



TELEDERMATOLOGY

MOBILE TELEDERMATOLOGY APP FOR DERMATOLOGICAL CARE IN RURAL NEPAL

D P Shrestha⁽¹⁾

Institute Of Medicine, Department Of Dermatology, Kathmandu, Nepal⁽¹⁾

Introduction: Skin diseases are among the most common health problems in Nepal. Skin care is not available in the rural and remote areas. There is rapid development of wireless internet and use of mobile phones in Nepal and other developing countries. Mobile phones now days have cameras with high resolution and data transmission capability. In our previous study, there was an overall concordance of 88% between the diagnoses of skin diseases by mobile teledermatology and face to face consultation.

Objective: To explore the feasibility of providing skin care in rural areas of Nepal via mobile teledermatology app.

Materials and methods: A mobile application, DCRN (Dermatological Care in Rural Nepal) was developed. Using this app, a general practitioner working in a primary health care centre in a far off area, sees the patient, and sends online photographs and description of skin lesions, to a dermatologist in Kathmandu, who in real time formulates a diagnosis and treatment, and sends to the general practitioner. The patient receives the treatment as advised by the dermatologist from the general practitioner. The app is double encrypted.

Results: Altogether 201 mobile teledermatology consultations were provided, using DCRN app, in a period of 6 months, to 6 primary health care centres/district hospitals in 6 districts of Nepal. The 5 most common skin disease categories diagnosed were eczemas, pigmentation disorders, fungal infections, acne and pyodermas. The app was easy to use, the photographs were of good quality and consultation could be provided in real time. The general practitioners found it very useful and the patients were satisfied with teledermatology consultation.

Conclusions: Mobile teledermatology is feasible, affordable and effective way of providing skin care in rural Nepal.

