ABSTRACTS

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Assessing health-related quality of life and associated factors on hemophilia patients in Kabul City, Afghanistan

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Abstract

Introduction: Haemophilia is a group of inherited, congenital diseases present all through the life. Those disorders are associated with a chronic burden of morbidity punctuated by episodes of acute deterioration in health-related quality-of-life (HR-QL). Identifying the factors affecting on quality of life in people with hemophilia in Afghanistan and comparing it with other countries can lead to improved quality of life.

Aid: Assessing health-related quality of life and associated factors on hemophilia patients in Kabul City among people with hemophilia in Afghanistan.

Methods: This is a cross-sectional study conducted among patients with hemophilia in Kabul, Afghanistan. A total of 288 patients with type A and B hemophilia consist of 19 mildly, 83 moderately and 186 severe forms. Patients in the age range of 3 to 42 years and the mean age (13.84 ± 8.63) from 3 centers of hemophilic patients in Kabul include the Esteqlal Hospital, the Children's Hospital Indra Gandhi and the Afghan Hemophilia Association. HRQoL uses SF-36 through medical records, interviews and self-report collection.

Result: Based on the results Age with all SF-36 subscales except Physical function (P = 0.055) and General health (General health) (P = 0.755), and hemophilia severity with all sub-scales significant relationship was obtained. (p <0.001).

Conclusion: Totally, due to low quality of life in patients with hemophilia, the need to plan for improving quality of life in all aspects patients is necessary.

Keywords: Haemophilia, health-related quality of life, Kabul

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Knowledge, Attitude and Vaccination status of Health Care Workers against hepatitis B virus infection in Kabul

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Abstract

Background: Hepatitis B virus (HBV) infection is a well-recognized public health problem across the globe. Health care workers (HCWs) are high-risk groups to obtain HBV infection due to direct interaction with HBV-infected blood and body fluids in their workplace. Improving health education, following standard precautions, vaccination of high-risk groups and post-exposure prophylaxis are the most actual methods for prevention and control of this infection. Finding the level of knowledge, attitude, and practices (KAP) among HCWs will be helpful in implementing measures for prevention and control of this infection.

Objective: The purpose of this research was to assess KAP of Health care workers towards Hepatitis B infection in Kabul.

Methods: This cross-sectional study was conducted from November 2018 to January 2019. Five hundred and two health care workers were included using a simple random sampling method. The tool for data collection was a self-administered structured questionnaire. The collected data were statistically analyzed with SPSS 16.00.

Results: The overall knowledge, attitude and practice scores of HCWs were 86.58%, 34.73%, and 61.22% respectively. HCWs who were well educated, showed better knowledge than those with low educational level (p < 0.0001) and women showed a better level of knowledge compared to men (p < 0.05). Majority of the participants had poor attitude towards HBV prevention (53.98%). Only 77.45% of participants had been screened for HBV. Only 56.37% of participants had got vaccinated against HBV, out of them only 5.17% had completed three doses of vaccine.

Conclusion: The results of this study show that HCWs in Kabul are at higher risk of acquiring HBV infection due to low vaccination coverage and poor preventive practice, requiring provision of free and compulsory vaccination and awareness and educational programs. **Keywords:** *hepatitis, Hepatitis B virus, Kabul, health care worker*

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In vitro spermatogenesis assessment after transplantation of human spermatogonial stem cells

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Abstract

Background: The introduction of alternative systems in vivo can be very important for cancer patients who are treated with gonadotoxic methods and drugs. In this study, we examine the progression of the spermatogenesis process after transplantation of human spermatogonial stem cells (SSCs) under conditions of testicular organ culture and in vivo condition.

Materials and Methods: Human SSCs were obtained from TESE sample, and the nature of these cells was confirmed by detecting the PLZF protein. These cells, after being labeled with DiI, were transplanted to adult mice testes, treated with Busulfan 40 mg/kg as azoospermia model. Then the culture of host testicular tissue considered as a test group and in vivo transplant as a control group. After 8 weeks, immunohistochemical, morphometric and molecular studies were performed.

Results: The results of morphometric studies indicated that the mean number of spermatogonia, spermatocytes, and spermatids in test groups was significantly lower than the control group (P<0/05) and most of the cells responded positively to DiI tracing. Immunohistochemical in both groups revealed expression of the PLZF, TP1 and Tekt1 proteins in spermatogonial, spermatocyte and spermatozoa, respectively. Also, in human molecular studies PLZF, TP1 and Tekt1, the results showed a significant difference in the expressions of these genes between test groups and control groups (P<0/05).

