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Scientific Tracks

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ROLE OF ROOTS AND TUBERS AS FOOD AND NUTRITION SECURITY CROPS IN ETHIOPIA

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Abstract

Root and tuber crops are essential staples to lots of people worldwide. Their contribution to food and nutrition security is enormous. Because of their agronomic and nutritional advantages, they are potential to provide nutritious and cheap food in sufficient quantity. In Ethiopia, most root and tuber crops are used as security crops against crop failures to bridge the food deficit periods. Root and tuber crops such as Ensete, sweetpotato, taro, cassava, yams, and anchote function as important staple in different regions of Ethiopia. In the north and central Ethiopia, these crops serve as secondary staples whereas in southern and south-western regions they constitute a significant proportion of daily dietary intakes. Moreover, due to their agronomical and nutritional advantage these crops act as an insurance crop against crop failures to bridge the food deficit periods, especially for the most vulnerable households. Even though their importance in tackling food insecurity is high, the research and policy attention towards root and tuber crops is lacking in the country. Urgent policy attention and investment are required to improve yields, postharvest handling practices, and integration of these crop in wider food systems in Ethiopia. Excellent opportunities exist to expand these crops' potential for increased food and nutrition security in the country. The aim of the present review is to reveal the potential contribution of root and tuber crops in solving the problem of food and nutrition security in Ethiopia. The way they can fit the four dimensions of food security (availability, access, utilization, stability) and to the three determinants of nutrition security (access to adequate food, care & feeding practices, sanitation & health) has been shown.

Professional Biography

Mr. Adugna Mosissa studied Analytical chemistry at Jimma University, Ethiopia and graduated MSc in 2010. He then joined Mizan-Tepi University and worked for 3 successive years at position of lecturer. After 3 years service at the same position at Wollega University, he joined Jimma University to attend his PhD in 'Food Science and Technology'. At this time, only certain research activities are left to complete his PhD. He has published 4 articles in scientific journals.

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PCOS (POLYCYSTIC OVARY SYNDROME) CLINICAL NUTRITION

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Abstract

Polycystic Ovary Syndrome (PCOS) Is A Common Endocrine Disorder In Reproductive-Aged Women, Which Leads To Reproductive, Metabolic And Hormonal Abnormalities, Androgen Excess, Ovulatory Dysfunction, Polycystic Ovaries, Obesity, Adipose Tissue Dysfunction, Difficulty To Conceive And High-Risk Pregnancy Are The Most Common Pcos-Associated Complications. Cos Increases The Risk Of Chronic Diseases Like Type 2 Diabetes, Hypertension, Lipid Disorders, Cardiovascular Diseases And Malignancies Such As Breast And Endometrial Cancer. The Aim Of This Review Describes Environmental Factors Such As Dietary Habits Play An Important Role In Prevention And Treatment And Lifestyle Modifications Are The Most Important Therapeutic Strategies In These Patients. The Approach Of The Diet Therapy In These Patients Must Be To Reach Specific Goals Such As Improving Insulin Resistance, Metabolic And Reproductive Functions That Will Be Possible Through The Design Of Low-Calorie Diet To Achieve Weight Loss Or Maintaining A Healthy Weight, Limit The Intake Of Simple Sugars And Refined Carbohydrates And Intake Foods With A Low Glycemic Index, Reduction Of Saturated And Trans Fatty Acids And Attention To Possible Deficiencies Such As Vitamin D, And Omega-3.

IRON TABLET COMPLIANCE AND ITS DETERMINANTS AMONG PREGNANT WOMEN

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Abstract

Anaemia is an extremely serious public health problem in Nepal. Anaemia is typically defined as a haemoglobin level of less than 13.5 gram/100 ml and less than 12 gram /100 ml for men and women respectively.

The Iron Deficiency Anemia in pregnancy increases the risk of growth retardation low birth weight, premature delivery, increased perinatal mortality and reduced resistance to infection for mother as well as the infant. Compliance may be defined as the extent to which behaviour of the subject coincides with medical or health advice. The major problem with iron supplementation in pregnancy is compliance.

Objective:

To assess the Iron tablet compliance and its determinants among pregnant women.

