



# Effects of Skin Care Self-Management in Lung Cancer Patients with Skin Toxicity during Targeted Therapy

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**Abstract summary.** We expect the findings of this study will draw attendees' attention on the skin care self-management of patients with non-small cell lung cancer who suffered from skin toxicity during targeted therapy.

**Introduction.** Nearly 100% of those receiving EGFR-tyrosine kinase inhibitor will experiencing skin toxicities. These skin reactions cannot be avoided but can be controlled. Developing skin care self-management is critical in alleviating severity of skin toxicity and avoiding dose-reduce or discontinued of EGFR-tyrosine kinase inhibitor.

**Objectives.** The purpose is explore the effect of skin care self-management on severity of skin toxicity, anxiety, depression, social function, skin care self- efficacy and quality of life for patients with advanced non-small cell lung cancer suffered from skin toxicity during targeted therapy.

**Methods.** This pilot study is a two-group pretest-posttest longitudinal study. Data were collected at pre-targeted therapy, 1 and 3months after the targeted therapy prospectively. Eighty-five patients were randomly assigned with 40 patients in the experimental group and 45 patients in the control group from Nov 2017 to July 2018.

**Results.** The score of depression was significantly lower in the experimental group than it was in the control group at one month ( $p < .05$ ) after pretest. The score of skin care self-efficacy and social function was significantly higher in the experimental group than it

was in the control group at one month ( $p < .001$ ) and three months ( $p < .001$ ) after pretest. After the intervention, significant improvements were found in the experimental group in quality of life ( $p < .05$ ). There were no difference between groups in severity of skin toxicity and avoiding dose-reduce or discontinued of EGFR-tyrosine kinase inhibitor after pretest.

**Conclusion.** Early identification of skin toxicity during targeted therapy is useful to conceptualize the impact of skin toxicity on a health trajectory, as this provides a comprehensive means to link a patient's past, present, and projected future health condition and places the patient's health within a specific context. The skin care self-management program is developed based on Self-Efficacy Theory and Causal Model of Behavior Change, the contents include knowledge about target therapy, skin cleansing (scalp, face, body), skin hydration and photo protection, fingers and toes protection, oral care, diarrhea managing, relaxation technique, breathing control methods and maintaining a healthy lifestyle. We suggest healthcare professionals to apply this program to advanced non-small cell lung cancer patients with skin toxicity during targeted therapy.

**Reference.** Bourbeau, J. (2008). Clinical decision processes and patient engagement in self-management. *Disease Management Health Outcomes*, 16(5), 327-333.

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