Conclusion: These results suggest that the conditions of testicular tissue culture after transplantation of SSCs can support the development of spermatogenesis, as well as in vivo. **Key words**: *stem cells, human, transplantation, culture*

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Real-time inverse PCR, a substitute and rapid detection method for intron 22 inversion mutation in patients with severe Hemophilia A

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Abstract

Hemophilia A (HA) is one of the most deleterious X-linked bleeding disorders in male patients. Early and rapid detection could provide management strategies for this disease. This study aims to improve the classic method for detection of important intron 22 inversion mutations (INV22). Whole blood samples were taken from 21 male children with a history of severe HA, referred to the Iranian comprehensive hemophilia care center. Two groups were involved for detection of INV22 and two methods were examined in a double-blind manner. The first method used a classical method, inverse PCR, and the second method was Real-time inverse PCR. Results showed that both methods could separately detect the INV22 in 11 out of 21 patients with severe HA (52%) in the same accuracy, but with this difference that only one day was needed for detecting of INV22 by Real-time inverse PCR and on other hand 3 days were needed for the classical methods. Because of the medical importance of early detection or prenatal/postnatal diagnosis of this disease, this study recommends the Real-time inverse PCR technique for the rapid detection of this mutation in wellequipped genetic laboratories everywhere.

Keywords: Hemophilia A, Factor VIII, Intron 22 Inversion, Real-time inverse PCR

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Food regimes for people with diabetes

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Abstract

In this study, the data collected about diabetes and its diet. Whereas they manage the diabetes diet by implementing it in their lifestyle, they will be saved from its complications. Diabetes mellitus is one of the common diseases in Afghanistan, which thousands of people are being suffered. The degree and level of this disease can be evaluated if proper and recommended diet schedules are not taken into account, which will put the health at risk. In this study, we have discussed the disease of Diabetes mellitus and its Nutritional program for diabetic patients to regulate their food intake.

In the nutritional program we advise the following points:

- Decrease intake of Carbohydrate
- Decrease intake of Fat
- Normal Intake of Protein
- Increase intake of Cellouse containing food
- Intake of food regularly by time, quantity and quality

Keywords: Diabetes, diet regimen, first type diabetes, second type diabetes

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Evaluation of Psychometric Indicators of Sherer General Self-efficacy Questionnaire in Afghan Refugee Adolescents in Iran

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Abstract

Introduction: The purpose of this study was to assess the validity of self-efficacy questionnaire in Afghan refugee adolescents in Iran.

Method: In this research, 714 people were participated. This study evaluated content validity and internal consistency through Cronbach's alpha and construct validity through exploratory and confirmatory factor analysis.

Results: The results showed that this questionnaire has good content validity and Cronbach's alpha is also in the desired range. The exploratory factor analysis of the three factors in identifying self-efficacy was identified in the samples of this study and confirmatory factor analysis confirmed this three-factor hypothesis.

Conclusion: According to the results of this study, it can be pointed out that this scale has good psychometric properties in the Afghan refugee adolescent society in Iran.

Keywords: *Psychomotricity, Sherer Self-efficacy Scale, Validity, Reliability, Afghan Refugee Adolescents* Received: 24/01/2019 Accepted: 14/04/2019 PP. 63-74 Kateb Quarterly (Scientific - Research) Vol. 6, No. 12, Spring 2019 ISSN: 2706-7262

Assessing the mediating role of self-efficacy related to the stress of acculturation and resilience in Afghan refugee adolescents in Iran

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Abstract

Introduction: The purpose of this study was to investigate the intermediate role of self-efficacy related to the stress of acculturative and resilience in refugee adolescents in Afghanistan.

Method: The method of this study was descriptive and collaborative. 408 Afghan young immigrants (14 to 18-years-old) who live in Iran for more than 3 years were studied. Random sampling method was applied to obtain data. The data were collected using questionnaires on the acculturative stress, self-efficacy, and resilience of children and adolescents. Data were analyzed by Pearson correlation and regression.

Results: The results showed that the correlation between acculturative stress and self-efficacy with resiliency in adolescents is negative but significant. Also, when confronted with acculturative stress, high self-efficacy can predict resilience in Afghan refugee adolescents in Iran.

Conclusion: According to research findings, it can be concluded that increased self-efficacy of Afghan refugee adolescents can play an important role in increasing their resilience.

