



Rudd speaks about the tests during a meeting with media representatives.

Genetic photo-fits to battle diseases

> Genome science gives a new edge to medical diagnostics

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KUALA LUMPUR: Science and medical journalists were given a snapshot of the newest cutting-age diagnostic tool with the launch of a range of comprehensive genetic-screening services by Malaysian Genomics Resource Centre Berhad (MGRC).

MGRC also unveiled an all-in-one test that could profile a multitude of infectious diseases, on Tuesday.

Genetic screening helps to identify the biological photo-fit and make-up of the "enemy" within, and helps doctors find better ways of managing and treating diseases - as the modern "battle-charge" against diseases trenches down to a genetic-level firefight.

Genetic screening examines a person's genome for known variation markers, some of which are the cause of illnesses, while others carry a lifetime risk for contracting a genetic condition. An abnormality in a human genome can predispose people to various types of diseases, such as cancer, autism, Alzheimer's disease and Down's syndrome.

The genetic screening services will be made available through hospitals and other primary care facilities. Doctors will be able to use these services for early identification of predisposing conditions to inherited diseases, co-related risk factors and identify the drugs that might have side-effects in certain people.

With the help of geneticists, doctors will better understand their patient's health and, clinicians will be able to prescribe suitable and more effective drugs at optimal dosages based on the patient's genetic make-up.

Speaking to journalists, MGRC chief scientific officer Dr Stephen Rudd said: "Our tests are designed to correlate to both inherited and infectious diseases that commonly affect Asian communities and are more relevant to the Malaysian population."

He also said "predictive medicine" is possible through genetic screening and genomics is rapidly moving healthcare in the direction of "personalised medicine".

Besides tests for genetic diseases, MGRC also offers "definitive tests" for a slate of infectious diseases - streamlining the rapid identification and treatment of disease-causing pathogens in humans.

For an example, current diagnostic tests for dengue are "reliable" approximately five days after onset of symptoms and only when antibodies are present in the blood. MGRC's rapid genetic marker-based test - which does not depend on the presence of antibodies, will enable earlier detection.

To a suggestion by *theSun* that genetic screening could have a major impact in the future of insurance underwriting - as it can be used by insurance agencies to disqualify a potential policy buyer and a new interpretation will be needed to define the term "pre-existing illnesses" - Rudd said insurance companies are not supposed to discriminate anyone and that there are regulations governing the terms and policies of insurance underwriting.

The following genetic tests will be made available in hospitals in the country: Genome sequencing, basic to extensive genotyping, perinatal genotyping, pre-conception genetic tests and infectious disease tests.