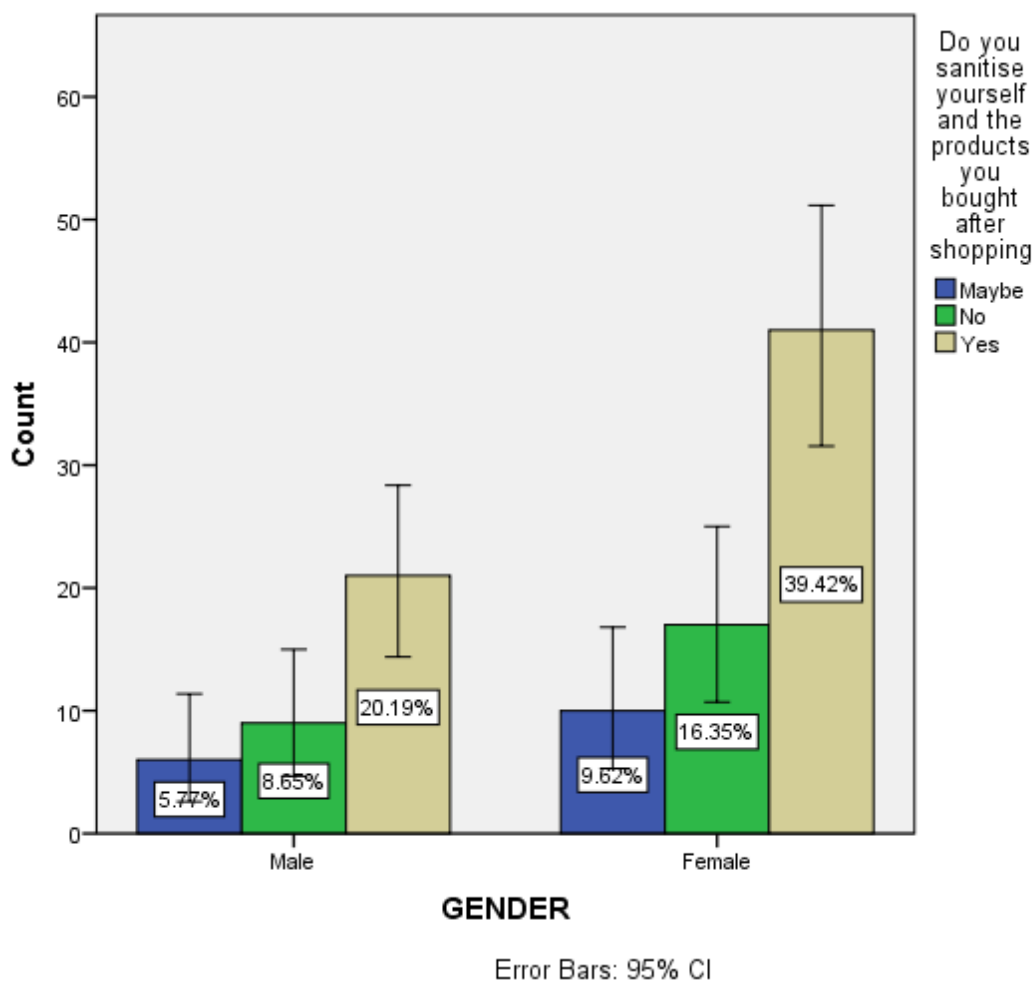


Figure 10: The above bar chart represents the frequency of people who sanitise after shopping. The x-axis represents the gender and responses (green for no, blue for maybe and sandal for yes) and the y-axis represents the number of participants. The p value = 0.00 statistically significant. This implies that there was a significant gender variation with the predominance of females in the participants who sanitise the purchased goods after shopping.

