There were no significant differences in the mortality risk scores PRISM, PIM y PELOD. Mortality of patients with CRRT after cardiac surgery was higher 43% than the mortality of the rest of patients 29% ($p=0,051$). Factors associated with mortality were age less than 12 months, weight less than 10 kg, hypotension, high PRIMIS score and low creatinine and urea at the beginning of the CRRT, and hemofiltration (without dialysis). In the multivariate study the only factor associated with mortality was the hypotension at the beginning of CRRT (Hazard Ratio: 4.01; CI 95%:1.2-13.4; $p=0.024$).

Conclusions: A 5 % of children after cardiac surgery require CRRT. Mortality of these patients is higher than other critically ill children who require CRRT. Hypotension at the beginning of the CRRT is the most important factor related to mortality.

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RENAL FUNCTION AND SIZE AT THE AGE OF 7 YEARS OF EXTREMELY LOW BIRTH WEIGHT INFANTS

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Background: Prematurity is considered to be an important risk factor of renal disorders in adulthood. However, there is little reliable evidence about the correlation between ELBW and the development of renal complications at school age.

Aim. Assessment of renal function, renal size and the risk of hypertension at the age of 7 years of the regional cohort of ELBW children born in 2002.

Material and methods: 40 children born as ELBW infants with mean birthweight 869g (SD:121) and mean gestational age 27.6 weeks (SD: 1.9) were evaluated at the age 6.7 years (range 6.3-7.4 years). Serum Cystatin C, microalbuminuria, renal ultrasound and 24-hour ambulatory blood pressure measurements were performed.

Results: Mean serum Cystatin C level was 0.63 mg/l (range: 0.45-0.78 mg/l) and mean estimated GFR was 124 ml/min/1.73m² (range: 98-176). Renal problems were found in 9/40 (22.5%) children including: mild hypertension (n=5), microalbuminuria (>20mg/g of creatinine) (n=3) and low renal volume on ultrasound (n=5).

Conclusions: The prevalence of renal problems in 7 year old children born as ELBW infants is considerable, although Cystatin C levels in all assessed children were within normal range. Obtained eGFR values may suggest compensatory hyperfiltration of kidneys, which might result in increased frequency of renal complications at later age. So, it is important to include systematic renal evaluation in the follow-up programs of ELBW infants.

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HEALTH AND SCHOOL PERFORMANCE: LONGITUDINAL FINDINGS FROM PROJECT HEALTHY PATHWAYS

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Background/aim: Although the connections between health and school performance are well accepted, data on the specific mechanisms that account for this relationship is remarkably scant. The aim of this study was to characterize the longitudinal associations between child health and academic achievement among 4th-8th graders followed for 3 years in 3 school districts in the USA.

Design/Methods: Project Healthy Pathways, an NIH-funded study, enrolled 2,091 4th-6th grade students (90% with complete data) and used a cohort sequential design to monitor changes over 3 years in their health, as reported by children (ACASI) and parents (mailed questionnaires), and their performance on standardized achievement tests and annual grade point averages.

Results: Both the quantity and pattern of children's health significantly predicted achievement test scores and grade point average. Although health declined for many children during entry into adolescence, about 20% experienced large decrements in health. These children were more likely girls, had low self worth, and experienced early puberty. Significant positive predictors of school performance were good nutrition habits, good coping, adequate levels of sleep, and feeling connected with adults, and negative predictors included feelings of stress,

physical discomfort, being a bully victim, having a special healthcare need, and being overweight.

Conclusions: In this longitudinal study, characteristic patterns of child health predicted future academic achievement. These findings suggest that health promotion efforts provided to children in elementary school may have beneficial effects on academic performance in adolescence.

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CLUSTER RANDOMISED TRIAL OF AN INFORMATION LEAFLET DESIGNED TO PROMOTE SELF-MANAGEMENT OF HIV/AIDS IN ZAMBIAN ADOLESCENTS

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Objective: The study aimed to examine whether an information leaflet designed to promote self-management of health in adolescents with HIV/AIDS was effective in increasing knowledge about HIV, reducing perceived stigma associated with the disease and increasing sense of control in Zambian school children.

Method: In this cluster randomised controlled trial, 8 schools in the Lusaka region of Zambia were randomised to receive either an English language HIV/AIDS information leaflet (n=156) or a control leaflet (n=186). Inclusion criteria were age 11-16 years and attending Grades 8 or 9 in the study schools. Students were given the leaflet and encouraged to discuss its content with their peers. The leaflets were removed and students completed measures of knowledge, stigma and health locus of control. Researchers analysing the data were blind to leaflet allocation.

Results: Participants receiving the HIV/AIDS leaflet (n=156) had higher levels of knowledge about HIV/AIDS ($p < 0.001$, Cohen's $d = 0.82$); a greater sense of control over health ($p < 0.05$, $d = 0.24$), and lower levels of stigma associated with HIV/AIDS ($p < 0.001$, $d = 0.55$) compared to those receiving the control leaflet (n=186). Better HIV/AIDS knowledge was associated with lower stigma ($r = -0.373$, $p < 0.001$) and, controlling for other factors, 21% of variance

in stigma scores was accounted for by HIV/AIDS knowledge ($p < 0.001$).

Conclusion: A brief educational intervention was effective in improving knowledge about HIV/AIDS and reducing stigma in a normal population of Zambian adolescents. The results support the use of the leaflet in peer education and in clinical samples to promote self-care.

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PRENATAL NICOTINE EXPOSURE INCREASES THE RISK OF NEONATAL APNEA -A NATIONAL BIRTH-COHORT STUDY

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Background: Smoking during pregnancy is associated with disturbed cardio-respiratory control of the infant and is a major risk factor for sudden infant death syndrome (SIDS). Although it is not known whether the harmful effects of smoking are caused by nicotine or other toxic substances in tobacco smoke, nicotine replacement therapy (NRT) during pregnancy is often regarded as being safer than smoking.

Aim of study: To investigate if the disturbances in cardio-respiratory control seen in infants exposed to smoke are also noticed in infants exposed to nicotine (in the form of snuff) prenatally.

Method: We conducted a population-based cohort study in the Swedish Medical Birth Register, 1999-2006, to study the association between maternal tobacco use and neonatal apnea.

Of 569,859 newborns, 7,599 were born to snuff-using mothers, 41,391 and 16,928 born to light smokers (1-9 cig./day) and heavy smokers (≥ 10 cig./day), respectively. Apnea was defined by using ICD-10 codes P28.2-P28.4. Logistic regression was used for statistical analysis.

Results: Compared with infants to non-users, prenatal exposure to snuff doubled the risk of apnea, and this risk was not confounded by maternal or