

439 **OUTCOME OF REPRODUCTIVE HEALTH EDUCATIONAL INTERVENTION ON DROP-OUT RATE DUE TO PREGNANCY AMONG RURAL HIGH SCHOOL STUDENTS IN SW NIGERIA**

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Background and Aims In Nigeria, many in-school adolescents engage in risky sexual behaviour, which predisposes them to social and health consequences, including unwanted pregnancy, school drop-out, STIs and HIV/AIDS. This study addressed drop-out rate due to pregnancy among female high school students in rural SW Nigeria.

Methods The study utilized quasi-experimental design which consisted of four experimental schools in one rural local Government Area (LGA) and four control schools in another rural LGA which were randomly selected from the 30 existing LGAs in Osun State (One of the six states in SW Nigeria). The experimental schools received the intervention strategies (reproductive health educational messages including contraceptive services) while the control ones did not.

The intervention strategies were implemented for two and half school calendar terms (a calendar term in Nigeria lasts approximately thirteen weeks), from November 2008 to June, 2009. Drop-out rate due to pregnancy were collected in both groups at pre- and post-intervention using school attendance records and home visits.

Results The results showed a sharp reduction in the average proportion of students who dropped out due to pregnancy in all the intervention schools compared with the control group which recorded a slight change. The change was from 57.3% to 26.2% in the intervention group, while the control was from 64.5% to 55.0%.

Conclusions The study showed that the intervention strategies had an impact on reduction of school drop-out rate due to pregnancy.

440 **LINGUISTIC ACCULTURATION AND PARENTAL MONITORING ON THE SUBSTANCE USE OF MEXICAN-HERITAGE ADOLESCENTS IN PREDOMINANTLY MEXICAN ENCLAVES OF THE SOUTHWEST US**

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The present study, from an ecological perspective, examines the relationship of linguistic acculturation and perceived parental monitoring of the adolescent's behaviors as predictors of youth substance use.

Methods The data are drawn from a longitudinal study of the effectiveness of a Parent Education supplement called "Families: Preparing the New Generation." This supplement was designed to increase the efficacy of the established *keepin' it REAL* primary prevention intervention in reducing substance use among adolescents. Data were drawn from the pre-intervention Wave 1 assessment of 388 youths (189 boys, 204 girls) 7th grade participants who were recruited from nine middle schools, and youths who reside within two school districts that are densely populated with Mexican heritage youths.

Results: In general, greater perceived parental monitoring did significantly predict a lower likelihood (frequency) of substance use both for boys and girls. Furthermore, among boys, there was a significant acculturation by parental monitoring interaction effect which predicted lifetime use of alcohol. Among boys relative to girls, the effects of parental monitoring were more pronounced in terms of lower levels of alcohol use, among the most highly

acculturated boys. Results are discussed in terms of how levels of acculturation impact family processes and the drug use behaviors of Mexican-heritage adolescents who live primarily within Mexican enclaves (barrios) and who attend schools that have a high proportion of Mexican heritage youths. The present findings are also discussed in terms of the interface of community-based prevention with pediatrics as a means to enhance the overall adolescent health outcomes.

441 **IMPACT OF OBESITY ON BONE MINERAL CONTENT AND DENSITY IN A GROUP OF EGYPTIAN ADOLESCENT GIRLS**

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Recent studies suggest conflicting findings regarding association between obesity and adolescent bone mineral content (BMC) and bone mineral density (BMD).

Aim To determine the impact of being obese on whole-body (WB) BMC and BMD in a group of Egyptian adolescent girls.

Methods Study included 35 obese adolescent girls (13.5±1.8 years) with body mass index (BMI) ≥ 95th percentile and 35 maturation-matched (14.4±1.7 years) controls with BMI 15th - 85th percentile for age and gender. Bone mineral areas (BMA), BMC, BMD at the WB and body composition (lean mass, fat mass and fat %) were assessed by dual-energy X-ray absorptiometry (DXA). Calculations of the BMC/height ratio and bone mineral apparent density (BMAD) were computed for the WB.

Results BMD, BMC, BMAD and BMC/height ratio were highly significant higher in obese adolescent girls compared to controls. Body weight, height, BMI, lean mass, fat mass and fat% had highly significant positive correlations with BMD, BMC, BMAD and BMC/height ratio. BMA had highly significant positive correlations only with weight, height, lean and fat mass. After adjusting for either body weight or total fat mass, BMD, BMC, BMAD, BMC/height and even BMA became highly significant higher in control than obese girls. After adjusting for total lean mass, the same was observed but the differences were only highly significant between the two groups in BMC and BMA.

Conclusion This study suggests that there is positive effect of obesity on BMC, BMD, BMAD and BMC/height ratio due to body weight, while obesity has no effect on BMA.

442 **RESILIENCE AS A WAY TO COPE WITH BULLYING IN BRAZILIAN VULNERABLE STUDENTS**

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Bullying is an intentional aggressive behavior, involving imbalance of power. Bullied children are at risk for chronic multiple risks, social, emotional, and behavioral problems. Resilience is a positive predisposition towards difficulties, despite adverse experiences. It strengthens self esteem and empowers students to face adversities.

The main goal of this research was creating safer learning environment for students. Specific objectives were detecting bullying incidence in Brazilian schools, teachers' reaction to the aggressions and implement anti bullying programs, based on encouraging resilience in children.

255 children and teenagers, from both sexes, from public and private schools (8-16 years old) and 10 teachers filled a Bullying and Resilience Questionnaire. Discussions between teachers and students started activities designed to promote participants' resiliency skills, reduce bullying behavior and create safer classroom environments.

