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TWO INSTITUTIONS ESTABLISH KIDNEY RESEARCH FUND TO FIND CURE FOR DIABETES

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Providing treatment for kidney disease patients and subsidising their treatment do not address the underlying problem. The Kidney Dialysis Foundation (KDF) set up a kidney research fund with NUS in 2007 and sponsored gene and cell therapy research on diabetes in the hope of finding a fundamental cure for the disease.

The research project has completed testing on rats and will soon proceed to trials on dogs. If successful, it will be tested on human subjects, and we can look forward to the day when there is a cure for diabetes.

March is World Kidney Month and KDF held an activity outside Tiong Bahru Plaza yesterday to encourage people to lead healthy lifestyles and to raise funds.

KDF chairman Dr Gordon Ku revealed the progress of the research project when interviewed.

KDF CEO Foo Pek Hong said that the foundation has committed to sponsoring \$350,000 each year to cover research costs over the next five years.

However, KDF stressed that its main objective remains to help patients. Its expenditure on research comprises only 5% of total expenditures. In addition, during fund-raising, donors can also choose to have their donations spent on patient treatment or on research.

The gene and cell therapy research project sponsored by KDF is headed by leading international transplant surgeon Professor Sir Roy Calne. He is a professor at Cambridge University and visiting professor at the NUS Yong Loo Lin School of Medicine.

Diabetes patients experience high blood sugar because their bodies fail to produce sufficient amounts of insulin. High blood sugar over long periods will lead to renal failure and problems with other parts of the body.

Dr Ku said that half of new cases that require dialysis are related to diabetes. "If we can cure diabetes, then we will be able to cut down the number of kidney patients."

The research group led by Sir Roy Calne comes from institutions including NUS, National Cancer Centre and Cambridge University. One research team uses cord cells to cultivate cells that can produce insulin. When such cells are injected into rats with diabetes, this can lower their blood sugar and improve their condition.

Another research team uses cells in the bone marrow to produce insulin. The research team has successfully used this therapy to treat rats with diabetes.

Dr Gordon Ku said that the team will conduct trials on dogs in a few months. If successful, the procedure will be tested on human subjects.

KDF needs to raise \$4 million each year. It hopes to raise \$60,000 from activities held during World Kidney Month and has already raised \$20,000 as of yesterday morning. In addition, a number of people have already committed to adopting a healthy lifestyle through the activities organised. A total of 6,680 have committed to healthy eating, 4,450 to drinking eight glasses of water a day and another 5,624 to exercising daily.

KDF has no plans to increase its number of dialysis centres as the operating costs of such centres are high. Dr Ku said that they hope to promote peritoneal dialysis to allow patients to carry out dialysis by themselves at home. Currently, KDF has one peritoneal dialysis centre and three haemodialysis centres.

KDF currently treats 267 patients, who mainly come from the lowest 10% of income earners. The cost of haemodialysis is \$1,820 per month and the cost of peritoneal dialysis is between \$1,150 and \$2,200 per month (depending on the dialysis fluid used).