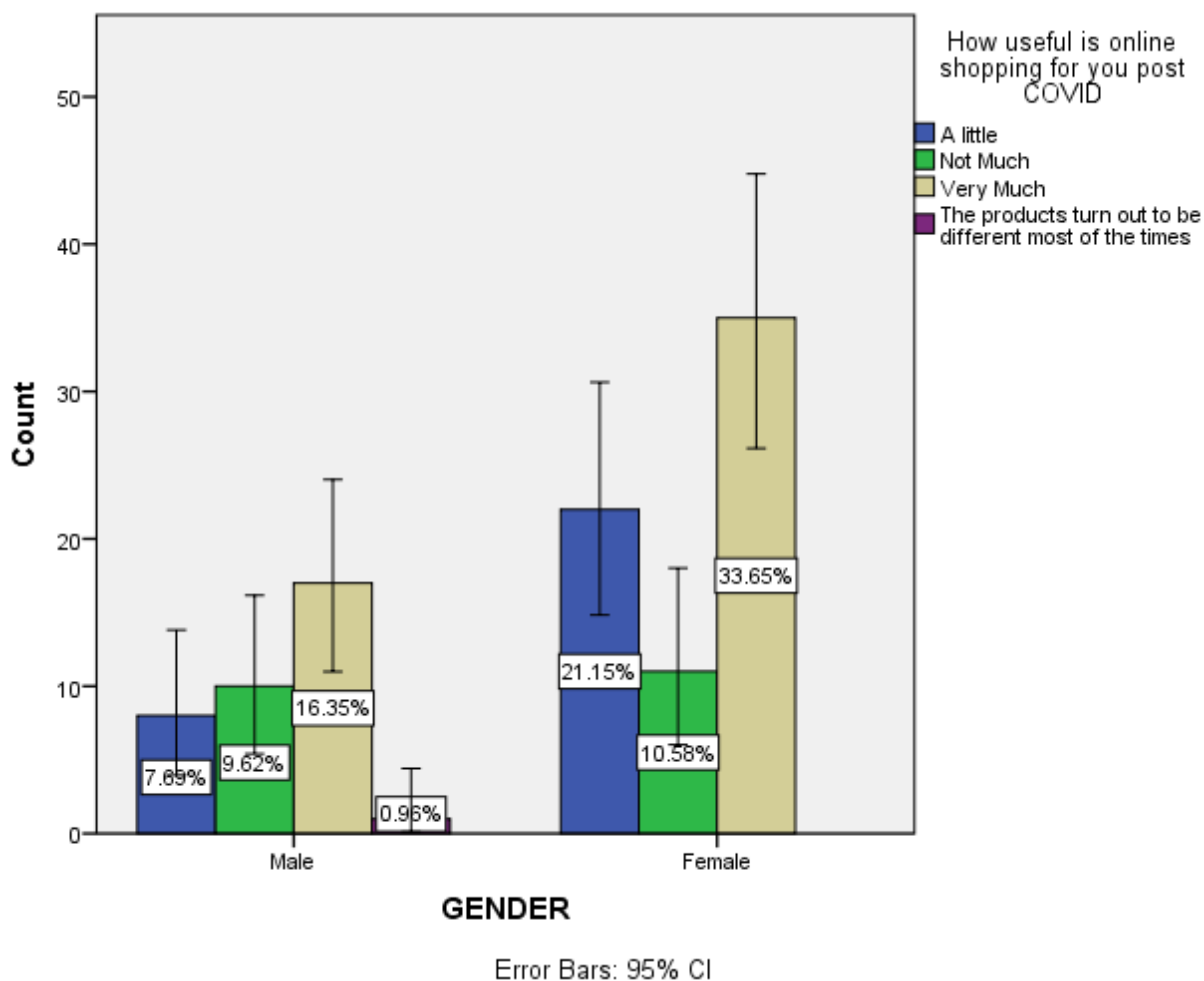


Figure 11: The above bar chart represents the comparison of values of online shopping practices between males and females. The x-axis represents the gender and responses (green for not much, blue for a little and sandal for very much) and the y-axis represents the number of participants . The p value = 0.00 statistically significant($p < 0.05$). This implies that there was a significant gender variation with predominance of females in the participants who prefer online shopping post covid.

