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PERCEIVED BODY IMAGE AND WEIGHT MANAGEMENT IN A SOUTH AFRICAN POPULATION

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BACKGROUND-AIM

Misperception of own body image is common and may prevent individuals from engaging in corrective measures to improve health or participating in weight-loss programmes.

METHODS

A cross-sectional study was conducted in Cape Town, South Africa involving 1889 adults aged 20 years or older. Participants were required to estimate their weight prior to anthropometric (weight, height, waist and hip circumference) measurements and the Stunkard figure rating scale (FRS) was used for participants to select an image that closely resembled their perceived body shape. Metabolic syndrome (MetS) parameter tests were performed on all participants.

RESULTS

The mean ± standard deviation (SD) age was 47.7±15.8 years for men (n=452) and 50.3±14.9 years for women (n=1437). Approximately 20% of overweight participants estimated their weight correctly, whilst over 40% of obese individuals underestimated their weight. This was exaggerated in obese men, where only 9.5% estimated their weight correctly compared to 26.9% of women. Approximately 30.6% overweight or obese participants were engaged in a weight loss programme, although a desire to lose weight was expressed by 90% of obese individuals and 65% of overweight individuals. Logistic regressions adjusted for age, sex, and MetS components revealed that the waist circumference was associated with the likelihood for weight loss management (odds ratio 95% confidence interval; 5.7 (3.8-8.4); p<0.0001).

CONCLUSIONS

Our data shows that both men and women underestimate their weight and show distorted perceptions of their body shape, which influences whether individuals will participate in healthy initiatives or weight loss programmes. Our study contributes to the importance of mental health awareness in conjunction with physical health. We recommend that health facilities managing obesity include visual representations of body shapes corresponding to an individual's weight. This approach may assist in addressing the disconnect between how individuals perceive their body shape and their actual weight, thereby encouraging corrective actions, such as improved dietary choices and increased physical activity.

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REMOTE TESTING WITH POCT IN CHILOÉ ISLANDS: FROM 4 WEEKS TO 20 MINUTES. A VALUE-BASED LABORATORY MEDICINE SOLUTION FOR CHILEAN POPULATION

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BACKGROUND-AIM

To study the impact of the use of POCT to give access and equity in rural distant communities, with cost/effectiveness data and VBHC results of applied laboratory medicine in the improvement of care in diabetes and cardiovascular risk.We screened a sample of individuals of a 2k population living in small islands of Quinchao-Chiloé, testing lipid profile and HbA1c.

METHODS

Two analyzers Cobas s101 were installed in two islands, online and face-to-face training, logistics for consumables and communication strategies were considered to achieve the communities engagement. 167 adult patients from 18-79yo tested for lipid profile and HbA1c after informed consent in a 4 month period (may-sept/24). The % of cases outside the recommended cut-off points and the measurement of the time to perform the examination per patient were obtained. We estimated the cost savings of detecting earlier hipercolesterolemia and diabetes

RESULTS

121 were women (72%). The average HbA1c was 5.95% (4.9-12%). Total cholesterol averaged 211 mg/dl (114-322) in 140 cases measured and with results over 200 mg/dl in 53 cases (37.9%). The LDL cholesterol estimated in 117 cases by Friedewald formula on average was 115.6 mg/dl. The average triglyceride level was 220.3 mg/dl and hypertriglyceridemia above 150 mg/dl was detected in 76 cases out of 140 (54%). The average care time for each patient was 20 min, compared to 2 weeks-4 months for the tests sent to the closest laboratory. The estimated QALY years gained for a patient with type 2 Diabetes Mellitus detected at 38 vs 55yo was 3-7years, and savings of €18k-120k per patient assuming lifestyle changes and treatment followed correctly and based in chilean data. For hipercolesterolemia 3-10 years gained with quality of life and 2-5 QALY gained, considering an early intervention if detection is done on a 30 year old versus a 55yo subject to reduce cardiovascular risk.

CONCLUSIONS

POCT is a solution for screening non-communicable diseases such as hipercolesterolemia and T2DM in adult populations in remote areas. After diagnosis access to treatment programs and healthier lifestyles habits may be enabled. POCT is a suitable choice to save costs implementing prevention and better outcomes.

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DOES BEING A WOMAN INTERFERE WITH TREATMENT WITH ADALIMUMAB AND INFLIXIMAB?

