Dogs can be trained to sniff out certain cancers, people at risk of a diabetic coma, and children with malaria, just by smelling their socks, researchers said on Monday.

According to findings presented at the annual meeting of the American Society of Tropical Medicine and Hygiene in New Orleans, dogs were trained to sniff out malarial parasites in African children who tested positive for the mosquito-borne disease, but did not have a fever or other outward symptoms. Malaria kills some 445,000 people worldwide each year.

"Sniffer dogs could help in diagnosis of people who don't show any symptoms," said co-author James Logan.

A total of 175 sock samples were tested, including 30 malaria-positive children in The Gambia and 145 from uninfected children. Dogs were able to identify 70% of the malaria-infected samples. They were also able to identify 90% of the samples without malaria parasites.