

Interpretation: The risk of bias of studies and variability in the distribution of relationships within relationship groups restricted the synthesis of Caribbean evidence on social inequalities of depression. Along with more research focusing on regional social inequalities, attempts at standardizing observational reporting guidelines for observational studies of inequality is necessitated. This review offers as a benchmark to prioritize future research into the social determinants of depression frequency and outcomes in the Caribbean.

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Abstract #: 1.007_NCD

Best Practice Guidance for the Use of Strategies to Improve Retention in Randomised Trials: Results From Two Consensus Development Workshops

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Background: Loss to follow-up in randomised clinical trials (RCTs) can lead to biased results. Evidence from a Cochrane review identified that monetary incentives and some postal communication strategies improve retention in RCTs. A related qualitative study found retention strategies are routinely used without knowledge of their effect. As no guidance for the use of retention strategies in RCTs exists, we developed consensus based guidance for the use of retention strategies in RCTs based on the evidence available.

Methods: We used consensus development workshops with trial personnel from two UK Clinical Trials Units to: explore the evidence available for retention in RCTs; identify barriers to the use of retention strategies; develop best practice guidance for the use of retention strategies; and to identify further strategies for evaluation. Each workshop commenced with a presentation of the evidence from a Cochrane review and associated qualitative study followed by discussions on: how convinced workshop participants were by the evidence; barriers to the use of effective strategies; types of RCT follow-up retention strategies could be used for, and retention strategies for future research. Summaries of the group discussion were fed back to workshop participants and agreed consensus on best practice guidance for retention identified.

Findings: 66 trial personnel attended the workshops. Best practice guidance was agreed for the use of small financial incentives to improve questionnaire response in RCTs and that 2nd class post rather than 1st class post was sufficient to improve postal questionnaire response in RCTs. Barriers to the use of effective retention strategies were: the small absolute benefits seen for the addition of monetary incentives, and perceptions among trialists that some communication strategies are outdated. Furthermore, there was resistance to change existing retention practices thought to be effective. Face to face and electronic follow-up strategies were identified for further research.

Interpretation: The extent of agreement on best practice guidance for the use of retention strategies in RCTs is limited by the variability in the currently available evidence. Potential barriers to the use of effective strategies have been identified. This guidance will need updating as new retention strategies are evaluated.

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Spatial and Temporal Analysis of Nasopharyngeal Carcinoma Mortality in China, 1973-2005

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Background: To describe geographical variation in nasopharyngeal carcinoma mortality over time, we analysed nasopharyngeal carcinoma mortality data from three retrospective national surveys on causes of death in recent decades in China.

Methods: We first calculated the age-standardized mortality rate (ASMR) for each of the 31 provinces in mainland China stratified by survey period (1973–1975, 1990–1992 and 2004–2005). To test whether the geographical variation in nasopharyngeal carcinoma mortality changed over time, we then estimated the rate ratio (RR) for the aggregated data for seven regions using generalized linear models with a negative binomial error structure.

Findings: From the mid-1970s to the mid-2000s, there was an decrease in nasopharyngeal carcinoma mortality in China both male and female, and the ASMR for male were much higher (2–3 times) than female for all 31 provinces both three surveys. The overall ASMR decreased from 2.03 per 100,000 in 1973–1975 to 1.51 per 100,000 in 1990–1992, and to 1.07 per 100,000 in 2004–2005. Residents living in the South China areas had a extremely higher risk of nasopharyngeal carcinoma mortality than the North China for all three survey periods with the RR been 4.95(95% CI: 4.30–5.70) in 1973-1975, 12.83(95% CI: 10.73–15.34) in 1990-1992 and 15.20(95% CI: 12.34–18.72) in 2004-2005. The interaction between geographical region and death survey period was significant ($p < 0.0001$), indicating that the geographical differential had widened over time.

Interpretation: Although nasopharyngeal carcinoma mortality in most areas of China reduced to near zero, the high risk of nasopharyngeal carcinoma in the South China is still noteworthy. It may be necessary to target public health policies to the South China to address the widening geographic variation in nasopharyngeal carcinoma mortality. To further reduce the burden brought by nasopharyngeal carcinoma in China, primary prevention strategies should mainly focus on banning smoking in public areas. Other measures such as mass screening in high-risk populations and effective treatment programs are also of paramount importance in reduce the deaths.

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Perceptions of Vaginal Illness Related to Water Quality in the Coastal Ouest Region of Haiti

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Background: There is a need for information on the perceptions of health concerns from a local perspective since resource availability and behavior expectations differ widely by social structure and region. Cultural competency, such as accurate definitions of health and illness are an integral part of developing effective medical interventions and educational initiatives because they allow research to respond directly to public needs, misconceptions, or behavioral practices.

