

Descriptive statistics



Descriptive Statistics As far as this case study and its level of promise is concerned, it is worthwhile to mention the fact that mean value of 10.75 were in this research could be considered as appropriate because it has increased after last entry of 45 weeks. However, if you eliminate this entry the mean of 11 patients in the same study will be 7.64 weeks, which is considerably low from mean of 12 patients. For instance, the standard deviation will also be affected significantly of 11 patients if we eradicate last entry. In simple words, the results are not accurate because the last patient's survival of 45 weeks is an exceptional entry that has alone a considerable impact on measures of central tendency in this study. Recall that the standard deviation defines an area below and above the mean about which it is expected that a majority of the scores will fall. The researchers; therefore, would be required to submit another set of results on 12 new entries to estimate the mean and central tendency measures. Additional money to researchers will then be granted if they come up with satisfactory results. Research Hypothesis Null Hypothesis: $H_0 - \mu = 9.6$ Alternative Hypothesis: $H_a = \mu > 10$ The original claim is that the mean number of weeks that a prostate cancer patient lives after receiving a confirmed diagnosis of being in stage 4 is 9.6. Whereas, the new case study considers that it is above 9.6; therefore, there is need to conduct a statistical test of single average. Test Statistic Variables The independent variables include the age of cancer patients, financial situation of participants etc. The dependent variables may include medical checkups and patients' personal care. Selection, Problems and Ethical Issues The cancer patients in stage 4 will be selected randomly without identifying their forecasted survival life in weeks by doctors and medical representatives.

Indeed, this is an attempt to avert any possibility of biases in the study. The researchers may encounter problems such as participants' lack of interest in becoming part of pilot study. In addition, the possibility of some fake responses (despite mutual consent and pledge of confidentiality) about personal life, any financial issues or what have to cancer could adversely impact on research goals. Indeed, the treatment for diseases like Cancer is quite expensive; therefore, the financial status also plays a key role in determining diagnose checkups for personal care and continuous fulfillment of medical requirements (Bella et al, 1997). The experimental group (prostate cancer patients in stage 4) will be manipulated by giving new cancer treatment to smoothly conduct research process; however, the control group will also consist of stage 4 patients but they will not be given new treatment to compare the differences in survival results of patients of two groups (Borrel et al, 1998). References Michel Bolla et al (1997). Improved survival in patients with locally advanced prostate cancer treated with Radiotherapy and Goserelin. The New England Journal of Medicine, Vol. 337, No. 5, pp. 295-300 Borre1, M., BV Offersen, B. Nerstr0m and J. Overgaard (1998) Microvessel density predicts survival in prostate cancer patients subjected to watchful waiting. British Journal of Cancer, Vol. 78(7), pp. 940-944