

Studi pemanfaatan dan keamanan kombinasi metformin dengan ekstrak Campuran ANDROGRAPHIS PANICULATA dan SYZYGIIUM PLYNTHUM untuk pengobatan diabetes Mellitus= Preliminary Study

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20406252&lokasi=lokal>

Abstrak

Background: Use of *Andrographis paniculata* and *Syzygium polyanthum* have been used widely, on the contrary the benefit and safety have not been scientifically proven. This study aimed to overview and analyze benefit and safety the extract of *Andrographis paniculata* and *Syzygium polyanthum* mixture to decrease blood glucose concentration. **Methods:** It was an experiment study among intervention and control group by a block random sampling with pre-post test design. Data were collected by questionnaires and also data among intervention group, therapy of conventional antidiabetic of metformin in combination to the herbal extract of *Andrographis paniculata* and *Syzygium polyanthum* mixture (1:1) with among control group, of metformin. A total samples of 30 diabetes Mellitus respondents were selected among males or females, aged 40-60 years with blood glucose concentration of 140-220 mg/dl, has no history of hypertension or has mild hypertension. The samples were divided in 2 groups composed of 15 persons among intervention and 15 persons among control groups, respectively. The intervention group was given metformin 500 mg once a day in the morning taken 15 minutes after breakfast in combination to the extract of *Andrographis paniculata* and *Syzygium polyanthum* mixture (1:1) of 700 mg. The control group was given metformin 500 mg once a day in the morning taken 15 minutes after breakfast in combination to placebo. The duration of therapy was 4 weeks. Data were taken by anamnesis, physical diagnosis, laboratory examination of fasting blood glucose and Oral Glucose tolerance test (OGTT) in every week. Meanwhile for examination side effect on liver and renal function test in every 2 (two) weeks. The data were analyzed descriptively and tested. **Results:** Results showed that the intervention group given metformin in combination to the extract of *Andrographis paniculata* and *Syzygium polyanthum* mixture (1:1) of 700 mg could significantly decrease fasting blood glucose but could not significantly decrease OGTT in comparison to control group given metformin with placebo. There were no side effects on liver and kidney function test in the therapy of herbal extract of *Andrographis paniculata* and *Syzygium polyanthum* mixture in duration of 4 weeks. It concluded that the herbal of *Andrographis paniculata* and *Syzygium polyanthum* mixture is safe.