Methods: An initial pilot needs assessments conducted in the Coastal Ouest region of Haiti eluded to a belief that vaginal illness related to water quality was a major concern among community members. Since the relationship between water quality and feminine health is not reflected in the literature, follow-up research was conducted to better define the beliefs and behaviors associated with “vaginal illness” and “poor water quality” from a local perspective. Cultural perceptions of vaginal illness related to water quality were explored with maximum variability sampling among community members and key informants. Participants were selected based on diversity criteria including age, gender, socioeconomic status, occupation, and type/degree of medical training. Beliefs and themes surrounding vaginal illness and water quality were allowed to arise through open-ended, semi-structured interviews conducted with the use of qualified translators.

Findings: Results indicate that the perception exists among all (N=37) Haitian study participants that water is related to vaginal illness, with 81% (N=30) of Haitian participants expressing the belief that water is a direct cause of vaginal illness.

Interpretation: The current biomedical model does not support the claim that water is causally related to vaginal illness in Haiti. However, given the cultural and behavioral patterns associated with water use in Haiti this association cannot be immediately dismissed. The current research indicates that the additional monitoring of bathing water may be a justifiable public health concern in tracing the transmission of vaginal infections, though further research is needed to determine what if any, specific pathogens might frequently be transmitted through contact with contaminated bathing water.

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Abstract #: 1.010_NCD

Association between Childhood Abuse and Health Risk Behaviors among Chinese College Students

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Background: Little is known about the link between child abuse and health risk behaviors among Chinese college students.

Methods: This cross-sectional study examined the prevalence of child abuse and its relations with individual and clusters of health risk behaviors among Chinese college students. A total of 507 students participated in this survey in Wuhan, China from April to May 2012. Six health risk behaviors were investigated among Chinese college students: internet addiction, self-harm behavior, suicidal behavior, current smoking, binge drinking, and risky sexual

behavior. Items were adapted from Youth Behavior Survey Questionnaire (YRBS) developed by the CDC in the USA and Young's Internet Addiction Test. Experiences of child abuse occurred before age 18 were measured by using *Childhood Trauma Questionnaire – Short Form (CTQ-SF)*, a well-validated retrospective self-report inventory.

Findings: The prevalence of child abuse from highest to lowest was emotional neglect (53.9%), physical neglect (49.0%), emotional abuse (21.8%), physical abuse (18.3%), and sexual abuse (18.1%), respectively. Males were more likely to report child abuse than females ($p < 0.01$). For males, emotional abuse was associated with internet addiction (OR = 2.28; 95% CI: 1.00, 5.20) and suicidal behavior (OR = 12.47; 95% CI: 2.61, 59.54); while sexual abuse was associated with internet addiction (OR = 2.30; 95% CI: 1.14, 4.66). For females, emotional abuse was significantly associated with increased risks for self-harm behavior (OR = 15.03; 95% CI: 3.59, 63.07) and suicidal behavior (OR = 5.16; 95% CI: 1.63, 16.40). Physical abuse was related to risks for internet addiction (OR = 2.50; 95% CI: 1.03, 6.04) significantly. Two-step cluster analysis showed that participants in clusters with more health risk behaviors reported higher scores of child abuse.

Interpretation: Our study reveals significant association between child abuse and multiple health risk behaviors among Chinese college students. Our findings highlight the need for implementing effective education programs targeting parents to adopt the best parenting style to raise their children. Furthermore, it will be important to early identify and take interventions for college students to reduce the occurrence of unhealthy behaviors in this population.

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Pediatric Burn Injuries in Northern Laos

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Background: Burn injuries represent the third most common type of trauma experienced by the pediatric population and are a significant cause of pediatric mortality and lifelong disability worldwide. The current global burden of burn injuries is profoundly inequitable with low and middle-income countries (LMICs) carrying approximately 90% of total burn cases. The region of Southeast Asia carries the highest annual incidence of burn injuries at 243 per 100,000 population. Children in LMICs, like Laos, have been shown to be at higher risk of burn injuries- through flame burns or scalding. However, no research has been conducted on the patterns of pediatric burn injuries in Laos to date. The main objective of this study is to describe patterns and understand trends among pediatric patients treated for burn injuries in Northern Laos.

Methods: This retrospective chart review was carried out at the Lao Friends Hospital for Children in Luang Prabang, Lao PDR. Each child's medical record was reviewed for demographic features, mechanism of burn, and duration of hospital stay. The chi-square test was used to analyze associations between two categorical