Preparation of new formulated amphotericin B-loaded nanocapsules and in vitro evaluation: toxicity and efficacy

Hassan Mohammad Asghari1, Amir Gharib1 and Zohreh Faezizadeh1

Background: Amphotericin B (AmB) is one of the oldest antifungal medication which is the appropriate choice for systemic fungal infection. Unfortunately, this antibiotic has shown some dose dependent side effects such as nephrotoxicity. Therefore, recentl new AmB formulated is prepared to increase efficiency and reduce the toxicity of the drug.

Methods: AmB nanocapsules prepared from polymers such as poly D,L-lactide-co-glycolide by means of a solvent substitution method. The dried nanocapsules suspensions prepared by nanoprecipitation of polyesters using SiO2 as adjuvant. Total AmB was measured by spectrophotometry technique. Then AmB-loaded nanocapsules efficiency of each formulation was assessed. The MICs of these nanocapsules to Candida albicans (ATCC 90028) was determined and compared to those of respective free AmB using microdilution method. Also, in vitro toxicity (haemolysis) of the nanocapsules determined on human RBCs.

Results: Drug entrapment efficacy for nanocapsules were 75% ± 0.13. The MICs of AmB nanocapsules against Candida albicans tested were reduced (50%) compared to that of free antibiotic and significant difference between data analysed by two-way ANOVA test. The AmB-loaded nanocapsules found to be 5.94 times less toxic than free AmB on RBCs.

Conclusion: The results suggest that new AmB-loaded nanocapsules prepared in this research may be an appropriate option in order to be used in the treatment of fungal infections.

Key words: Amphotericin B, nanocapsule, Candida albicans, entrapment efficiency
The relationship between iron deficiency anemia and febrile convulsion in 6month to 5 years Old children
Soghra Hassani, Ali Abaskanian , Fatemeh Asedi

Abstract :

Background: Febrile convulsions are the most common seizures type in children that occurs in 2 to 5 percent of the children. The reason is unknown, but some known factors such as the risk factors are involved in its outbreak. There are contradictory results regarding the studies which were conducted to find the relations between iron deficiency anemia and convulsions. Based on these results and its wide-spreading outbreak, this study was conducted to see the relationship between iron deficiency anemia and febrile convulsions.

Methods: This is a prospective control-case study and 200 children ranging from 6 months to 5 years old who were referring to the pediatric section of Buali-sina Hospital in Sari in 1386. One hundred (100) children with first seizures caused by fever were selected as the case group and 100 children without febrile seizures were randomly selected as the control group. Both groups of patients were homogenized on the basis of age and sex, and their normal growth. Nerves and blood specialists did diagnosis of fever-induced seizure and iron deficiency anemia based on the existing criteria. All patients hemoglobin, hematocrit, red blood cell indices, ferritin, iron serum, TIBC, phosphorus, calcium and blood sugar were tested; the data sets were compared and the test group and T-Test and Fisher Exact Test were analyzed.

Results: 39 children in case group and 13 children in control group had positive family record and this difference was statistically significant of which the most common cause of fever was respiratory infection. 42% of children in case group and 60% in the control group were suffering from anemia which was statistically significant P= /014. Fever-induced seizures in children with positive family record of seizures which was caused by fever were higher.

Conclusion: The chances of fever-induced seizures incidences in children with iron deficiency anemia seem less probable and anemia may have a protective role in fever outbreak which is caused by seizures. It is recommended that other related studies cover wider areas.

Key words : Iron Deficiency , Anemia , Febrile convulsion , children
Efficacy of schema-focused Cognitive-Behavioral Therapy in treating a case of mixed personality disorder

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Abstract:
Background: In this study, a patient is introduced with a mixed personality disorder (with two dependent and avoidant personality simultaneously) that has been investigated and cured based on schema-focused Cognitive-Behavioral therapy.