Method:

The study was a quantitative cross-sectional study design. The total sample size was 341 number of eight-month completed pregnant women of rural settings of Nepal.

Result:

Among the total 341 respondents mean (SD) age and mean (SD) age at first childbirth was 23.38 (4.92) years and 20.06 (2.92) respectively found. Whereas mean (SD) weight of respondent at 9 months of pregnancy was 60.87 kg (5.86) and mean (SD) height was observed 154.41 cm (4.91). There was found 72.7% respondent visit complete fourth ANC visit in their 9th month of pregnancy and 87% of respondents consume deworming tablets. Result found that nearly half of the respondent had more than three years of spacing between pregnancies. There was 81% of pregnant women had a high level of iron tablets compliance and 19% had a low level of compliance. Among the total pregnant women, 86.7% start to consume iron tablets within four months of pregnancy. About 34% of pregnant women felt side effect of iron tablets. Common side effects of iron tablet were Nausea (36.4%), Gastritis (35%) and Constipation (11.1%). Result found that 39.6% of pregnant women were anaemic. Whereas 28% were mildly anaemic and 11% were moderately anaemic. Regarding knowledge on anaemia, there were only 5.6% of pregnant women had a medium level of knowledge remaining 94.4% had a low level of knowledge. Result observed that there were no significant association between socio-demographic characteristic of respondents and iron tablet compliance. Those pregnant women who visit ANC ≥4 times had 2.80 (CI=1.58-4.93) times more likely high level of compliance than who visit < 4 ANC visit. There were 27.50 (CI=11.92-63.4) times more likely to high compliance in those pregnant women who were satisfied with health worker and health service than who were fair or unsatisfied. Those respondents who not felt side effect of iron tablets had 3.27 (1.84-5.82) times more likely high compliance than who felt side effect of iron tablets. Study found that Gastritis, Nausea, constipation and headache were common side effect of iron tablets felt by pregnant women. Study found that major cause of not having full compliance of iron tablets was afraid to deliver large baby, ignorance and side effect of iron tablets. Those respondents who had no complication during pregnancy has 2.34 (CI=1.3-4.19) times more likely to high compliance than who had a complication during pregnancy. Level of compliance and anaemia had a strong significant association. Those respondents who had low-level compliance of iron tablets had 5.75 (CI=3.12-10.58) times more likely to high compliance in those pregnant women who were satisfied with health worker and health service than who were fair or unsatisfied.

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Keywords:

Compliance, Anaemia, Iron Tablets, Pregnant women

Professional Biography

Ganesh Barual has completed his MPH at the age of 29 years from Tribhuwan Unicversity Institute of medicine, Nepal. He is the Project Manager of FAIRMED Foundation Nepal. He has published 3 papers in reputed journals.

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DIETARY ROUTINE PRACTICES AMONG TYPE 1 AND 2 PALESTINIAN DIABETIC PATIENTS IN WEST BANK.

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Introduction:

Diabetes Mellitus (DM) is still considered as a public health problem all over the world, the number of those who developing type II diabetes is increasing. While dietary therapy is highly recommended to be involved in the management therapy of diabetic patient it is still neglected by patients, their families and even by health care providers.

The aim of this study was to asses' dietary routine practices among type 1 and 2 Palestinian diabetic patients in West Bank.

Research design and method:

Quantitative, a cross-sectional, descriptive analytical study was conducted in primary health care centers (Hebron, Ramallah and Nablus).350 patients were randomly selected from September to November, 2015, utilizing questionnaire including five domains; about dietary routine after diabetes.

Results:

The age of 32.9% of participants was more than 60 years and 91.7% of them have type 2 DM. Their dietary routine pattern mostly characterized by poor meals preparation (49.4% poor, 10.6% very poor). 33.7%, 17.4% have been evaluated as having poor and very poor family support respectively. Regarding to eating pattern just, 3.7% of participants have a very good eating pattern while 42.3% of them have poor eating pattern. The results also indicated that there was a significant relationship between last HbA1C results and eating pattern as p-value is (0.000< 0.05).in addition, there was a relationship between complications of DM and

family support as the p-value (0.018< 0.05) and also represented there was a significant relationship between educational level and meal preparation as the p-value is (0.000< 0.05).

