

الآية

بسم الله الرحمن الرحيم

قال تعالى:

(يَرْفَعِ اللَّهُ الَّذِينَ آمَنُوا مِنْكُمْ وَالَّذِينَ أُوتُوا الْعِلْمَ دَرَجَاتٍ وَاللَّهُ بِمَا تَعْمَلُونَ خَبِيرٌ).

سورة المجادلة (١١)

DEDECATION

To my mother Aisha Fadol Abdulla

For her endless love and support

To the soul of my father Ahmed Ibrahim humida

To my brother and sister for unlimited support

To all people who encourage me.

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ABSTRACT

Hepatitis A virus (HAV) infections occur mainly as a result of bad hygienic conditions. The objective of this study was to detect HAV among food handlers working in cafeterias in Khartoum Province. The study was conducted during the period from June to September 2013.

Food handlers working in Sudan University of Science and Technology cafeterias were included in this study. A pretested structured questionnaire was used for collecting demographic data.

Blood samples were collected from each participant, both sex's (males and females); serum was prepared from each blood sample. Enzyme linked immunosorbent assay was used to detect Anti-HAV IgM and IgG antibodies.

Out of the 90 food handlers (73 males and 17 females) who took part in this study, 89 (98.8%) were positive for anti-HAV IgG, 73 (81%) from males and 16 (17.8%) from females. Moreover, only 4 (4.4%) were positive for anti-HAV IgM, 2(2.2%) from males and 2 (2.2%) from females.

From the above findings, the study concluded that, there is asymptomatic individuals indicate that the HAV circulate at low but considerable levels especially among food handlers; that may be a source of outbreak. Confirmation of Hepatitis A positive food handlers should be tested polymerase chain reaction is highly recommended. Further study with large number of blood samples is required to validate the results of the present study.

المستخلص

تحدث الإصابة بالتهاب الكبد الفيروسي أ بصورة رئيسية نتيجة لعدم توفر الشروط الصحية. الهدف من هذه الدراسة الكشف عن الأجسام المضادة لالتهاب الكبد الفيروسي أ عند تناول الطعام في كافتريات محافظة الخرطوم. أجريت الدراسة في الفترة من يونيو الي سبتمبر ٢٠١٣م.

شملت هذه الدراسة تناول الطعام الذين يعملون في كافتريات جامعة السودان للعلوم والتكنولوجيا، حيث تم اعداد استبيان تم اختباره مسبقاً لجمع البيانات من تناول الطعام .

جمعت عينات الدم من المشاركين في الدراسة من الجنسين (الذكور و الاناث)، وتم تحضير المصل من عينات الدم واستخدم اختبار الـ IgG المناعي الانزيمي لكشف الاجسام المضادة لالتهاب الكبد الفيروس أ من النمطين IgM و IgG.

من مجموع تسعون تناول طعام ، ٨٩ (٩٨.٨%) اعطوا نتيجة ايجابية لكشف المصلي لاجسام المضادة من النمط IgG حيث كانت اصابة الذكور ٧٣ (٨١%) والاناث ١٦ (١٧.٨%) . بينما ٤ (٤.٤%) اشخاص اعطوا نتيجة ايجابية لكشف الاجسام المضادة من النمط IgM حيث وجدت اصابة شخصين ٢ (٢.٢%) عند الذكور و ٢ (٢.٢%) عند الاناث.

من النتائج اعلاه خلصت الدراسة الي ان هنالك اشخاص لا تظهر عليهم الاعراض مصابين بالتهاب الكبد الفيروسي أ، وتشير الدراسة الي انخفاض مستوي الاصابة ولكن تختلف خصوصاً عند تناول الطعام الذين قد يكونوا مصدرا لتفشي المرض ، ولتأكيد نتيجة اختبار تناول الطعام الذين اعطوا نتيجة ايجابية ينصح باستخدام تفاعل البلمرة السلسلي، وازافة دراسة تحمل عدد اكبر من عينات الدم لأثبات نتائج هذه الدراسة.

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ABBREVIATIONS

ALP	Alanine aminotransferase
CDC	Centers for Disease Control and Prevention
ELISA	Enzyme Linked Immunosorbent Assay
EIA	Enzyme Immunoassay
HAV	Hepatitis A Virus
HBV	Hepatitis B Virus
HCV	Hepatitis C Virus
HCWs	Healthcare Workers
HEV	Hepatitis E Virus
HRP	Horseradish Peroxidase
IG	Immunoglobulin
PCR	Polymerase Chain Reaction
SES	Socioeconomic Status
SPSS	Statistical Package for Social science
WHO	World Health Organization

