

Dermatological Publications from Nepalese Dermatologist Before and During the COVID-19 Pandemic Period: A Review

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Abstract

Introduction: The COVID-19 pandemic created a nation-wide lockdown with hospital services resorting only to the emergency sections. Dermatology out-patient was closed with majority of services being deferred for a later date or through online platform. Here, we try to find whether Nepalese dermatologists were contributing to sciences through research.

Methods: A Google Scholar search using certain key words to search for publications done by Nepalese dermatologist during the pandemic was done for year 2020-2021 described as pandemic period. Similar search was conducted for year 2018-2019 for the same time frame called as pre-pandemic. All the publications were analyzed using appropriate statistical methods.

Results: A total of 197 publications were retrieved for pandemic period as compared to only 106 published articles in the non-pandemic period. Among 197 publications, 81 (41.11%) were published in PubMed indexed journal as compared to only 40 (37.73%) publications out of 106 total publications during the earlier period. However, the increase in the number was not statistically significant.

Conclusion: An interest among Nepalese dermatologists for academic publications was noted during the pandemic period. This might be due to the proper use of time during the lockdown and closure of out-patient department.

Key words: COVID-19; Dermatology; Nepal; Pandemic; Publications; Research

INTRODUCTION

The World Health Organization declared the pandemic on 11th March 2020. Government of Nepal also announced nationwide lockdown which came in effect from 24th March 2020.¹ All of the hospital system were shut down except the very essentials. This included the closing of the out-patient services in most of the hospitals throughout the country. In almost all of the hospitals, dermatology OPD were closed and all services were provided either through emergency or by online consultation. With exception of few centers, majority of the consultant dermatologists had an enough free time because of the closure of these services. Patients and dermatology residents suffered in terms of care and education.² In some institutes,

even dermatology residents were involved in managing the emergency triage.³ So, we tried to explore if we Nepalese dermatologists made the best of our time contributing in research through academic paper publications.

Methodology

A Google Scholar search was conducted from the start of the pandemic for publication done by Nepalese dermatologist in any field related to dermatology using

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particular search words for year 2020-2021 described as pandemic period and the same time period prior to the pandemic from 2018-2019 described as pre-pandemic period for a total of 2 years. All of the publications by Nepalese dermatologist working in any Nepali centers were included in this study. The exclusion criteria included articles where Nepalese dermatologist not appearing as first, last or corresponding authors, research topics that are not related to dermatology and publications of any Nepalese dermatologist working outside of Nepal. All of the data were further classified according to the sex of the corresponding author, article type, journal origin and indexing type, number of co-authors, location of the institute and if any collaboration was done. All of the results were

stored in excel and further analysis was done using appropriate statistical methods wherever possible.

Results

A Google Scholar search resulted in a total of 197 publications published by Nepalese dermatologist during the pandemic period as compared to only 106 published articles in the non-pandemic period. Among these 81 (41.11%) were published in PubMed indexed journal as compared to 40 (37.73%) publications during the earlier period (Figure 1). Similarly, a total of 107 (54.31%) publications were published in local journals as compared to a total of 75 (70.75%) publications in the pre-pandemic period.

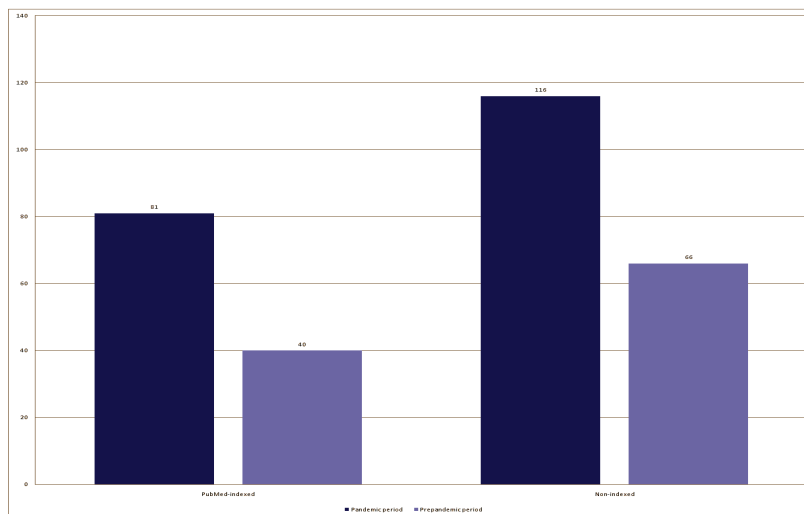


Figure 1: Bar-graph showing the comparison in the number of publications during these periods.

