**THE EFFECT OF A HIGH INTENSITY INTERVAL EXERCISE (HIIE) ON HYPOTHALAMIC NESFATIN-1 GENE EXPRESSION OF DIABETIC MALE RATS**

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**ABSTRACT**

**Background:** Nesfetin-1 is known as the peptide which interfere in appetite and glucose hemostasis. The aim of the present study is to investigate the effects of two kinds of acute exercise to nesfatin-1 gene expression of diabetic rats.

**Methods**: In this study, has utilized the diabetic vistar staggy rats with STZ (12 week-age, 220-240 gr-weight). Animals were divided into four group: high intensity interval exercise (HIIE-0), control (C-0), (witch immediately has murdered after the exercise) and high intensity interval exercise (HIIE-2), and control (C-2), (which has murdered 2 hours after the exercise). HIIE group activated on the treadmill with 25 and 14 meter/minute in the 12 interval-one-minute period.

**Results**: After removing hypothalamus and extraction of RNA, has down RT.PCR. The Independent T test analyzed and level of significance has been considering at 0/01 The exercise activity caused the significant increase of gene expression in the HIIE-0 group (P=0/001). But there was not significant increase in the HIIE-2 group (P=0/234).

**Conclusion**: The results of this study displayed that one session of high intensity interval activity caused an increase immediately after the exercise in the hypothalamic nesfatin-1 gene expression of vistar staggy rats.

**Key words:** Nesfatin-1, High intensity interval exercise, diabetics rat

**SIX-MONTH-OLD INFANTS DEVELOPMENTAL INDEX COMPARISON BETWEEN GESTATIONAL DIABETES MOTHERS ON INSULIN AND METFORMIN**.

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**ABSTRACT**

**Background:** Insulin is first choice for gestational diabetes control, but its needed to frequent injections; one thing that is difficult for pregnant women, so interest to metformin consumption is increased. Metformin easily crosses the placenta and its fetal blood levels is equivalent to the level of the mother's blood. Metformin also easily cross the brain barrier and enter the brain. Possible side effects of metformin compared to insulin on fetus brain development was concerned to design of present study.

**Methods:** In this cross-sectional prospective trial, gestational diabetes women were recruited randomly to insulin (64 patients) and metformin (64 patients) groups and compared for pregnancy and neonatal outcome and also six-month-old infancy developmental indexes. The results considered significant if P value was ≤ 0.05.

**Results:** Six-month body mass index of insulin group women was significantly more than metformin group(P=0.05), but there was not any significant difference in cesarean section, preterm labor, dystocia, preeclampsia and still birth rate between two groups. Also neonatal characteristics, need to admission and six-month-old infancy developmental indexes according to Ages stages questionnaire were no different between two groups.

**Conclusion:** Metformin consumption in compare to insulin was not associated with maternal, neonatal and six-month-old infancy developmental indexes side effects.

**Key words:** Metformin, Insulin, Ages stages questionnaire, Gestational diabetes

**THE EFFECTIVENESS OF DIALECTICAL BEHAVIORAL THERAPY ON REDUCING ANXIETY AND IMPROVING SOCIAL FUNCTIONING OF PATIENTS WITH DIABETES**

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**ABSTRACT**

Due to the high prevalence of diabetes in the general population and companionship with psychiatric disorders, this study was aimed to examine the effectiveness of dialectical behavior therapy in reducing anxiety and improving social function in patients with diabetes. This was a semi-experimental design with pretest-posttest and control group. The Community of study included all diabetic patients have been admitted to the Shahid Mohammadi hospital of Bandarabbas in the first half of 1395. The participants (24 people) were selected using available sampling and subsequently assigned into a control and an experimental group. The Members of the experimental group received dialectical behavior therapy for 8 sessions but the control group received no intervention. Beck Anxiety and California social adjustment were applied as pre-test and post-test. The obtained data were analyzed by MANCOVA method. The results of MANCOVA showed that dialectical behavior therapy was significantly effective in reducing anxiety and improving social adjustment in diabetic patients. Based on these results it is necessary to improve the psychological rehabilitation of diabetic patients by applying the more effective interventions.

**Key words:** Diabetes, anxiety, social function, dialectical behavioral therapy

**STUDY OF FACTORS AFFECTING GESTATIONAL DIABETES IN**

**PREGNANT WOMEN REFERRED TO HEALTH CENTERS OF HAMADAN,**

**2015**

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**ABSTRACT**

**Background:** Gestational diabetes is one of the most common metabolic disorders during pregnancy. The purpose of this study was to determine Prevalence of Gestational Diabetes Mellitus in Pregnant Women Referred to Therapeutic and Health Centers in Hamadan Town.

