Reliability, validity and feasibility of the Thai translation (Thai G8) of the G8 screening tool in geriatric oncology

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**Background:** A comprehensive geriatric assessment (CGA) is recommended method in determine the medical, psychological, and functional capabilities of elderly patients but it is a time-consuming tool to use in clinical practice. G8 screening tool is a quick and simple tool to screen elderly cancer patients. The aims of this study were to identify reliability, validity and feasibility of the Thai translation (Thai G8), including sensitivity, specificity and optimal cutoff point score Thai G8.

**Methods:** Thai G8 was translated from G8 tool and evaluated for content validity. The reliability was performed in 2 times, 2 weeks apart. Sensitivity and specificity were evaluated in new diagnosed patients who received chemotherapy comparing who received standard and adjusted dose. Feasibility was done by surveyed in doctors and nurses.

**Results:** Thai G8 had excellent content validity (content validity index was 1). 76 elderly patients were enrolled. Time-consuming for assessment were 5 minutes. Mean score of Thai G8 was 12 (4.5-17). 74% of patients had score ≤ 14 which defined as abnormal. Mainly causes of lowering score were malnutrition, low BMI and polypharmacy. The reliability was high (the intra-class correlation coefficient was 0.97). 20 newly diagnosed patients were evaluated for sensitivity and specificity. At cutoff point ≤ 14, sensitivity was 66.7% and specificity was 35.7%. But at cutoff point < 11, Thai G8 showed higher specificity (85.7%). 34% of patients had score < 11. For feasibility, 82.6% of participants accepted Thai G8 feasibly in using Thai G8 as a screening tool in elderly patient and helped in decision making for treatment.

**Conclusions:** Thai G8 had excellent reliability, validity and feasibility. Three-fourth of Thai elderly patients had abnormal score in Thai G8 and required CGA directed interventions. The adjusted cut-off point score < 11, showed higher specificity in chemotherapy intolerability. Most of patients had problems in malnutrition and polypharmacy.