More male corresponding authors contributed to research compared to females 63% vs 37% in pandemic to 62% vs 28% in pre-pandemic period. According to the different categories of publications, original articles were the most common types of articles published in both pandemic and pre-pandemic period (44.16% vs 56.6%). Similarly, case reports constituted 36.54% of the total publications during the pandemic period vs

37.73% in the period earlier. However, no significant statistical differences could be derived among these results (Figure 2). But interestingly, a large number of systematic reviews were published during the pre-pandemic period as compared to the pandemic period that is 8 publications⁴⁻¹¹ as compared to only a single research during the pandemic period.¹²

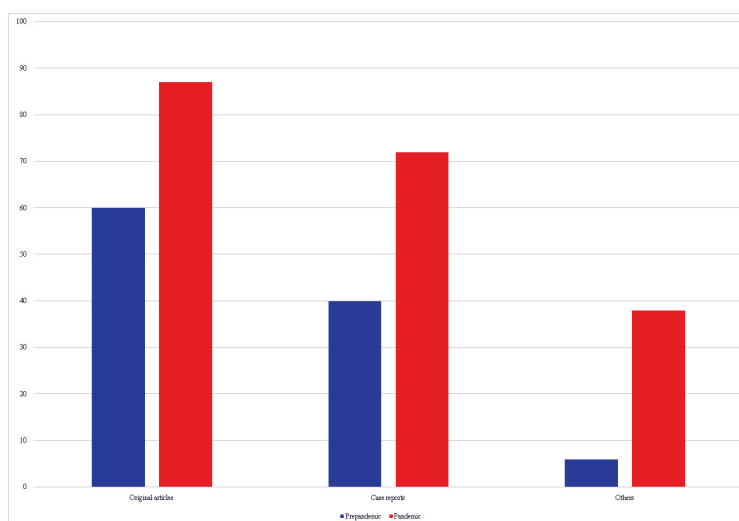


Figure 2: Bar-graph with comparison of different types of publications in two separate periods.

The topic of presentations were diverse in nature, however most of the publications seems to lack interest from the other researchers since majority of these publications did not receive any citation. Majority of publications from the pandemic period (84.26%) did not receive any citation as compared to pre-pandemic period where only half (50.94%) were cited in other research publications. There was not much change in the location of the researchers during these period as in both cases authors residing in capital were more involved in research works as compared to researchers working outside capital.

Among the medical colleges, BP Koirala institute of Health Sciences (BPKIHS) led the way with most number of publications during the pandemic period with 42 (21.31%) publications. On the other hand, Tribhuvan University Teaching Hospital (TUTH) had the most number of publications during the pre-pandemic with a total of 20 (17.90%) publications as compared to only 11 (5.5%) during the pandemic period. The three centers with most numbers of publications during the pre-pandemic period were TUTH (17.90%) , BPKIHS (14.15%), and National Academy of Medical Sciences (NAMS) with 12 (11.32%) publications. Similarly, during the pandemic period most of the papers originated from BPKIHS with 42(21.31%), Nepal Medical College(NMC) with a total of 27 (13.7%) publications and from College of Medical Sciences (CMS) with 22 (11.16%) papers. There was only 14 papers (7.10%) from NAMS. However, papers with most citations were published from authors in CMS where 55% of published works were cited from publications done during the pandemic and 100% of their work were cited from the pre-pandemic period. Among all of the published works, the most cited article was an original article on the dermoscopic features of pityriasis versicolor published by Mathur *et al.* which was from prior to the pandemic.¹³ A total of 17 publications were a collaborative work with authors from different institute during the pre-pandemic period which increased to 48 publications during the pandemic period which was not still statistically significant.

Discussion

The pandemic had a significant psychological and professional impact among the dermatologists. The dermatologists despite not being on the frontline shared the same level of anxiety and stress like other health care workers.^{14,15} The uncertainty which arose from the pandemic infused a significant level of stress

and anxiety to most of people including the Nepalese dermatologists. So, even with ample time provided the increased number of published works was not significant as compared to the pre-pandemic era. On a brighter side, there was a substantial rise in the total number of publications during the pandemic period. The number of PubMed indexed articles also increased during the pandemic period which shows a rising interest among both the academicians and clinicians for a better quality research work. This was particularly true with topics related to the pandemic itself. Case reports and commentaries made the bulk which was similar in our study.¹⁶

Female authors have been actively involved in publications despite the proportion. Multiple researches have highlighted the gender inequalities as more male researchers published their work during the pandemic which was not the case from Nepal.¹⁷⁻²¹ This study showed that there was no difference in the proportion of publications with regards to gender in both period. But despite the rise of number of academic publications during the pandemic period, no statistical differences could be derived on the basis of indexing of journal, origin of journals, citation numbers, site of research conducted and type of research articles. There was a steep increase in the number of publications during the pandemic which was also noted in our review search.²² There has been questions regarding the quality of research published during the pandemic despite the explosion in numbers.²³ It had been also seen that majority of the Nepalese publications of pandemic period did not get any citation.

Limitations

Google Scholar was used as the only search engine to look for publications. The search engine is rather not a library database. The search displays options are difficult to use and number of citation count may not be accurate in few instances. A PubMed search would have been better option but it would exclude many articles which were not included in PubMed.

Conclusion

A large number of publications has been done during the pandemic but seemed to lack interest for the broader audience. A need for more significant papers is important for internationally promotion of our fraternity and our dermatologists.

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