Symptoms of Breast Cancer – An Analysis Using Induced Fuzzy Cognitive Maps (IFCMS)

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Abstract

Cancer is a disease in which cells become abnormal and form more cells in an uncontrolled way. With breast cancer, the cancer begins in the tissues that make up the breasts. The cancer cells may form a mass called a tumor. (Note: Not all tumors are cancer.) They may also invade nearby tissue and spread to lymph nodes and other parts of the body. The most common types of breast cancer are: Ductal carcinoma – Cancer that begins in the ducts and grows into surrounding tissues. About 8 in 10 breast cancers are this type. Lobular carcinoma (LAH-byuh-luhr KAR-sih-NOH-muh) – Cancer that begins in lobules and grows into surrounding tissues. About 1 in 10 breast cancers are this type. Hence, this research investigates the most contributing / impactful factor of symptoms of breast cancer using Induced Fuzzy Cognitive Maps (IFCMs). IFCMs are a fuzzy-graph modeling approach based on expert's opinion. This is the non-statistical approach to study the problems with imprecise information. In the current study, Section 1 introduction about cancer. Section 2 overviews the Fuzzy Cognitive Maps theory, and its influence. Section 3 explains the Algorithmic approach of IFCM models. Section 4 discusses the components (attributes) symptoms of breast cancer and implementation of IFCM model and Section5 reveals the conclusion of the problem.