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BACKGROUND-AIM

It is documented in the technical sheet that antibodies against Adalimumab increase clearance and decrease its efficacy. Similarly, antibodies against Infliximab have been related to increased transfusion reactions and a reduction in the duration of response. These document the frequency in different pathologies, in the pediatric population, and in general, but do not mention frequency based on sex. As mentioned, the presence of these antibodies can pose a serious problem in treatment, which is why it is important to analyze the incidence according to sex.
Objective:
To determine the prevalence of free antibodies against adalimumab and infliximab based on sex, and to analyze if there is a correlation between sex and the higher prevalence of free antibodies against Infliximab and Adalimumab in the population of the Hospital Clínico Universitario de Valladolid.

METHODS

A retrospective observational study was conducted using data from samples that had determinations of anti-adalimumab and/or anti-infliximab antibodies determined by an ELISA immunoassay.

RESULTS

110 samples with anti-adalimumab antibody values and 132 with anti-infliximab were analyzed. 8.18% of the total results were positive for anti-adalimumab and 14.39% of the total for anti-infliximab. It is also noteworthy that 4.55% of men and 3.64% of women had positive anti-adalimumab antibodies, results not very different from each other, whereas for anti-infliximab antibodies, 3.79% of men had anti-infliximab antibodies compared to 10.61% of women with anti-infliximab antibodies. Statistical analysis shows that the difference between sexes in anti-adalimumab antibodies is not significant ($p=0.984$ ($p>0.05$)), whereas the difference between sexes in anti-infliximab antibodies is significant ($p=0.024$ ($p<0.05$)).

CONCLUSIONS

In the selected sample, it was observed that anti-adalimumab antibodies are not related to sex, but in the sample of anti-infliximab antibodies, they are. This is important as it is related to transfusion reactions and reduced duration of response, so special care should be taken in women when administering this drug.

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TO STUDY THE PREVALENCE OF GESTATIONAL DIABETES MELLITUS IN RURAL VILLAGES OF SOUTH HARYANA, INDIA

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BACKGROUND-AIM

The prevalence of gestational diabetes mellitus (GDM) in India ranges from 3-35% which is due to high variability and differences in genetics and population across India. Also due to difference in screening practices across India. To overcome these challenges DIPSI used for screening of GDM in India. This study was aimed to know the prevalence GDM in rural villages of Haryana after implementing screening and diagnosis with DIPSI.

METHODS

This is retrospective analysis of data conducted in 18-49 years old Primigravida with singleton pregnancy screened for GDM via OGTT(DIPSI) and OGTT(100gm), attending the outpatient department of obstetrics and gynecology at SGT medical college for routine antenatal examination. The duration of the study period was January 2024 to October 2024.

RESULTS

Total 1442 pregnant women were registered in obstetrics dept for antenatal checkup. Out of which 646 were primigravida. Total 348 women subjected for OGTT (DIPSI), 298 for OGTT(100gm). The mean (SD) age was 22.3 (2.7) years, and the mean (SD) gestational age was 24 week (2.3). A total of 20.12% women screened positive for GDM compared to 17.56% in OGTT(100gm).

CONCLUSIONS

The prevalence of gestational diabetes depends on socioeconomic status, and demographic factors. Prevalence is high in both but DIPSI guidelines are more compliant and clinically relevant for the screening of GDM in resource-limiting settings where females either report late for antenatal checkup or fall out rate is very high in rural area.

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NATION-WIDE SCREENING PROGRAM PRELIMINARY RESULTS. BASIC LABORATORY TESTS RESULTS REVEAL ABNORMALITIES IN THE MAJORITY OF THE TESTED SUBJECTS. PREVENTION 40 PLUS PROGRAM – PRELIMINARY OBSERVATIONS.

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BACKGROUND-AIM

Prevention 40 PLUS program is a free-of-charge project for patients over 40 y.o., financed by the Polish Ministry of Health, which includes a set of laboratory tests (CBC, urinalysis, lipid profile, glucose, ALT, AST, GGT, creatinine with eGFR calculation, uric acid, fecal occult blood (iFOBT) and PSA (for men) and some additional anthropometric measurements.

METHODS

This abstract presents an analysis of the laboratory tests results obtained between July 1, 2021 and the end of December 2024, in patients undergoing testing at Diagnostyka SA network of medical laboratories. This population included 1,430,112 patients (572,018 men and 858,094 women) aged 40-105 (average 57.17).