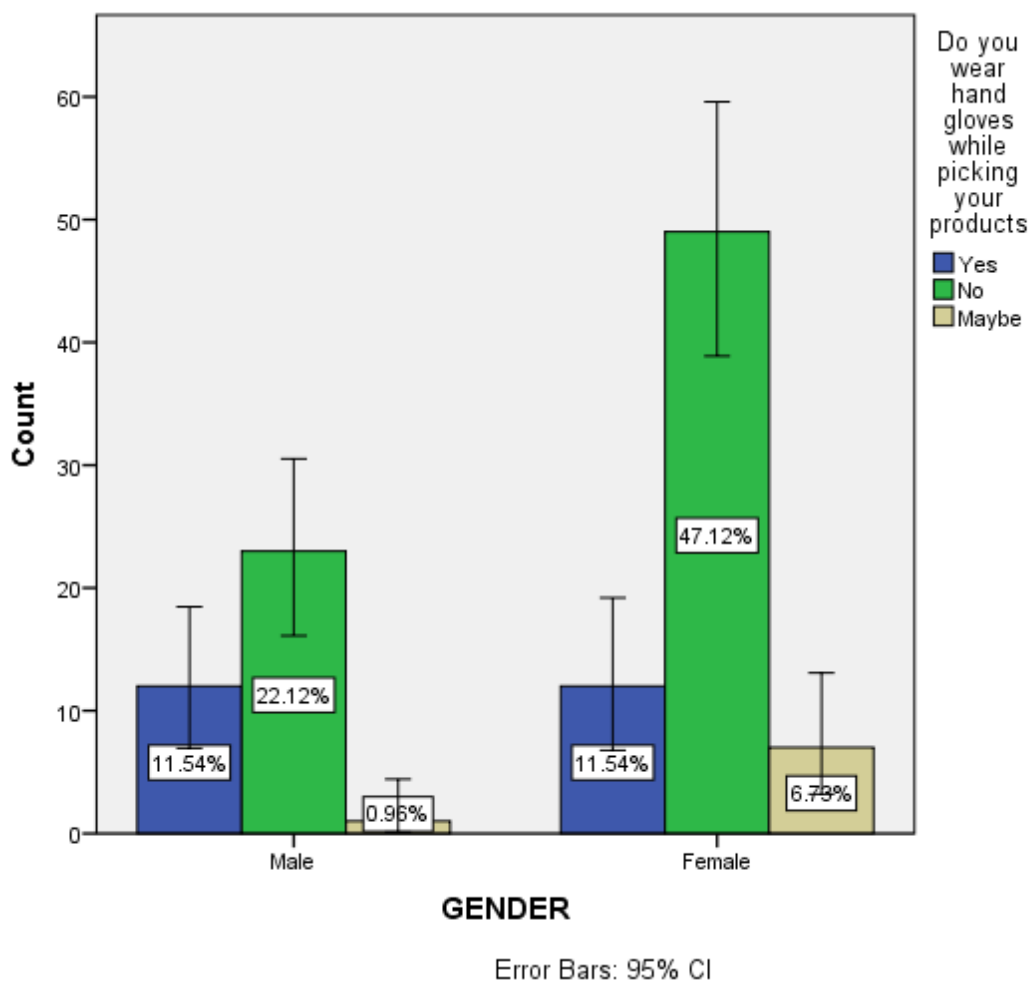


Figure 12 : The above bar chart represents the comparison regarding wearing hand gloves while shopping between males and females. The x-axis represents the gender and responses (green for not much, blue for a little and sandal for very much) and the y-axis represents the number of participants. The p value = 0.00 statistically significant($p < 0.05$). This implies that there was a significant gender variation with a predominance of females in the participants who wear gloves while shopping.

