

Progress Test as Formative Evaluation in Teaching Clinical Hematology

Arnuparp Lekhakula

Division of Hematology, Department of Internal Medicine,

Faculty of Medicine, Prince of Songkla University, Haadyai, Songkhla

Objectives : To assess the effectiveness of progress test as a formative evaluation about students' knowledge in teaching Clinical Hematology and to determine the predictive validity of progress test on summative examination performance

Design : A prospective descriptive study

Setting : Department of Internal Medicine, Faculty of Medicine, Prince of Songkla University

Subjects : 121 fourth-year medical students of academic year 1999

Measurement : The multiple-choice test of 35 items drawn from all objectives of Clinical Hematology is administered to 39-43 students four times per 12-week rotation.

Results : The Progress test demonstrated strong construct validity with highly significant statistical tests of changes of scores within rotation on successive administration (Wilk's lambda = .097, $p=0$). The predictive validity of the progress test on final examination performance increased monotonically from a correlation of .22 ($p=.015$), .29 ($p=.002$), .41 ($p=0$) to .65 ($p=0$) for the first test to the fourth test respectively. The accuracy on determination for summative purpose was 92% with kappa's statistic for agreement of .605 ($p=0$)

Conclusions : The progress test seems to provide useful formative evaluation about students' growth in learning Clinical Hematology. Additional benefits are providing individual feedback and identification of students who have persistent learning problems. It also gives high predictive validity, accuracy and agreement on summative knowledge achievement.