

The Effectiveness of Intravenous Admixture Training in a Private Hospital in Surabaya

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Background:

In this hospital, the nurses face intravenous (iv) admixture problems in preparing and delivering iv injection and/or infusion to patients due to their limited background knowledge of drug stability and incompatibility. The nurses lack comprehension in maintaining the physical and chemical stability of the drugs. When stability is disrupted, incompatibility may occur. The incompatibility will diminish the effectiveness and the safety of drugs.

Methodology:

Six small classes are conducted at the hospital, with 184 total attendants. There are three sessions: i. drug stability, ii. iv injection or infusion delivery, iii. case study (preparing and delivering several iv injections and/or infusions). The effectiveness of iv admixture training was evaluated through questionnaires and formative test (pre-test and post-test sessions). A process evaluation is based on both a 5-point Likert scale questionnaires and pencil and paper test distributed for each session. The nurses' awareness of iv drug incompatibility, as an impact of the training, is showed through a percentage of pharmaceutical queries before and after training.

Findings:

All of the attendants follow the training with great enthusiasm. The score of the attendants' satisfaction reaches more than 4-point Likert scale. More than sixty percent attendants have post-test scores higher than their pre test scores ($p < 0.05$). The number of the pharmaceutical query after training increases more than twice, as much as 497.

Conclusion:

According to the Kirkpatrick model, iv admixture training in this private hospital in Surabaya brings about the increase of knowledge and awareness towards attendants.