**Methods:** This descriptive-sectional study was done in the year2014 on 620 pregnant women Referred to The health Centers in Hamadan Town. The necessary information was collected by means of a self-made

Questionnaire. The scientific validity of the questionnaire Comments 15 members of the faculty of nursing and midwifery. The necessary amendments were made. To determine the reliability question a pilot study on 10 patients was performed twice with an interval of 10 days and offer 0/91 reliability was confirmed Then the data was analyzed by using SPSS software, independent Fisher test, Chi-square and a=0.05 was taken as the significant level.

**Results:** 110 of the 620 cases studied (almost 17.1%) suffered from gestational diabetes mellitus and 38 cases of all (almost 6.1%) had overt diabetes. Mean age of the pregnant women was30.6±5 and BMI25.3±4.1 their mean number of pergment was 1.6±0.8. Increasing the hours of mother's work at home, body mass index, household size, number and history of abortion, number of pregnancies and delivery, and the history of diabetes in the family, the chance of having diabetes also significantly increases (P<0.05).

**Conclusion:** Regarding the great importance of gestational diabetes and its complications on the fetus, diabetes preventive practices demand special attention to pregnant women Regarding the trend of increasing the incidence of pregnant women to gestational diabetes mellitus and the effect of demographic and obstetric factors on its development, screening for women before admission for diabetes and healthy lifestyle education is recommended.

**Keywords:** Prevalence; Gestational diabetes; women

**PREDICTING SELF-CARE BEHAVIORS BASED ON PATIENT-DOCTOR RELATIONSHIP AND EMOTIONAL DISTRESS IN ADOLESCENTS WITH DIABETES**

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**ABSTRACT**

**Background:** The aim of the present research is to predict the self-care behaviors based on emotional distress and physician – patient’s relationship in adolescents with diabetes.

**Methods:** The research design was correlation and the study population included all adolescents with diabetes at Shiraz city. For this purpose, 198 adolescent patients participated in the study through the convenience sampling method. Research instruments included the Questionnaire of Diabetes Self-management, Emotional Distress Questionnaire and finally Physician–Patient’s Relationship Questionnaire. To analyze the data, the simultaneous multiple regression methods were applied using SPPS (version 17).

**Results:** Regression analysis showed that emotional distress (β=-0.58, P<0.001) significantly (negative) predicted diabetes self-care behaviors. Also, among the components of emotional distress only barriers to treatment (β=-0.53, P<0.001) significantly (negative) predicted diabetes self-care behaviors. However, results showed that physician–patient’s relationship did not significantly predicted diabetes self-care behaviors.

**Conclusion:** According to the results, it can be argued that the emotional distress (especially barriers to treatment) variable, play an important role in addressing diabetes self-care behaviors in adolescents.

**Key words**: self-care behaviors, emotional distress, physician – patient’s relationship, diabetes, adolescence

**EVALUATION THE PREDICTORS IN PATIENTS WITH CARDIOVASCULAR DISEASE BASED ON WALKER HEALTH-PROMOTING LIFESTYLE**

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**ABSTRACT**

**Background:** According to the World Health Organization, cardiovascular diseases are the leading cause of death. Behavior modification to improve lifestyle habits can reduce the risk of cardiovascular disease. The aim of this study was to investigate the health promoting lifestyle in Patients with cardiovascular disease in 2014.

**Methods:** After approval of the study, 352 patients with cardiovascular disease in Gonabad city were enrolled 2014. Data were collected using Health Promoting Lifestyle Promoting (HPLP2) questionnaire. Then analyzed using SPSS software and the Mann-Whitney and Kruskal-Wallis tests. The significance level of P value was considered to be less than 0.05.

**Results:** Three hundred and fifty-two patients (232 females and 120 males) were recruited, with a mean age of 61.89 ± 1.34 years. The highest mean score of lifestyle was 24.45 ± 8.05 in personal relationships and the lowest was 12.65 ± 5.60 in the area of stress management. All structures had the direct impact on the lifestyle that the most direct impact was social relations (R2= 0.329) and the least direct impact was stress management (R2= 0.164) and the strongest predictor of lifestyle in the mechanisms related to physical activity with the overall effect 14.38 was based on the pattern walker.

**Conclusion:** Considering, life style has a significant effect on cardiovascular disease. It is possible to improve the lifestyle of patients by providing steps to prevent and control this disease.

**Key words:** Cardiovascular disease, lifestyle, Health Promotion, Gonabad

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