Contribution ID: **49** Type: **Poster**

Breaking COVID-19 Transmission: Leveraging on Telemedicine for Cancer Management in Indonesia

Introduction

The development of the application of technology in health services is experiencing rapid development. In Indonesia with a huge millennial generation, adoption of digital technology is progressing rapidly. The advancement is pushing the boundaries and making telemedicine low cost with high impact. Especially during this COVID-19 pandemic, utilization of technology to remove conventional face to face interaction is necessary. Specifically in cancer management telemedicine has been utilized for some time in Indonesia. Telemedicine has been used to connect different radiotherapy centres from various islands throughout Indonesia to discuss difficult cases, sharing of skills and knowledge, informing best practice, updating practice guidelines, and so on.

Recently during this COVID-19 pandemic, a new platform for communication between doctors and patients was developed. This was developed with aim to reduce unnecessary hospital visit by cancer patients thus reducing the COVID-19 transmission. This kind of teleconsultation platform is also meant to assist cancer patients who like to seek advice or do routine follow up after treatment with their oncologists without the need to be physically travel to the hospital. Various methods have been developed to find best solution to safely, securely, and conveniently connecting doctor and patient. The development of such technology is elaborated in brief below.

Method

The developed teleconsultation was in the form of two-way video communication which was thought to be an effective media. The system enables a doctor to provide services to his / her patients via video conference. The system allows patients to do appointment with a particular oncologist on their allocated designated time. The system will automatically mark the appointment and provide a consultation link in the doctor's digital calendar. The patient initial data was keyed in by the patient into the system to provide the doctor with some general information about the condition to be discussed. A reminder will be automatically sent both to the patients and doctors around 10 minutes before the consultation begins.

During the teleconsultation, the doctor is able to interact with the patient virtually, though physical examination is unable to be performed. The key summary of the findings can be noted by the doctor into the system, which will become the cloud consultation medical record. The doctor can also access the past consultation history through the cloud medical record. Whenever, a procedure is necessary, for instance biopsy, chemotherapy, surgery, or radiotherapy, then the doctor will consult the patients on how to safely access treatment in the hospital. The doctor note can be sent to the treating hospital after the consultation as the patient wish to enable a prompt procedure during the patients'visit.

Result

The development of telemedicine in the form of tele-consultations for cancer management is a relatively new model in Indonesia. This teleconsultation tool specifically developed to assist cancer management has shown some positive impact. This system is particularly very useful to enable consultations of patients residing in rural areas with limited access of health services, particularly cancer services. This system provide great satisfaction because patients can access the oncologists early in the course of their disease, some even when there was just still a small lump. Furthermore, the cost of teleconsultation is exceedingly low compared to standard consultation in the clinic.

Those patients that were deemed necessary to undergo further clinical examination were then suggested to come to the clinics or hospitals. Some patients that were thought to have benign lesion can be consulted to delay their visit, but the alarming signs and symptoms of more severe condition is informed to the patients by the oncologist . Though, generally this system works well, nevertheless, some technical problems existed. The availability of hardware, network and connection are some of the technical problems. However, they seem able to be solved in most cases as Indonesia has 4G network in most of its archipelagos. Furthermore with digital transformation is happening now in Indonesia, with lots of daily activities have gone digital from market place, ride hailing, food order, and so on, the adoption of teleconsultation is soon become the norm too.

Conclusion

This result showed a high possibility that by applying telemedicine in cancer setting can have impact in continuation of cancer services in Indonesia, while preventing unnecessary hospital visit. This will be able to help slow down the COVID-19 transmission. However, some further adjustment is necessary to tweak the system and provide even better services for as many cancer patients as possible in Indonesia.

Country or Int. Organization

Indonesia

Affiliation

Faculty of Medicine, Universitas Indonesia –Department of Radiation Oncology, Dr. Cipto Mangunkusumo National General Hospital –Jakarta, Indonesia

Primary authors: Mr HANDOKO, Handoko (Faculty of Medicine, Universitas Indonesia –Department of Radiation Oncology, Dr. Cipto Mangunkusumo National General Hospital –Jakarta, Indonesia); Mr NICHOLAS, Nicholas (Faculty of Medicine, Universitas Indonesia –Department of Radiation Oncology, Dr. Cipto Mangunkusumo National General Hospital –Jakarta, Indonesia); Mr NURYADI, Endang (Faculty of Medicine, Universitas Indonesia –Department of Radiation Oncology, Dr. Cipto Mangunkusumo National General Hospital –Jakarta, Indonesia); Mr HANDOYO, Denny (MRCCC Siloam Hospital –Jakarta, Indonesia); Prof. GONDHOWIARDJO, Soehartati A (Faculty of Medicine, Universitas Indonesia –Department of Radiation Oncology, Dr. Cipto Mangunkusumo National General Hospital –Jakarta, Indonesia)

Presenters: Mr HANDOKO, Handoko (Faculty of Medicine, Universitas Indonesia –Department of Radiation Oncology, Dr. Cipto Mangunkusumo National General Hospital –Jakarta, Indonesia); Mr NURYADI, Endang (Faculty of Medicine, Universitas Indonesia –Department of Radiation Oncology, Dr. Cipto Mangunkusumo National General Hospital –Jakarta, Indonesia); Prof. GONDHOWIARDJO, Soehartati A (Faculty of Medicine, Universitas Indonesia –Department of Radiation Oncology, Dr. Cipto Mangunkusumo National General Hospital –Jakarta, Indonesia)

Session Classification: Paper Session 3: Health Economics and Health Systems Research