

Review of: "Evaluating Fomite Risk of Brown Paper Bags Storing Personal Protective Equipment Exposed to SARS-CoV-2: A Quasi-Experimental Study"

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The paper is interesting in the sense that it addresses the risk of COVID-19 transmission through the re-use of disposable PPE items in the first pandemic waves and particularly their storage in paper bags. The study is quasi-experimental with « case » and control samples.

Although the experimental design is acceptable, the statistical data analyses are brief and do not address testing the significance of the difference between groups of PPE or samples (for example by a chi-square or Fisher Exact test). Assessing the overlapping of confidence intervals (by the way why not using exact Clopper-Pearson confidence intervals !) is not the good way in testing statistical hypotheses. In laboratory setting the authors, however, compared total viral counts between droplet and nebulized samples (Wilcoxon signed rank test). Generally, when comparing counts a log-transform is done prior to testing. Despite these caveats in data analyses and some limitations in study design, the work is « attractive », mainly from health-care workers' perspectives. It is, in fact, now well documented that HCW are among the highest exposed groups to COVID-19 and are at risk for several infection and reinfection events, even if they are vaccinated and any improvement in protection measure is welcome. One other important issue is that the study was performed during the first and second pandemic waves (May-October 2020), before the emergence of highly contagious variants of concern (VOC). It would be interesting to see if these data and findings are still valid for VOCs !