RESULTS

The analysis of the results of studied population showed that:
• 61.47% had increased triglycerides value (> 1.13 mmol/L)
• 60.55% had increased total cholesterol value (> 4.9 mmol/L)
• 42.67% had increased glucose value (> 5.3 mmol/L)
• 14.16% had increased uric acid value (> lab-specific cut-off)
• 13.95% had increased GGT value (> lab-specific cut-off)
• 9.57% had increased ALT value (> lab-specific cut-off)
• 6.96% had increased AST value (> lab-specific cut-off)
• 6.98% had increased PSA value (> 4 ng/mL)
• 5.72% had decreased eGFR value (< 60 ml/min/1.73 m2)
• 3.87% had decreased hemoglobin value (< lab-specific cut-off)

CONCLUSIONS

The high percentage of dyslipidemia cases may indicate the need to assess the lipid metabolism in the population under 40 y.o., as early lifestyle modification may be crucial.
The glucose test results require separate analysis and discussion, as they suggest an incorrect patient preparation for blood collection (non-fasting). For this reason, it is worth to consider the substitution of glucose testing with glycated hemoglobin (HbA1c), which will eliminate the preanalytical factor. HbA1c results may suggest pre-diabetes, clearly identify diabetes cases and allow for monitoring of this disease in already diagnosed patients.
The obtained results present enormous medical value and confirm the importance of regular laboratory testing and anthropometric measurements for assessment of the health status of patients over 40 y.o. These basic test may serve both as a tool for detecting new undiagnosed cases, and as a means of monitoring health of patients already diagnosed and treated.

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TRANSFORMING WOMEN'S HEALTH IN ALBANIA: PREVALENCE OF ABNORMAL PAP SMEAR FINDINGS IN HPV-POSITIVE WOMEN THROUGH THE FIRST CO-TESTING INITIATIVE.

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BACKGROUND-AIM

Cervical cancer is the second most common type of cancer among women of reproductive age in Albania based on World Health Organization reports. Persistent high-risk Human Papillomavirus (HPV) has been proven to cause all cervical cancers. While it can be preventable through HPV vaccination, Albania has made minimal progress in ensuring broad access to it leaving the high-risk population unvaccinated. For the first time in Albania Co-testing of HPV and Liquid Cytology was offered to the Albanian women. This study aims to investigate the prevalence of HPV-positive cases among non-vaccinated women aged 20-66, focusing on both normal and abnormal Pap smear results to improve the local guidelines for prevention and early detection of cervical cancer.

METHODS

This retrospective study was conducted with 147 outpatient women who presented at Labor Dr. Limbach Albania between 2021 and 2024. Cervical smears were collected using Liquid Cytology (ThinPrep®), and the results were classified according to the Munich III system. HPV analyses were performed using the Polymerase chain reaction (PCR) method (cobas® HPV) to detect HPV High-Risk (HR) strains.

RESULTS

Among 147 patients, 55 (37.41%) tested positive for HPV HR, and 92 (62.59%) tested negative. The most common result was 12 HPV HR types (non-16/18) at 60%. Among HPV-positive patients, 33 (60%) had abnormal Pap smears, with Pap IIID1 being most frequent (27.2%). For HPV Type 16, 91.67% of cases showed abnormalities, primarily Pap IIID1 (36.36%). For Type 18, 75% had abnormalities, with Pap IIg most frequent (50%). In non-16/18 types, 42.42% had abnormal smears, mainly Pap IIID1 (50%). In HPV-negative cases, 81 (88.04%) had normal Pap smears. Among HPV HR-positive patients, 63.63% reported 4 or more sexual partners, compared to 11.96% in the HPV HR-negative group.

CONCLUSIONS

There is a statistically significant correlation between HPV HR strains and abnormal pap smear results. Therefore, it would be advisable to implement HPV-based primary screening for early cervical cancer detection, taking into consideration the lack of HPV vaccination and the lifestyle of the at-risk Albanian women population.