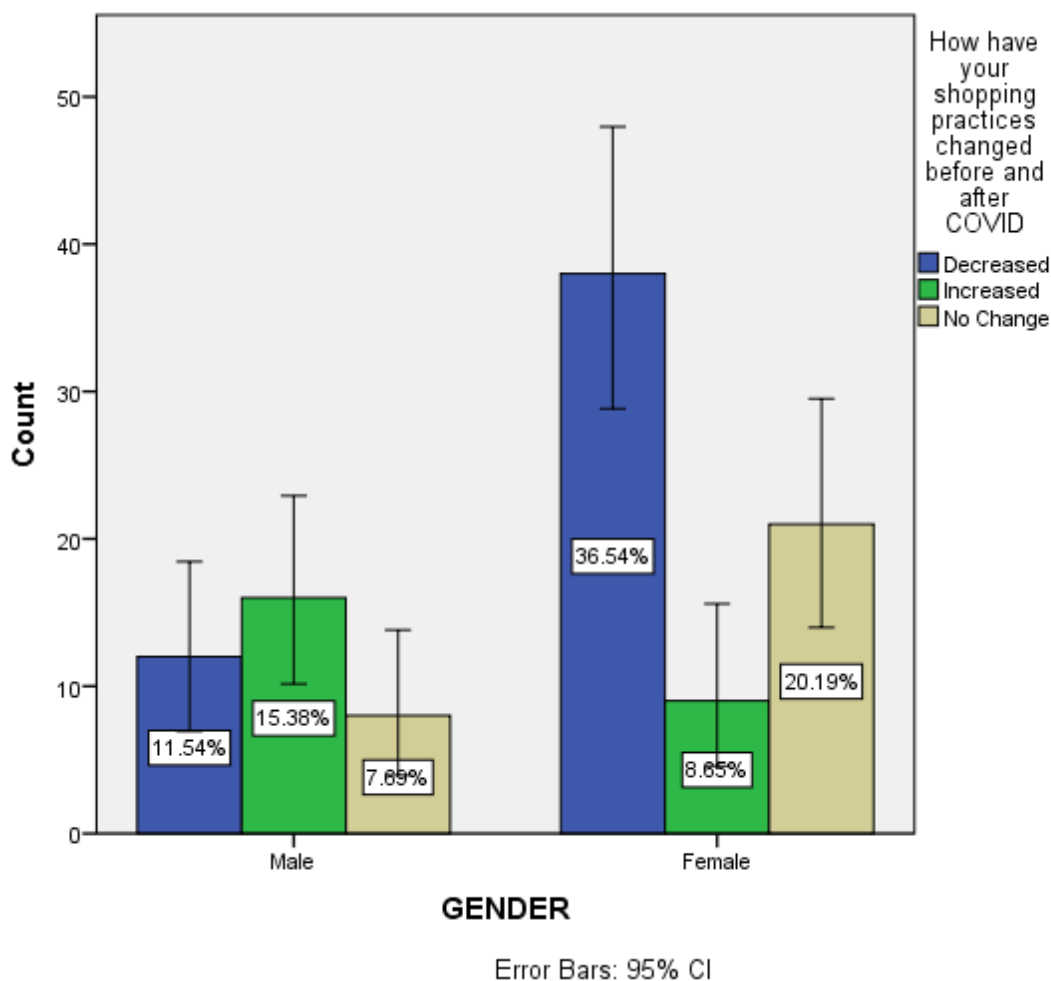


Figure 13 : The above bar chart represents the comparison regarding change in shopping practices between males and females. The x-axis represents the gender and responses (green for increased, blue for decreased and sandal for no change) and the y-axis represents the number of participants. The p value = 0.00 statistically significant ($p < 0.05$). This implies that there was a significant gender variation with a predominance of females reporting of change in the participants' shopping practices before and after covid.