Conclusions:

the factors affecting on dietary pattern were, firstly eating pattern (60.2%), then family support (57.8%) and meals preparation (57%).

Recommendation:

MOH has to pay more attention for the dietary therapy and include it in management therapy of diabetic patients and teaching session for patients to maintain optimum dietary habits is highly recommended. Family has to consider dietary therapy of diabetic patient while preparing their different meals and helping on reading the nutrition fact label before choosing the meals.

Keywords:

Diabetes Mellitus, Dietary routine, family support, meal preparation

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Optimizing Micronutrition for Athletes

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Statement of the problem:

While athletes are generally very studious about their protein, fat, and carbohydrate nutrition, micronutrition can sometimes be overlooked or misinterpreted.

Presentation Goal:

The goal of this presentation is to help all kinds of athletes optimize their micronutrition through food and supplements. An analysis of energy metabolism and how micronutrients make up certain metabolic proteins will be detailed in appropriate depth, the "Micronutrient Kreb's Cycle" will be a highlight of this section. Afterwards, erythrocyte proliferation and function through micronutrition and it's influence on muscular health will be explored. To finish, lesser-known sports nutritional therapies will be presented for the concerning athlete to explore.

Relevant Studies

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(More studies are subject to be added to this list as presentation research advances)

Biography

Matthew Cress is a Dietitian Nutritionist who works individually and with Enable Your Healing as the lead Dietitian Nutritionist. He started his education at Western Michigan University and finish his dietetic training at Université Claude Bernarde, Lyon 1, France. Matthew is a former elite gymnast. He specialized in ketogenic diets, sports nutrition, the microbiome, and is currently exploring the vast world of fermentation.

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FREQUENCY OF RELAPSE FOR SEVERE ACUTE MALNUTRITION AND ASSOCIATED FACTORS AMONG UNDER FIVE CHILDREN ADMITTED TO HEALTH FACILITIES IN HADIYA ZONE, SOUTH ETHIOPIA.

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Background:

Severe acute malnutrition is a common cause of morbidity and mortality among under five children in Ethiopia. A child may experience more than one episode of SAM depending on the improvement of the underlying factors. However, there is no study that determined the frequency of relapse of SAM cases after discharge in Ethiopia.

Objective:

To identify the frequency of relapse and associated factors among children discharged after undergoing treatment for SAM in Hadiya Zone, South, Ethiopia

Methods:

An institution based retrospective cohort study was done among children admitted to health posts for treatment of SAM from 2014/2015-2019/2020 under-five children's after discharge in health post for severe acute malnutrition in the last five years in Hadiya zone, SNNPR, Ethiopia. Both first admission data and relapse data were abstracted from the records of the SAM children from Aguste 1 – 30 /2020 Using a data collection format. Data were coded and edited manually, then doubly entered into Epi-Data statistical software version 3.1 and then exported to SPSS for windows version 26. After checking all the assumptions finally Negative binomial regression for poison has been used. All tests were two sided and P values <0.05 were used to declare statistical significance.

Results:

In the last five year there were the proportion of relapsed cases were 9.6%, 95% CI: (7.7% , 11.7%) On multivariable negative binomial regression model, after adjusting for background variables relapse of severe acute undernutrition was significantly associated with having edema during admission with (IRR=2.21, 95% CI:1.303-3.732), being in the age group of 6-11 months (IRR=4.74,95% CI:1.79-12.53), discharge MUAC for the first admission (P=0.001, IRR=0.37, 95% CI:0.270-0.50) increase the risk of incidence rate ratio(IRR) relapse case of severe acute under nutrition.

Conclusion:

Frequency of SAM relapse was positively associated with age, having edema during admission, while it was negatively associated with discharge MUAC. The results imply the need for reviewing the discharge criteria taking into account the recovery of MUAC as a marker for lean tissue accretion, especially in edematous children and those in the younger age,

Keywords; Relapse, Incidence rate ratio, SAM, under five children, Ethiopia.

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