

نموذج مشروع

صفحة الغلاف

عنوان البحث: عوامل الخطر والمضاعفات والكشف عن داء الكبد الدهني غير الكحولي في المملكة العربية السعودية؛ مراجعة منهجية.

Title: Risk Factors, Complications and Detection of Non-Alcoholic Hepatic Steatosis in Saudi Arabia; a Systematic Review.

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الباحثين المذكورين أعلاه ينتمون لكلية الطب بالدوامي جامعة شقراء والباحث الرئيسي مسؤول عن المحتوى العلمي

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ملخص مقترح البحث (عربي)

1- عنوان البحث : عوامل الخطر والمضاعفات والكشف عن داء الكبد الدهني غير الكحولي في المملكة العربية السعودية؛ مراجعة منهجية.

داء الكبد الدهني غير الكحولي (NASH) هو واحد من الاضطرابات الرائدة في منطقة الخليج بما في ذلك المملكة العربية السعودية. يتميز هذا الداء بزيادة تراكم الدهون في الكبد. إن معدل انتشار داء الكبد الدهني غير الكحولي يتزايد ومع ذلك، لا تزال عوامل الخطر والمضاعفات والتشخيص غير واضحة في المملكة العربية السعودية.

تهدف هذه الدراسة إلى مراجعة الأدبيات لتقييم عوامل الخطر والمضاعفات وطرق الكشف عن داء الكبد الدهني غير الكحولي في المملكة العربية السعودية. ستتم مراجعة الأدبيات من خلال قاعدة بيانات PubMed في الفترة ما بين 2009 و 2019. وستشمل مصطلحات البحث مزيجًا من "داء الكبد الدهني غير الكحولي" و "المملكة العربية السعودية". سيتم تصفية النتائج لتشمل مقالات بحثية أصلية تبحث في عوامل الخطر والمضاعفات وبروتوكولات الكشف عن داء الكبد الدهني غير الكحولي. يجب أن تذكر التجارب المختارة الخصائص الوبائية وكذلك الأمراض المصاحبة وعوامل الخطر الناجمة عن المرض. سيتم تلخيص نتائج الدراسات المختارة وتبويبها من أجل تحديد النتائج المشتركة وتقديم الاستنتاجات وفقًا لذلك.



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Summary (English)

Title: Risk Factors, Complications and Detection of Non-Alcoholic Hepatic Steatosis in Saudi Arabia; a Systematic Review

Non-alcoholic hepatic steatosis (NASH) is one of the leading disorders in the gulf region including Saudi Arabia. It is characterized by increasing fat accumulation in the liver. The prevalence of NASH is progressing. However, its risk factors, complications and diagnosis are still unclear in Saudi Arabia.

This study aims at reviewing the literature to evaluate the risk factors, complications and methods of detection of NASH in Saudi Arabia. The literature will be reviewed through PubMed database in the duration between 2009 and 2019. Search terms will include a combination of “non-alcoholic hepatic steatosis” and “Saudi Arabia”. The results will be filtered to include original research articles investigating risk factors, complications and detection protocols of non-alcoholic hepatic steatosis. Selected trials should mention the epidemiological characteristics as well as the comorbidities and risk factors of NASH.

Results of eligible studies will be summarized and tabulated in order to identify common findings and make conclusions accordingly.

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Introduction & Literature Review

Aims/Objectives of the study

This study aims at reviewing the literature to evaluate the risk factors, complications and methods of detection of NASH in Saudi Arabia.



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Study Design

This study will be a systematic review that will include studies from the literature discussing the risk factors, complications and detection protocols of NASH in Saudi Arabia.

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A- Study design and type of the study:

This will be a systematic review performed in Saudi Arabia. The systematic review will include assessment of medical databases through PubMed.

B-Sample Size

The study will start with assessment of the literature and selecting filters, based upon which, the number of chosen trials will be decided.

C- Subjects:

This study will not include patients' recruitment. The number of patients recruited in each study will be identified.

D- Inclusion and exclusion criteria:

All clinical studies published in the duration between 2009 and 2019 on PubMed assessing the risk factors, complications and methods of detection of NASH in Saudi Arabia will be included. Studies published in any languages other than English, will be excluded.

E- Data collection methods and procedure:

The data will be collected through reviewing the literature and PubMed medical research databases. The outcome of initial search will be used to select the keywords in order to filter the produced trials. After that, the selected trials and studies outcomes will be assessed and discussed thoroughly.

F- Statistical analysis plan:

Not applicable.

G- Ethical consideration:

Before starting any study related procedures, institutional approval will be obtained. There is no need to get consent form as the study is not involving any patient related interventions.

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Suspected Outcomes& Utilization

This study will produce detailed figures about NASH disease as well as its complications, risk factors and detection protocols in Saudi Arabia. This will inform practical guidelines in order to ensure the prevention, early detection and appropriate management of NASH in Saudi Arabia.

To our knowledge, this is considered the first systematic review in Saudi Arabia to show the figures of NASH risk factors and diagnostic techniques in Saudi Arabia.

Sponsors

This study is self-funded Conflict of Interest

Conflict of Interest

Authors of the study don't have any conflicts of interest.