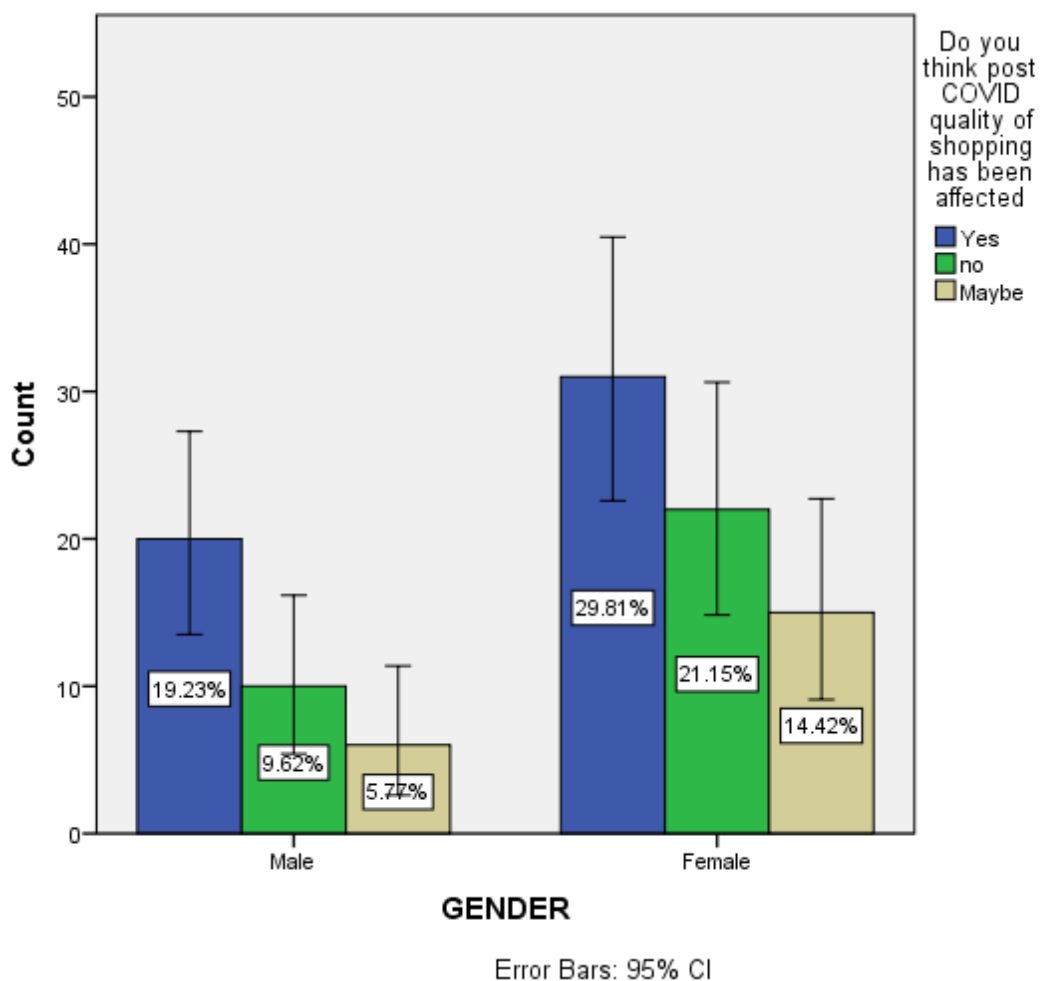


Figure 14 : The above bar chart represents the comparison regarding post covid quality of shopping between male and females. The x-axis represents the gender and responses (green for no, blue for maybe and sandal for yes) and the y-axis represents the number of participants. The p value = 0.00 statistically significant($p < 0.05$). This implies that there was a significant gender variation in the participants' who think quality of shopping has been affected post covid.

DISCUSSION:

In the study we observed that females responded more than males and practiced more precautions such as wearing masks, social distancing, and sanitisation which was not practiced earlier. Majority (58.2%) were female respondents whereas males were 41.8%. Similar findings were found in other studies where three quarters of respondents were females (73.2%), and 26.5% males (29). Awareness regarding coronavirus among 97 interns were assessed of which 41 were males and 56 were females. 60% majority responded saying that they follow proper sanitisation methods while shopping, similar

findings were found in other articles where 67% majority responded saying that they practise sanitising .

