The majority of the numerous fish parasites are harmless to man and many domestic animals because when eaten with their fish hosts, they are digested. However, some of the fish parasites with larval stages in freshwater or marine teleosts have zoonotic potential if eaten raw or partially cooked. These are usually parasites, which have a piscivorous mammalian carnivore as their normal final host and are able to infect man because of the low host specificity of the adult stage. The major groups of fish parasite that are known as potentially dangerous pathogens of man belong to the helminth groups cestoda, trematoda, nematoda and rarely acanthocephala. However, bacterial and viral disease of man transmitted through fish are not uncommon. Toxic substances, metals and insecticides used to control human diseases in aquatic environments may accumulate in fish in polluted waters at such levels as to constitute a health risk to the consumer. Other health problems associated with fish arise from its perishable nature for example, in adequate handling, processing and storage, which may lead to the accumulation of microbes enhancing the risk of food poisoning. The aquatic environment in Africa constitutes a breeding habitat to several vectors of human diseases such as mosquitoes, snails and black flies. This paper reviews the role played by fish in transmitting diseases to humans as well as the importance of the aquatic environments in the transmission of human diseases such as Malaria, Schistosomiasis and onchocerciasis.