Keywords: Self-Efficacy, Acculturative Stress, Resilience, Afghan Young Immigrants

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Evaluation of male infertility according to Semen analysis in two diagnostic center of Kabul city

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Abstract

Infertility is one of the most common reproductive disorders occurring in approximately 15% of the couples. Male factor accounts for about half of these cases. Male infertility is due to low sperm production, abnormal sperm function or blockage that prevents the delivery of sperm. Illnesses, injuries, health problems, lifestyle choices, and other factors can play significant role in male infertility.

Objective: Evaluation of male infertility according to semen analyses in the medical centers (Faiz medical Lab and Mir Ansari Clinic) of Kabul city from 2016 to 2017.

Method: A descriptive study was conducted on the subjects who attended Faiz Medical Lab and Mir Ansari Clinic. They were interviewed, via questionnaire, from 2016 to 2017. Collected data was entered and analyzed in Excel Program. Semen samples were collected in sterile wide-mouthed container and then semen analysis was performed.

Result: A total of 300 participants were interviewed. Among 300 people, 292(97%) were married, 8(2.6%) were single. Among 292 married, 66(22.6%) of them had child, 226(77.3%) of them did not have child. From 300 person 63(21%) were addicted to tobacco, 237(79%) were not addicted to tobacco. Out of 63 addicted persons 58(92%) people were smoking, 2(3,1%) used hookah, 3(4.7%) used snuff, 2 other people used both cigarettes and hookah. From 58 smoker persons, 12(20.6%) were normal, 46(79.3%) persons were abnormal. From 300 person 26(8.6%) were having a history of mumps, 247(91.3%) did not have a history of mumps. 26 people with a history of mumps 6(23%) were normal, 20(76.9%) were abnormal. From 300 person 63(21%) had a history of UTI, 237(79%) did not have a history of UTI. 63 persons with a history of UTI 15(23.8%) were normal, 48(76.2%) were abnormal. From 300 people according to their semen analyses, 87(29%) were normal, 213(71%) were abnormal. From 213 73(73%) abnormal persons diagnosed Oligoasthenozooprima, 42(14%)persons Asthenozoospermia, 36(12%) persons Oligozoospermia, 28(9.3%) person Azoospermia, 15(5%) person prolonged liquefaction, 15(5%) combination of aforementioned problems, 2(0.6%) person Crptozoospermia, 1(0.3%) person hyperthermia, 1(0.3%) person Teratozoospermia.

Conclusion: Based on the results of this study, the rate of infertility in male is high. **Key worlds:** *Infertility, Sperm, Kabul*

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Stem Cells, Characteristics and Applications in Regenerative Medicine

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Abstract

Human cells are classified in different tissues. One of the most important types of these cells are the Stem Cells mostly existing in the lower layer of epetilium. Stem cells are of particular because they can produce exactly similar cells as well higher level cells. This suggests that these cells store their own characteristics and can be used to produce or repair other tissues. There are two major types of stem cells: Adult Stem Cells and Embryonic Stem Cells. Other types of these cells are discussed in the context of this article. In this study, we tried to state a comprehensives, adequate and new information regarding stem cells, their types and characteristics, as well as the tools used in regenerative medicine **KeyWords:** *Stem Cells, Medicine, Regenerative, Cell*

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Prevalence of H-pylori infection among dyspeptic patient in the west of Kabul city

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Abstract

Introduction: Helicobacter pylori is the most common cause of dyspepsia, gastritis, gastric pain, gastric ulcer, duodenal ulcer, gastric and duodenum cancer. The prevalence of this infection varies across countries and even in different regions of a country. The global prevalence of the infection is more than 50%, which means that more than half of the worldwide population are infected with this bacterium. The purpose of this study was to investigate the prevalence of Helicobacter pylori among dyspeptic patients in the west of Kabul city.

Methods: This descriptive-analytical study was performed on 884 patients suffering dyspepsia at Alimi Hospital and the Alimi Clinic in the OPD (outpatient department) from 22/5/2018 to 21/3/2019 due to gastrointestinal system problems. In this study, a stool sample was used to obtain Helicobacter pylori antigen.

Results: From 884 patients, who participated in the study, 526 positive cases were recorded (59.5%). 524 (59.27%) patients were female and 360 (40.72%) were male.

Keywords: Prevalence, Helicobacter pylori, dyspepsia, Kabul City

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