In another study (30) it stated people do not follow proper sanitation techniques and 83% participants were under the poor sanitisation category which is the most common risk factor of COVID-19. Our findings are in concordance with other articles but there was slight variation in some other articles. About 83% majority participants responded 'yes' they wear masks while shopping, similar findings were found in (4) study 86.5% people responded yes they wear mask. Important to note that while the general public appears to be well informed regarding the common symptoms, 20% of the population excluded wearing masks. Our findings thereby were in concordance with other articles. 64.7% participants responded 'yes' they practice social distancing while shopping, similar findings are found in other articles stating that around 65% people practise social distancing while shopping . Similar findings were found in other articles stating that 65% participants practised social distancing (8). In (31) study 89% people responded 'yes' they practise social distancing. The social distance measure was found to be influential in discriminating shopping frequency groups for the two stores, providing evidence that people tend to avoid stores that are perceived as being socially distant from themselves. Social distancing involves keeping 1.5 m distance between people, which can prevent the spread , especially most respiratory infectious diseases. Social distancing is the most effective measure to reduce COVID-19 (10). Our findings were in concordance with other articles regarding social distancing. About 50% of participants encourage stores to drop off at home. Similar findings stated that out of 550 people, 346 people strongly agree to avoid going to the market (32). Our findings regarding people going out for shopping was in concordance with other articles. About 37.5% participants experienced increased stress and anxiety level due to COVID19. In the study by (33) it was stated that the anxiety score was 28% while the stress score was 11.6% among participants post COVID. COVID-19 also caused various psychological effects , thereby finding its concordance with other articles.

The limitations of the study were that the Questionnaire was filled by people who understood English and possessed smartphones with internet connectivity. Uneducated people were not included in this survey. And the study was also restricted to urban society, thereby cannot be generalized to the whole community. Time duration for collecting data was less, time taken for an analysis and statistics was too long. The future scope is that there is an increase in awareness among the general public; since we know for sure that simple measures like better hand hygiene, safe practices, social distancing goes a long way in reducing the spread of the COVID-19 infection. Documenting such data can help the government formulate a better and effective shopping strategy to cope up with COVID-19.

CONCLUSION:

This study sheds light on the current level of awareness regarding safe shopping practices post COVID-19. It also ensures that it inculcates Knowledge, preventive practices, and preparedness to enable customers and shopkeepers to have safe practices. Therefore this article will ensure people take preventive steps while shopping thereby reducing the potential spread of the pandemic .

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CONFLICT OF INTEREST

None declared.

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AUTHORS CONTRIBUTION

S Pragya : Literature search, data collection analysis, manuscript drafting.

Dr Gheena.S and Dr Sandhya : Data verification, manuscript drafting.

REFERENCES

1. Ullah N. THE WORLD AFTER COVID -19 [Internet]. COVID-19 Pandemic update 2020. 2020. p. 248–53. Available from: <http://dx.doi.org/10.26524/royal.37.25>
2. Pizam A. The Aftermath of the Corona Virus Pandemic. Int J Hosp Manage. 2021 Mar 2;102909.
3. Kaushik M, Agarwal D, Gupta AK. Cross-sectional study on the role of public awareness in

- preventing the spread of COVID-19 outbreak in India. *Postgrad Med J* [Internet]. 2020 Sep 10; Available from: <http://dx.doi.org/10.1136/postgradmedj-2020-138349>
4. Tripathi R, Alqahtani SS, Albarraq AA, Meraya AM, Tripathi P, Banji D, et al. Awareness and Preparedness of COVID-19 Outbreak Among Healthcare Workers and Other Residents of South-West Saudi Arabia: A Cross-Sectional Survey. *Front Public Health*. 2020 Aug 18;8:482.
 5. Singh AK, Agrawal B, Sharma A, Sharma P. COVID -19: Assessment of knowledge and awareness in Indian society [Internet]. *Journal of Public Affairs*. 2020. Available from: <http://dx.doi.org/10.1002/pa.2354>
 6. Al-Hanawi MK, Angawi K, Alshareef N, Qattan AMN, Helmy HZ, Abudawood Y, et al. Knowledge, Attitude and Practice Toward COVID-19 Among the Public in the Kingdom of Saudi Arabia: A Cross-Sectional Study. *Front Public Health*. 2020 May 27;8:217.
 7. An Analytical Study on the Attitude and Behavior of Women During COVID – 19 Lockdown [Internet]. Vol. 7, *Strad Research*. 2020. Available from: <http://dx.doi.org/10.37896/sr7.6/029>
 8. Shammi M, Bodrud-Doza M, Towfiqul Islam ARM, Rahman MM. COVID-19 pandemic, socioeconomic crisis and human stress in resource-limited settings: A case from Bangladesh. *Heliyon*. 2020 May;6(5):e04063.
 9. Princeton B, Santhakumar P, Prathap L. Awareness on Preventive Measures taken by Health Care Professionals Attending COVID-19 Patients among Dental Students. *Eur J Dent*. 2020 Dec;14(S 01):S105–9.
 10. Mathew MG, Samuel SR, Soni AJ, Roopa KB. Evaluation of adhesion of *Streptococcus mutans*, plaque accumulation on zirconia and stainless steel crowns, and surrounding gingival inflammation in primary molars: randomized controlled trial. *Clin Oral Investig*. 2020 Sep;24(9):3275–80.
 11. Sridharan G, Ramani P, Patankar S, Vijayaraghavan R. Evaluation of salivary metabolomics in oral leukoplakia and oral squamous cell carcinoma. *J Oral Pathol Med*. 2019 Apr;48(4):299–306.
 12. R H, Hannah R, Ramani P, Ramanathan A, Jancy MR, Gheena S, et al. CYP2 C9 polymorphism among patients with oral squamous cell carcinoma and its role in altering the metabolism of benzo[a]pyrene [Internet]. Vol. 130, *Oral Surgery, Oral Medicine, Oral Pathology and Oral*

