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Investigation of risk factors of digestive system cancer

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The digestive system cancer, from the esophagus to the rectum, remains one of the most common types of cancer and causes of death worldwide in both men and women. A case-control study was conducted in Radiation and Isotopes Centre Khartoum RICK targeting the digestive system cancer patients who came to get treatment or follow-up during 2009. A total of 200 digestive system cancer patients and 200 controlled cases were interviewed using purposively designed questionnaires. The objective of this research is to investigate how the logistic regression methods are able to give improved prediction of risk factors of digestive system cancer. Logistic regression have been used for modeling the probability that a person developed digestive system cancer as a function of age, gender, tribe, height, weight or addressed as states or region, blood group type, cancer type, cancer stage, canned food, spicy food. It is also used as a function of diabetic, hypertensive, AIDS, jaundice with type (HA, HB and HC), anemia, regular tab, any digestive surgery and past history of digestive system disease and cancer in the patients family, gastroesophageal reflux, endoscopy, achalasia disease, gallstone and cholecystitis of the gallbladder, gallbladder polyps, chronic typhoid, chronic pancreatitis, heartburn, a persistent malaria, *Helicobacter pylori* infection and hypertrophic gastropathy, schistosomiasis, polyps, ulcerative colitis, Crohn disease, inflammatory bowel disease and sigmoidoscopy, smoking, shaisha, snuff, consumption of alcohol. Also the time period for each of that, drinking very hot liquids, physical activities, herbs used for treatment and lastly accessibility to RICK and Khartoum were considered. This research has shown that the digestive surgery, achalasia disease, inflammatory bowel disease, viral hepatitis type, schistosomiasis, herbs used for treatment and accessibility to RICK & Khartoum are significantly increasing the risk of digestive system cancer. The public awareness of this fatal disease must develop, to help in early detection of cancer and may decrease the mortality and ultimately will increase the probability of survival.

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