Results reported 62% victims, 11% bullies and 27% expectators. 8% from Teachers demonstrated confusion to identify bullying and the one's involved on the situation. Bullying happens in private and public schools in similar intensity. It's more reported in children, than adolescents and the verbal teasing is the frequented form of victimization, followed by physical aggressions. According to gender, girls also reported bullying, but it's in a hidden form. 4 months post-treatment, changes were seen in resilience acquisition, bullying reduction and differences based on gender.

Bullying is a pervasive, serious problem. These research findings must be disseminated to practitioners, schools and students to help victims coping with bullying. For those who are not naturally resilient, it's necessary to teach competencies associated with resilience.

443 AGGRESSIVE AND AND SELF-HARM BEHAVIORS IN ADOLESCENTS: THE ROLE OF EMOTION REGULATION

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Introduction The ability to regulate emotions has been identified as a protective factor associated with a reduced risk behaviors (Schneider and Caffray, 2000). Studies show that adolescents experience more frequent and intense emotions than individuals younger or older, and that at this stage of the life cycle greatly increases the incidence of conduct disorders. However, most research on emotion regulation has focused on children, while less attention was paid to early adolescence (Eisenberg & Morris, 2002). A better understanding of the emotional development would allow a better understanding of individual differences in regulation and behavior in this period of greatest risk.

Method The sample consisted of 740 adolescents aged between 13 and 19 years (mean age = 16.70, SD=0.91). For participants, attending secondary schools, are administered the following instruments: a) Difficulties in Emotion Regulation Scale (DERS: Giromini, Velotti, et al. 2012), a tool that examines the overall difficulty in regulating emotions through the evaluation of six factors; Aggression Questionnaire (AQ: Fossati et al., 2009) an instrument that measures hostility and aggression through five scales and Risk-Taking and Self-Harm Inventory for Adolescents (RTSHIA: Vrouva, Fonagy, Fearon, Roussow, 2010), a self-report measure designed to assess adolescent RT and SH in community and clinical settings.

Results Preliminary results show the presence of correlations between specific difficulties in emotion regulation, hostility, risk taking and self-harm behaviour, allowing a discussion about the role of emotional regulation in this particular phase of the life cycle.

444 SEXTING, FRAPING AND HYPER-TWEETING - WHAT SHOULD PAEDIATRICIANS BE DOING TO HELP?

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Unwanted sexual solicitation, online harassment, cyber-bullying and depression are all associated risks of social media to adolescents. More than a fifth of teenagers log on to a social media site at least ten times a day, 75% own mobile phones and of these, 25% use them for social media, 54% for texting and 24% for instant messaging. Adolescents often lack awareness of 'the digital footprint'; posting inappropriate messages, private and/or explicit pictures and videos and failing to recognise that 'what goes online, stays online'. Clinicians often see the consequences of these actions, for example, sexual abuse following meeting "friends" online, self harm following cyber-bullying and near-miss suicides following activities like "the choking game" viewed online.

Yet not all social media is bad. Professionals are in a key position to sign-post useful information and health advice via social media; promoting a healthy lifestyle, a balanced diet and sexual health screening.

The American Academy of Pediatrics (AAP) has published policy statements highlighting the impact of mass media and calling for media education to be a key goal for paediatricians. Professionals can provide anticipatory guidance to families, promoting wise-media choices as well as discussing the potential hazards. The AAP have developed a 'Media History form' to facilitate discussion.

We believe that professionals need to work together to ensure that adolescents can enjoy the benefits offered by social media while minimising the risks - how can we best achieve this?

445 THE RANGING NEW FEATURES AS A PRACTICAL APPROACH TO CONSTRUCT NEW PROBIOTIC CONSORTIUM FORMULAS

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Background Probiotic human bacterial mixtures constructed are important for health [1]. The aim was to develop new perspective variants of the known Russian mixed probiotic "Acilact" (*Lactobacillus* strains NK1+K₅III₂₄+100_{ash}; all strains of human origin) using approach of ranging new parameters of cultural fluids, their fractions and components.

Methods The system of at least 32 parameters was ordered as decreased/increased sequences of 4 members (Acilact and its strains) depending on any selected parameter. The cases of leadership (inverted or not in the sequence) of Acilact or strain(s) are considered as technological advantages of consortium or strain(s).

Results and discussion Among high molecular mass components (at least 30 kD), protein fractions, lectin systems, protease system, oxidase-reductase system, biosurfactants, intrinsic fluorophores containing protein and non-protein components, and activities against eukaryotic human pathogens were evaluated as perspective new features and criteria for construction of new system probiotics of differentially directed action. Non-linear proportional contributions of ingredient strains into final properties of Acilact were observed. Strains as dominant leaders in some features revealed in Acilact can be detected. Examples of significantly new advantages of ingredient strain(s) or Acilact are presented. The net of ordered ranges allows additional control of the results.

Conclusion The approach developed can help in constructing qualitatively new effective and directed mixed extended probiotics based on traditionally used probiotic bacterial industrial strains.

Reference [1]. V.V. Pospelova. Thesis (MD) [Microbial biological preparations for correction of intestinal bacteriocenoses, their designing and using (in Russian)]. Moscow. 1979.

446 BRONCHIAL ASTHMA AMONG UNIVERSITY STUDENTS, AJMAN, UAE

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Background and Aims Prevalence of wheezing and allergies among the Arab countries are on a rise due to urbanization resulting in substantial environmental changes. Prevalence of wheezing is about 14% among school children but data on adolescents in the Gulf region is lacking. This study aimed to assess the prevalence of wheezing and bronchial asthma among undergraduate students of Gulf Medical University.