Methods: The reported case is a 26 year-old girl with Associate Degree, a secretary from Kermanshah, and the first child of family who has incompatible cognitive schemes and was diagnosed as a case with (mixed) personality disorder of dependent and avoidant. The diagnosis was based on cognitive-behavioral interview principles, structured DSMIV-TR clinical interview and Milon Test.
In the first stage of treatment, the patient was treated with taking advantage from schema-focused (cognitive) methods cognitive reconstruction, emotional drain and interpersonal skills.

Results: The course of recovery with regard to scheme-focused, cognitive-behavioral therapy is represented through visual graphics. The treatment had 12 sessions. In the first to fourth sessions, no significant change was observed in the patient. But from the fifth session this change becomes upward, and from the eighth session the recovery process continues regularly and systematically to the point in which the individual performance reaches where the treatment was expected.

Conclusion: Schema-focused Cognitive behavioral therapy shows its efficacy in the treatment of personality disorders. Generally in the process of changing the incompatible schemas people can be helped to understand long-term patterns and in this method, incompatible schemas are recognized, encountered and challenged. This method is called schema-focused procedure and has performance capability.

Key words: cognitive-behavioral therapy, schema-focused therapy, mixed personality disorder.
Viewpoints of midwifery students regarding quality of educational environment in delivery ward in Kermanshah in 2007

Dezfulimanesh . M

Abstract:
Background: Environment is one of the most effective factors in learning. Nowadays there are learning theories which focus on the importance of learning environments for students. The present study aimed to determine viewpoints of midwifery students regarding the quality of educational environment in delivery ward in Kermanshah in 2007.

Methods: This descriptive – cross sectional study focused on 70 midwifery students that had passed their subjects in the delivery ward. Sampling was convenient and a questionnaire was used. To determine the scientific validity and reliability of the questionnaire the content validity and retest method were used respectively. The data was analyzed by SPSS software using descriptive statistics and frequency distribution.

Results: The communication between students and instructors were favorable in 1.77 percent of the cases; the communication between students and personnel was semi favorable in 1.47 percent of the cases, the communication between the doctors and the patients was semi favorable in 6.58 percent of the cases, supporting students in learning was semi favorable in 7.45 percent of the cases, and the equipment in delivery ward were semi favorable in 3.54 percent of the cases.

Conclusion: In this study the communication between students and the personnel, the communication between doctors and patients, supporting students in learning and hospital equipments were semi satisfactory. Therefore, it is recommended to pay attention to making it best.

Key words: viewpoints, midwifery students, quality of educational environment, delivery ward
Abstract

Epidemiologic study on suicide attempt in affiliated hospitals of Kermanshah University of Medical Sciences 2006-2008

Samad Noori Zad, Azam Ahmadi, Mehdi Marvi, Afshin Almasi, Nader Rzaei, Gholamreza Daniyair

Abstract:

Background: Emprise to suicide in all over the world take itself solicitous dimension. In present, the suicide is one of ten reason the death in the world. In 1996 hygiene world organization declarated that violence and suicide is one important case of public hygiene. This research with aim to determine rate of venture suicide and how it was distributed in province of Kermanshah between 2007-2009.

Methods: In the basis of gathering of data, this research is cross sectional study that implementation on sick that applying of remedical and educational center and hospitals. To determine correlation between variables chi square and fisher exact test was used

Results: Result show that rate of venture of suicide in total population, male and female sequence was 101,122,81 in one hundred thousand people. Also analysis show suicide is relationship with characteristics such as habitat, age, sex, married, job, education and tools used to venture of suicide.

Conclusion: In the basis of this result, this problem needs more than ever consideration of politician to suppression this public hygiene problem.

Key words: Suicide, Epidemiology, Kermanshah

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The comparison of efficacy of Simulation-based training and Traditional training on skill level of midwifery students in pregnancy and delivery unit apprenticeship.

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Abstract:
Background: Revising of Clinical apprenticeship has been emphasized in many studies; so new training methods are needed for student’s learning in order to engage students and make them promote. Efficacy of simulation-based training and traditional training on skill level of midwifery students in pregnancy and delivery unit apprenticeship was compared in this study.

