Diabetes mellitus has become a serious health concern in Kenya. This condition cannot be cured but can be controlled and managed successfully using diet, medication, exercise and adequate patient education and awareness. Studies have shown that exercise is the single most important factor for successful management of Type I and Type 2 diabetes. The study sought to investigate the use of exercise therapy in the management of diabetes by adult diabetic patients at Kenyatta National Hospital (KNH). This was done by assessing the patients' level of physical activity, their knowledge on exercise in managing diabetes, factors associated with the patients' participation in physical activity (PA) and the relationship between the diabetics PA levels and their age, gender, duration of the condition, type of diabetes and knowledge on exercise. The study design was descriptive survey. This was ideal to obtain information that best described diabetics' perception, awareness, attitude, practice and behaviour towards exercise. The study was conducted at KNH targeting diabetic patients seeking treatment at the diabetes clinic. It involved 140 patients who were selected using the simple random sampling technique. A questionnaire was used to collect data. The data were analysed using the Statistical Package for Social Sciences (SPSS) version 11.5. Descriptive statistics such as means, frequencies and percentages were used to present the findings. Chi-square measure of associations and influence to predict relationships was used to analyse data at level of significance of .05. The assessment of PA levels was based on the ratio of exercise metabolic rate (MET). Findings indicated that a large group 64 (46.1 %) had low level of physical activity when compared to recommendations for achieving health-related benefits of exercise in managing diabetes. It was also found that many of the patients, 64 (46.0%) had average level of knowledge on exercise and diabetes with 63 (45.3%) of them having sufficient knowledge on exercise for management of diabetes. Factors that were greatly associated with participation in physical activity included the perception that daily chores at home and at work constituted sufficient activity (40.3%), lack of knowledge on the kinds of exercises to perform (38.1%) and presence of discomfort due to the disease (37.4%). Testing of the hypotheses yielded conclusions that the patients' age, type of diabetes, duration of diabetes and knowledge on exercise had significant relationships with the patients' physical activity levels while gender had no significant relationship with the physical activity levels. It was also concluded that the diabetics' physical activity level, though seen as sufficient to a good percentage of diabetics, may not be sustainable. This is because physical activities are not consistent in occurrence due to constant changes in active practice at different seasons and state of diabetes control. This may deter the effectiveness of exercise therapy in this population. The diabetics also portrayed sufficient knowledge on exercise as taught at the clinic but lacked in fundamental instruction, supervision and specific exercise prescription resulting in difficulty and contraindications. The study recommends that an exercise prescription manual, for both recreational and clinical practice in managing diabetes in Kenya, be formulated and strictly followed. Diabetics' exercise constraint, be addressed by the involved sectors to motivate diabetics to exercise more. As this was a baseline study, more research should be done to strengthen and address finer issues in exercise therapy such as complications of diabetes.