

Hypotheses- quantitative analysis

Business



Hypothesis Hypothesis Hypothesis is an explanation accepted provisionally, to interpret certain phenomena or events and give guidance in making further investigations. However, it must be able to undergo refutation and be proven to be either correct or wrong. In addition, the hypothesis is said to be corroborated or verified if it is not refuted by facts. Hypothesis is often used in healthcare institutions by physicians as a method of statistical inference. As a result, it helps them to carryout testing procedures and understands the basic concepts for making sound opinion and decisions on presented results (Heathfield, 1998).

Healthcare is a discipline that is intensely driven by data that contain health information of a particular patient. However, in order to improve the health outcomes of a patient, hypothesis is applied as a method of statistical inference. Data is analyzed by physicians and then undergoes through cognitive processes such as the hypothetico-deductive approach. This approach involves various diagnostic reasoning where the medical experts first generate diagnostic hypotheses. They then make some data collection in order to refute or confirm their hypotheses. In addition, physicians may use a backward or forward reasoning. However, the backward reasoning, which involves working backward from the hypothesis, is different from forward reasoning. This is because medical experts depend on a wide set of heuristics to analyze the available data and make sound decisions (Heathfield, 1998).

In the field of health information technology, hypothesis is used to obtain rational solutions through a statistical testing procedure. The procedure may involve the use of specialized statistical software and computers that consist of extensive help guides (Heathfield, 1998). However, in the testing

<https://assignbuster.com/hypotheses-quantitative-analysis/>

procedure there is formulation of a statistical hypothesis. In addition, a sample data is used to determine the validity of the statistical hypothesis being formulated.

In conclusion, hypothesis is a crucial statistical method of interpreting certain phenomena or events and giving guidance in making further investigations.

Healthcare institutions widely use hypothesis in improving the health outcomes of their patients. In most cases, the physicians use the hypothetico-deductive approach during the diagnostic reasoning and use the collected data to either confirm or refute their hypothesis.

Reference

Heathfield, H., Pitty, D., & Hanka, R. (1998). Evaluating Information Technology in Health Care: Barriers and Challenges. *BMJ: British Medical Journal*, 316 (7149) 1959-1961.