Methods: In this clinical trial, all fourth semester students of midwifery in Nursing-midwifery school of Kermanshah (23) were randomly divided into two groups. One group received the simulation training in the practice room of School and then entered the clinical environment. The second group was trained by conventional method. The collection tool was questionnaire, containing demographic information and performance check list. Using check list, pre-test and post-test performance, scores were evaluated in each group. Experience of students in simulation-based training was evaluated by oral feedback.

Results: pre-test and post-test performance scores showed a significance difference in each group (p<0.001). But, post-test performance scores didn’t show a statistically significant difference between two groups. Students in simulation group stated that this training method was an interesting experience and provided rapid feedback to them.

Conclusion: Although post-test performance scores didn’t show a statistically significant difference between two groups, however, students expressed that the simulation method was an interesting experience.

Key words: simulation-based training, traditional training, skills, pregnancy and delivery
Methods of abuse against women in clients of family courts

Shokoh Sadeghi*, Fatemeh Darabi, Azita Karami

Abstract:

Background: One of the crises that unintentionally threaten the family system is violence in the family. Violence against women in the family in addition to physical injury will jeopardize the mental health of women. The goal of this study is to identify different methods of violence against women in families referred to the family courts.

Methods: This research method was descriptive. Samples (380 people) were selected through using random sampling method. Community sample was selected from clients of Kermanshah family courts. And data collection tool was questionnaire. After data collection, the data was analyzed using frequency and two-dimensional tables.

Results: 380 people from the community sample have completely answered the questionnaire. And the findings showed that most acts of violence against the community sample respectively were:

- Psychological violence: 63/31 percent
- Economic violence: 54/2 percent
- Physical violence: 51 percent
- Sexual violence: 22/9 percent

Conclusion: The consequences of acts of violence against women in addition to negative impacts on wives, will affect children and also cause disturbance in normal social interactions.

Key words: abuse - women - Family Court – Kermanshah
Study of entrance reasons to Nursing – Midwifery major in Kermanshah Faculty of Nursing and Midwifery.
Kermany, Alamtaj, Kaboody, Marziyeh, Kamravalanesh, Mastaneh

Abstract:
Background: Generally, profession is the most attractive subject that people can think and speak about. Because it fills most of our time in a day for almost all of us. If a person’s attitude is positive toward her or his profession, he or she will have more mental preparation for accepting responsibility; otherwise, he would be disappointed and unable to do any job. Therefore, regarding the importance of interest in profession on educational course selection, this study was carried out with the aim of determining the reasons of choosing nursing and midwifery courses in students of Kermanshah Nursing and Midwifery Faculty in 2007.

Methods: Present research is a cross-sectional descriptive study that was carried out on nursing and midwifery students. (n=140) in Medical Science University of Kermanshah. 70 students were selected by randomized sampling method in each group. A two-part questionnaire was used for collecting data. The first section was included demographic characteristics and the second section which was related to questions concerning the reasons of entering the field of nursing and midwifery was designed separately for each group. The questionnaire’s validity and reliability was determined and then was completed by interviewing students. The data was analyzed by descriptive statistics methods.

Results: The results of the research showed that the most important reasons of studying midwifery is: there is some one with this job in family (45.7%), not accepted in other fields (42.9%), advertisement in media (41.4%), regular working hours (40%), (table number 2). And the most important reasons of studying nursing was: there is a nurse in family (58.6%), regular working hours (52.9%), in family (58.6%), getting degree (50%), exciting major (28.6%), other people’s recommendation (22.9%) and only 28.6% of students in these two groups selected their courses based on interest.

Conclusion: According to research results, only 28.6% of midwifery and nursing students had selected their course based on their interest. Whereas it is clear that interest is the essential and main requisite for doing any profession, it is suggested that students be given sufficient information about professions during high school period and before entering university, so that they select educational courses with better knowledge.

Key Words: Nursing – Midwifery courses, reasons for course selection
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