

The effectiveness of research methodology course to health service researchers in Kota Bharu district, Kelantan

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ABSTRACT

Introduction: Research Methodology is a systematic approach in conducting scientific investigations. It encompasses the design, implementation, and analysis of research data to generate reliable and valid results. The Health Service Research (HSR) program was introduced in 2022 as part of the Quality Program. The HSR program introduced the Research Methodology Course for healthcare workers at the Kota Bharu District Health Office. The content of the Research Methodology Course included introduction to medical research, literature review, questionnaire development, sample size determination, sampling method, study design, data collection method, statistical analysis, ethical issues, and referencing. The aim of this study was to determine the effectiveness of the Research Methodology Course by comparing the pre- and post- research knowledge scores of the participants and establishing the linear relationship between those variables. **Materials and Methods:** Prior to attending the Research Methodology Course, participants were asked to take a pre-test containing 25 questions on research methodology. The same 25 questions were provided at the end of the course as a post-test to assess the effectiveness of the teaching as well as the receptive power of participants. Paired t-test was used to compare the means of two and Pearson's product-moment correlation and a simple scatter plot were used to determine if there was a linear relationship between pre- and post-test scores. **Results:** Twenty-five participants were selected from government clinics in Kota Bharu to attend a two-day course organized by the Quality Unit, Kota Bharu District Health Office. The mean (SD) age was 33 (3.6) years, with a minimum 28 years and a maximum 41 years old. The mean (SD) pre-test score was 13.64 (3.8), with minimum 7 score and maximum 22 score. The mean (SD) post-test score was 17.72 (3.2), with minimum 11 score and maximum 24 score. The maximum possible total score was 25. A significant increase from pre-test to post-test scores was observed, $t(24) = -7.955$, $p < 0.001$. A strong positive correlation was found, $r(25) = 0.742$, $p < 0.001$, indicating a significant linear relationship between the two variables whereby better pre-test scores were correlated with higher post-test scores. **Conclusion:** There was a significant increase in the research knowledge among HSR participants in Kota Bharu after attending the Research Methodology course, indicating a good start for HSR activities.