

DOI: <https://doi.org/10.33314/jnhrc.v18i2.2523>

# Medical Conference on a Complete Digital Platform in Nepal: A Paperless Experience

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## ABSTRACT

Medical conferences are held by different medical societies around the world on a regular basis. The society of Dermatologists, venereologists and leprologists of Nepal organized their 15th annual national conference in a complete digital platform making it the first paperless medical conference in Nepal. This conference initiated the use of digital platform for information dissemination and discouraged the use of paper. The mobile applications built for the conference provided information on the scientific programs and also created an unique identity of each registered delegate with an unique quick response code. The code was very valuable during registration and served as meal coupons too. This conference was our small effort towards creating an eco-friendly medical conference.

**Keywords:** Conference; dermatology; digital; eco-friendly; medical; mobile apps; paperless.

## INTRODUCTION

Digital health refers to the use of information and communication technologies in medicine and other health professions. This includes the use of wearable devices, mobile health, telehealth, health information technology and telemedicine. The use of digital technology in health is boundless.<sup>1</sup> But, how often does a digital technology gets integrated in a medical conferences? Here, we present the initiation of digital technology for the 15<sup>th</sup> annual national conference of Society of Dermatologists, Venereologists and Leprologists of Nepal (SODVELONCON 2019) completely displacing the paper based style for the first time in Nepal.

## INITIATION

It started with the development of a webpage with detail informations of the conference. It also hosted an online registration portal with a payment gateway. All the registrations and payments were done through an online process.

It is always difficult to predict the exact number of participants beforehand the conference. This, in turn creates a big paper waste from the excess printed materials in majority of conferences. So, we planned to go digital and cut-off this waste.

We also decided to work on the feasibility of making a

mobile application for the conference.

## MOBILE APPLICATION DEVELOPMENT

Till date, no medical conference in Nepal had used a mobile application. Availability of time and funds posed us a real challenge.

We also decided to provide an unique identity to each of the delegates. So, an unique quick response (QR) code was given to each delegates. The QR code would be imprinted in the identity card(ID) as well as synchronously aligned with the delegate's conference app.<sup>2</sup> QR codes often contained data for a locator, identifier, or tracker that points to a website or application. Another important aspect in any conference is the management of meal coupons. We developed an ingenious way to sort it out as well by developing an another mobile app which served as an identity scanner during registration and as a meal coupons during meal.

## FINAL PRODUCTS

After three months, two different apps were developed: one for the information of the conference named SODVELONCON 2019 and other for the scanning of QR code.

SODVELONCON 2019 app, compatible in both android and iOS platform provided each delegates with an unique username and password for log-in. The app contained all

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the program schedules, details on eminent speakers as well as the location of the venue guiding participants to the venue. The QR code in each app was dedicated to a single email address which was synchronized with the QR code printed in polyvinyl chloride (PVC) ID card. An abstract e-book was incorporated within the app with a downloadable link. Similarly, an online election portal was also created for an online election. An e-certificate was provided with a simple download upon attendance in the conference.

A QR code scanner app was incorporated in few mobile phones only. It was used solely for scanning the QR code during registration and in the food arena. A preset coding in QR code allocated each delegates with a prefixed number of meals during the conference without duplication.

Throughout the conference, a support portal provided within the app solved any technical problems encountered by the users.

## RESULTS

A total of 250 delegates were registered for the conference manually which was the same number retrieved through our online apps database. There were another 70 non-delegates who were either volunteers or representatives of pharmaceutical companies.

With regards to meals, discrepancy of only 5 entrées was found among the manual calculation by the hotel staffs as compared to our scanner app. This was quite significant where more than 1000 meals were provided during these two days conference.

An auto-generated link for e-certificate was sent to all the delegates which could be downloaded after completing few feedback survey questions.

Most of the delegates found the app to be informative and easy to use. They also welcomed e-abstract book. Surprisingly, this conference was more economical than previously conducted ones in a traditional paper based methods. There was no waste created with this digital initiative. More importantly, the same app could be used for the future conferences with slight modification, providing eco-friendly initiative of reusability and reduction of waste.<sup>3</sup>

There were some drawbacks being digital. Few delegates favored the traditional abstract books and printed scheduled. Some of the delegate were not so cooperative regarding the scanning process during registration and in the food arena. Few problems arose during registration process and e-certificate distribution, but was sorted out with help of information technology (IT) experts.

There are now questions being raised on the usefulness of in-person conference as compared to the e-conferences with regard to the carbon footprints it leaves behind from the travel of delegates and waste it creates.<sup>4,5</sup> A solution for the environmental friendly approach could be programs with a digital initiation. There are many conferences which are being conducted with extra focus on digital aspect, particularly in diabetes.<sup>6-8</sup>

## CONCLUSIONS

Medical conference mobile app is an useful tool for the conference organizing committee. The app can be handy for the scientific committee of SODVELONCON 2019 where any minor changes could be made either in the e-abstract book or schedule even in the eleventh hour. The QR code scanner solved the problem regarding double entry during registration and meals.

It is always difficult to start with a new initiative, but enthusiasm of delegates was enormous for the digital nature of the conference which in turn was very exciting for the organizing committee. We hope our conference will pave way to much smarter digital and eco-friendly nature of medical conference in Nepal in the future.

## CONFLICT OF INTEREST

SODVELONCON 2019 was organized by Department of Dermatology & Venereology, National Academy of Medical Sciences, Bir Hospital.

## ACKNOWLEDGEMENTS

We would like to acknowledge the organizing committee members namely Dr Laila Lama, Dr Rushma Shrestha, Dr Farooque A Mikarani, resident doctors and the energetic team of Bitpoint Nepal namely Bikram Aryal and Gorakh Raj Joshi for their enormous support and great enthusiasm. Last but not the least, my scientific committee team deserves a lot of appreciation namely Dr Yogesh Poudyal, Dr Anup Bastola, Dr Badri Chapagai, Dr Rabindra Baskota, Dr Pratima Poudel and Dr Nashwa Ahmed.

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