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Nonalcoholic fatty liver disease (NAFLD) is considered a major cause of advanced hepatic disorders in many regions [1]. It is identified by increasing liver fat accompanied with the absence of any other cause [2]. Overweight, obesity, type 2 diabetes mellitus, and metabolic syndrome are regarded as the most significant risk factors for NAFLD [3].

NAFLD is associated with high morbidity. The resulting nonalcoholic steatohepatitis (NASH) is expected to increase massively in the upcoming decades, particularly in the gulf region which is characterized by high incidence of obesity and diabetes [4].

NAFLD can be classified into two major groups: NAFLD with steatosis solely and NASH, which is identified by inflammation that can develop liver fibrosis [5]. NASH is considered the major risk factor for the progression of decompensated cirrhosis in addition to hepatocellular carcinoma [6]. Accordingly, it can increase mortality due to hepatic causes [7].

Risk factors for fibrosis and cirrhosis have been identified as advanced age, obesity, and diabetes [8]. However, most of the outcomes related to hepatic causes are commonly linked to significant fibrosis and cirrhosis [9].

Hepatocellular carcinoma often occurs in cirrhosis arising due to NASH; though, hepatocellular carcinoma has been also diagnosed in non-cirrhotic NASH patients [10]. When NASH is associated with end stage hepatic disease is progressively known as an indication for hepatic transplantation [11].

Further studies that will focus on the diagnosis and treatment of this disorder, should investigate the elementary epidemiological properties [12]. Unfortunately, there is only one big epidemiological study that was done in Saudi Arabia on NAFLD. However, this study did not evaluate the contributing risk factors for NAFLD [13].

Therefore, this systematic review aims to examine the literature for the risk factors, methods of detection as well as complications of NAFLD, particularly NASH, in Saudi Arabia.

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References

1. Bellentani S, Scaglioni F, Marino M, Bedogni G. Epidemiology of non-alcoholic fatty liver disease. *Digestive diseases*. 2010;28(1):155-61.
2. Almobarak AO, Barakat S, Khalifa MH, Elhoweris MH, Elhassan TM, Ahmed MH. Non alcoholic fatty liver disease (NAFLD) in a Sudanese population: What is the prevalence and risk factors?. *Arab journal of gastroenterology*. 2014 Mar 1;15(1):12-5.
3. Ashtari S, Pourhoseingholi MA, Zali MR. Non-alcohol fatty liver disease in Asia: Prevention and planning. *World journal of hepatology*. 2015 Jul 8;7(13):1788.
4. Ismail MH. Nonalcoholic fatty liver disease and type 2 diabetes mellitus: the hidden epidemic. *The American journal of the medical sciences*. 2011 Jun 1;341(6):485-92.
5. Bellentani S, Marino M. Epidemiology and natural history of non-alcoholic liver disease (NAFLD). *Annals of hepatology*. 2009;8(S1):4-8.
6. Alswat K, Aljumah AA, Sanai FM, Abaalkhail F, Alghamdi M, Al Hamoudi WK, Al Khathlan A, Al Quraishi H, Al Rifai A, Al Zaabi M, Babatin MA. Nonalcoholic fatty liver disease burden—Saudi Arabia and United Arab Emirates, 2017–2030. *Saudi journal of gastroenterology: official journal of the Saudi Gastroenterology Association*. 2018 Jul;24(4):211.
7. Masarone M, Federico A, Abenavoli L, Loguercio C, Persico M. Non alcoholic fatty liver: epidemiology and natural history. *Reviews on recent clinical studies*. 2014 Sep 1;9(3):126-33.
8. Do A, Lim JK. Epidemiology of nonalcoholic fatty liver disease: a primer. *Clinical Liver Disease*. 2016 May;7(5):106.
9. Aldoheyhan T, Hassanain M, Al-Mulhim A, Al-Sabhan A, Al-Amro S, Bamehriz F, Al-Khalidi H. The effects of bariatric surgeries on nonalcoholic fatty liver disease. *Surgical endoscopy*. 2017 Mar 1;31(3):1142-7.

10. Ahad Eshraghian MD, EshraghianMD H, OmraniMD GR. Nonalcoholic fatty liver disease in a cluster of Iranian popula-tion: thyroid status and metabolic risk factors. Archives of Iranian medicine. 2013 Oct;16(10):584.
11. Collison KS, Saleh SM, Bakheet RH, Al-Rabiah RK, Inglis AL, Makhoul NJ, Maqbool ZM, Zaidi MZ, Al-Johi MA, Al-Mohanna FA. Diabetes of the liver: the link between nonalcoholic fatty liver disease and HFCS-55. Obesity. 2009 Nov;17(11):2003-13.
12. Elmakki E, Aqeely H, Bani I, Omer H, Solan Y, Taher A, Hadi T, Mohammed M, Abdalla SE, Mahfouz MS. Nonalcoholic fatty liver disease (NAFLD) in Saudi patients with T2DM in Jazan region: prevalence and associated factors. diabetes. 2014;5:872-9.
13. Yilmaz Y, Younossi ZM. Obesity-associated nonalcoholic fatty liver disease. Clinics in liver disease. 2014 Feb 1;18(1):19-34

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