Radiology. 2020. p. 306–12. Available from: <http://dx.doi.org/10.1016/j.oooo.2020.06.021>

13. Antony JVM, Ramani P, Ramasubramanian A, Sukumaran G. Particle size penetration rate and effects of smoke and smokeless tobacco products - An invitro analysis. *Heliyon*. 2021 Mar 1;7(3):e06455.
14. Sarode SC, Gondivkar S, Sarode GS, Gadbail A, Yuwanati M. Hybrid oral potentially malignant disorder: A neglected fact in oral submucous fibrosis. *Oral Oncol*. 2021 Jun 16;105390.
15. Hannah R, Ramani P, WM Tilakaratne, Sukumaran G, Ramasubramanian A, Krishnan RP. Author response for “Critical appraisal of different triggering pathways for the pathobiology of pemphigus vulgaris—A review” [Internet]. Wiley; 2021. Available from: <https://publons.com/publon/47643844>
16. Chandrasekar R, Chandrasekhar S, Sundari KKS, Ravi P. Development and validation of a formula for objective assessment of cervical vertebral bone age. *Prog Orthod*. 2020 Oct 12;21(1):38.
17. Subramanyam D, Gurunathan D, Gaayathri R, Vishnu Priya V. Comparative evaluation of salivary malondialdehyde levels as a marker of lipid peroxidation in early childhood caries. *Eur J Dent*. 2018 Jan;12(1):67–70.
18. Jeevanandan G, Thomas E. Volumetric analysis of hand, reciprocating and rotary instrumentation techniques in primary molars using spiral computed tomography: An in vitro comparative study. *Eur J Dent*. 2018 Jan;12(1):21–6.
19. Ponnulakshmi R, Shyamaladevi B, Vijayalakshmi P, Selvaraj J. In silico and in vivo analysis to identify the antidiabetic activity of beta sitosterol in adipose tissue of high fat diet and sucrose induced type-2 diabetic experimental rats. *Toxicol Mech Methods*. 2019 May;29(4):276–90.
20. Sundaram R, Nandhakumar E, Haseena Banu H. Hesperidin, a citrus flavonoid ameliorates hyperglycemia by regulating key enzymes of carbohydrate metabolism in streptozotocin-induced diabetic rats. *Toxicol Mech Methods*. 2019 Nov;29(9):644–53.
21. Alsawalha M, Rao CV, Al-Subaie AM, Haque SKM, Veeraraghavan VP, Surapaneni KM. Novel mathematical modelling of Saudi Arabian natural diatomite clay. *Mater Res Express*. 2019 Sep 4;6(10):105531.