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IMPROVED PERFORMANCE IN SURVEILLANCE FOR HEPATOCELLULAR CARCINOMA THROUGH A MODIFIED APPROACH WITH EXTENDED USE OF AFP WITHIN THE NATIONAL CANCER SCREENING PROGRAM: A COMPREHENSIVE ANALYSIS OF DATA FROM 2018 TO 2020

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BACKGROUND-AIM

Hepatocellular carcinoma (HCC) is a major health concern, highlighting the need for effective surveillance. South Korea's National Cancer Screening Program (NCSP) uses ultrasound and serum alpha-fetoprotein (AFP) tests for high-risk populations, but its performance remains unevaluated. The AFP result is only used when a mass under 1 cm is detected on ultrasound, raising concerns about its appropriateness.

METHODS

We analyzed data from 820,380 participants in Korea's NCSP for HCC between 2018 and 2020, comparing the ultrasound-alone protocol, current criteria, and proposed modifications. The current criteria define surveillance positivity as positive ultrasound findings or equivocal findings with elevated AFP, while the modified criteria consider either positive ultrasound findings or elevated AFP. Sensitivity, specificity, and area under the receiver operating curve (AUROC) for detecting HCC with various AFP cutoffs were evaluated.

RESULTS

Ultrasound alone had a sensitivity of 44.26% and a specificity of 97.38%. The current criteria achieved a sensitivity of 44.82–46.51% and a specificity of 97.18–97.38% for detecting HCC with various AFP cutoffs ranging from 5 to 100 ng/mL. The modified NCSP criteria significantly improved sensitivity to 53.68–81.99% while maintaining specificity at 85.26–97.24%. An AFP cutoff of 7 ng/mL was identified as the optimal threshold based on AUROC. The AUROC for the modified criteria was 0.8728, significantly higher than that of the current criteria (0.7209, $P < .0001$).

CONCLUSIONS

The modified NCSP criteria, combining AFP with a 7 ng/mL cutoff and ultrasound, significantly improves the NCSP's performance for detecting HCC by enhancing sensitivity while maintaining specificity.

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EVALUATING REFERRALS FROM PRIMARY CARE TO SPECIALIST NEPHROLOGY CARE USING THE KIDNEY FAILURE RISK EQUATION (KFRE)

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BACKGROUND-AIM

Chronic kidney disease (CKD) affects over 10% of the global population, representing a major public health concern. Current KDIGO guidelines (2024) classify patients with albuminuria (urine Albumin-to-Creatinine Ratio [uACR] >300 mg/g) or estimated glomerular filtration rate (eGFR) <30 mL/min/1.73m² as having severe CKD. A promising tool to optimize Primary care to specialist referrals is the Kidney Failure Risk Equation (KFRE), which estimates the 5-year risk of kidney failure using four variables: age, sex, eGFR, and uACR. We aim to evaluate the referral process of CKD patients comparing KFRE to the KDIGO criteria in the province of Seville (1.6000.000 inhabitants).

METHODS

We retrospectively analyzed referral data from Primary care to Nephrology in Hospital Virgen del Rocío during the first semester of 2024. Inclusion criteria were: patients >18 years of age with measured uACR and eGFR (CKD-EPI 2021) results at least 3 weeks prior to the date of referral. Patients were categorized as eligible for referral based on KDIGO guidelines (uACR >300 mg/g and/or eGFR <30 mL/min/1.73m²) and 5-year KFRE >5%. Statistical significance was assessed using McNemar's test (99.5% CI) (R version 4.1.2).

RESULTS

Of 584 patients referred, 298 (51%) met the inclusion criteria. Of those, 153 patients (51.3%) met referral criteria under KDIGO guidelines, while 121 (40.6%) met referral criteria using KFRE. Comparing the two methods, KFRE could have reduced referrals by 20.9% ($p \leq 0.005$). The greatest reduction occurred in patients aged 18–60 (n=68), where KFRE identified 10 high-risk cases compared to 30 under KDIGO, decreasing referrals by 66.7% ($p \leq 0.005$). In patients aged 61–100 (n=230), KFRE identified 111 high-risk cases versus 123 under KDIGO, reducing referrals by 9.8% ($p \leq 0.005$). In ages 61–100, KFRE uniquely identified 19 patients, while KDIGO uniquely identified 31 ($p=0.119$). In ages 18–60, KFRE uniquely identified 1 patient, compared to 21 by KDIGO ($p \leq 0.005$).

CONCLUSIONS

Implementing the 5-year KFRE >5% in our population would theoretically reduce nephrology referrals by more than 20%, prioritizing patients at higher risk of kidney failure. Using KFRE as the main referral tool could optimize nephrology workflows, minimize waiting times, and significantly enhance the quality of patient care.