The effect of glucose consumption on night shift nursing personnel accuracy in their job performance

Protocol summary

Summary
Aims: Effect of glucose on improving brain cognition performance in general and accuracy in particular has been explored by many researchers. For Nurses accuracy in job performance is of paramount importance and any lapse could result in irreversible damage for patients. In this study we aim to determine the effect of blood glucose concentration on accuracy of job performance in nurses doing night shifts in selected military hospitals. Methods: Through a quasi-experimental study and convenience sampling, 60 nurses doing night shifts in two military hospitals in Tehran between September 2009 and April 2010 were recruited. Inclusion criteria were 1) Nurses working on night shifts (at least one shift in a week); 2) Minimum qualification of Bachelor of Science; 3) Normal visual accuracy (with glasses if necessary); 4) No Acute stress; 5) Lack of other concurrent disease; 6) Normal BMI. Exclusion criteria were 1) Patients having diabetes mellitus; 2) History of using drugs such as Thiazides and Steroids that interfere with blood sugar level ; 3) Pregnancy . Subjects were randomly assigned into case and control groups. Demographic data was collected through a questionnaire. Data on accuracy was collected using Tolus Pirven and Bonardel tests at 4-5 o’clock in the morning. Blood glucose concentration was measured before the intervention. Then case group were given 75gr glucose syrup and control group was received water without any added sugar. One hour after intervention accuracy tests were repeated and blood glucose reevaluated in both group. Key words: Glucose, accuracy, nurse, night work shift

General information

Acronym
IRCT registration information
IRCT registration number: **IRCT138808272730N1**
Registration date: **2010-06-07, 1389/03/17**
Registration timing: **registered_while_recruiting**

Last update:
Update count: 0
Registration date

2010-06-07, 1389/03/17

Registrant information
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Recruitment status
Recruitment complete

Funding source
Baghatallah University of Medical Sciences

Expected recruitment start date
2010-02-20, 1388/12/01
Expected recruitment end date
2010-08-23, 1389/06/01
Actual recruitment start date
empty
Actual recruitment end date
empty
Trial completion date
empty

Scientific title
The effect of glucose consumption on night shift nursing personnel accuracy in their job performance

Public title
The effect of glucose consumption on night shift nursing personnel accuracy in their job performance

Purpose
Other

Inclusion/Exclusion criteria
Inclusion criteria 1- Nurses working on night shifts (at least one shift in a week) 2- Minimum qualification of Bachelor of Science 3- Normal visual accuracy (with glasses if necessary) 4- No Acute stress 5- Lack of other concurrent disease 6- Normal BMI Exclusion criteria 1- Diabetes mellitus 2- History of using drugs such as Thiazides and Steroids that interfere with blood sugar
level 3- Pregnancy

Age
No age limit

Gender
Male

Phase
N/A

Groups that have been masked
None

Sample size
Target sample size: 60

Randomization (investigator's opinion)
Randomized

Randomization description
Single blinded

Blinding (investigator's opinion)
Placebo
Used

Assignment
Parallel

Secondary Ids
empty

Ethics committees

1

Ethics committee
Name of ethics committee
Baqiyatallah University of Medical Sciences
Street address
Velayat complex, Araj, Aghdasieh,
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Approval date
2009-12-28, 1388/10/07
Ethics committee reference number
22/340/

Health conditions studied

1

Description of health condition studied
Accuracy in Nursing Job performance

ICD-10 code
-

ICD-10 code description
-

Primary outcomes

1

Description
Accuracy in Nursing job performance

Timepoint
before and 1 hour after intervention

Method of measurement
Tolus Pirven and Bonardel tests

Secondary outcomes
empty

Intervention groups

1

Description
Glucose syrup (75gr glucose)
Category
Other

2

Description
Water
Category
Placebo

Recruitment centers

1

Recruitment center
Name of recruitment center
Selected hospital
Full name of responsible person
Fereydoun Shokrollahi
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Neuro-science center, Bagiatallah University of Medical Sciences
Full name of responsible person
Dr Sahraee
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Country
Iran (Islamic Republic of)

Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Neuro-science center, Baghiatallah University of Medical Sciences
Proportion provided by this source
100
Public or private sector
empty
Domestic or foreign origin
empty
Category of foreign source of funding
empty
Country of origin
empty
Type of organization providing the funding
empty

Person responsible for general inquiries

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Sharing plan
Deidentified Individual Participant Data Set (IPD)
empty
Study Protocol
empty
Statistical Analysis Plan
empty
Informed Consent Form
empty
Clinical Study Report
empty
Analytic Code
empty
Data Dictionary
empty