22. Yu J, Li M, Zhan D, Shi C, Fang L, Ban C, et al. Inhibitory effects of triterpenoid betulin on inflammatory mediators inducible nitric oxide synthase, cyclooxygenase-2, tumor necrosis factor- α , interleukin-6, and proliferating cell nuclear antigen in 1, 2-dimethylhydrazine-induced rat colon carcinogenesis. *Pharmacogn Mag.* 2020;16(72):836.
23. Shree KH, Hema Shree K, Ramani P, Herald Sherlin, Sukumaran G, Jeyaraj G, et al. Saliva as a Diagnostic Tool in Oral Squamous Cell Carcinoma – a Systematic Review with Meta Analysis [Internet]. Vol. 25, *Pathology & Oncology Research*. 2019. p. 447–53. Available from: <http://dx.doi.org/10.1007/s12253-019-00588-2>
24. Zafar A, Sherlin HJ, Jayaraj G, Ramani P, Don KR, Santhanam A. Diagnostic utility of touch imprint cytology for intraoperative assessment of surgical margins and sentinel lymph nodes in oral squamous cell carcinoma patients using four different cytological stains. *Diagn Cytopathol.* 2020 Feb;48(2):101–10.
25. Karunagaran M, Murali P, Palaniappan V, Sivapathasundharam B. Expression and distribution pattern of podoplanin in oral submucous fibrosis with varying degrees of dysplasia – an immunohistochemical study [Internet]. Vol. 42, *Journal of Histotechnology*. 2019. p. 80–6. Available from: <http://dx.doi.org/10.1080/01478885.2019.1594543>
26. Sarode SC, Gondivkar S, Gadgil A, Sarode GS, Yuwanati M. Oral submucous fibrosis and heterogeneity in outcome measures: a critical viewpoint. *Future Oncol.* 2021 Jun;17(17):2123–6.
27. Raj Preeth D, Saravanan S, Shairam M, Selvakumar N, Selestina Raja I, Dhanasekaran A, et al. Bioactive Zinc(II) complex incorporated PCL/gelatin electrospun nanofiber enhanced bone tissue regeneration. *Eur J Pharm Sci.* 2021 May 1;160:105768.
28. Prithiviraj N, Yang GE, Thangavelu L, Yan J. Anticancer Compounds From Starfish Regenerating Tissues and Their Antioxidant Properties on Human Oral Epidermoid Carcinoma KB Cells. In: *PANCREAS. LIPPINCOTT WILLIAMS & WILKINS TWO COMMERCE SQ, 2001 MARKET ST, PHILADELPHIA ...*; 2020. p. 155–6.
29. Alaa E, Alaa M. Awareness, Perception and Behavior Regarding Coronavirus Disease 2019 Among a Group of Egyptian Dental Students: A Cross Sectional Study [Internet]. Vol. 8, *Al-Azhar Dental Journal for Girls*. 2021. p. 137–47. Available from:

<http://dx.doi.org/10.21608/adjg.2020.33294.1271>

30. COVID-19 and Ensuring Safe Cities and Safe Public Spaces for Women and Girls [Internet]. UN Women Ending Violence Against Women (EVAW) COVID-19 Briefs. 2020. Available from: <http://dx.doi.org/10.18356/0ddfc8bd-en>
31. Hu X, Yan H, Casey T, Wu C-H. Creating a safe haven during the crisis: How organizations can achieve deep compliance with COVID-19 safety measures in the hospitality industry [Internet]. Vol. 92, International Journal of Hospitality Management. 2021. p. 102662. Available from: <http://dx.doi.org/10.1016/j.ijhm.2020.102662>
32. Yan H, Hu X, Wu C-H. When and how can organizational punishment stop unethical pro-organizational behaviors in hospitality? [Internet]. Vol. 94, International Journal of Hospitality Management. 2021. p. 102811. Available from: <http://dx.doi.org/10.1016/j.ijhm.2020.102811>
33. Lakhan R, Agrawal A, Sharma M. Prevalence of Depression, Anxiety, and Stress during COVID-19 Pandemic [Internet]. Vol. 11, Journal of Neurosciences in Rural Practice. 2020. p. 519–25. Available from: <http://dx.doi.org/10.1055/s-0040-1716442>