sub-groups to target with interventions, and propose topics for further research.

**Method.** A literature search was performed with Ovid on three databases, using wildcards and synonyms to increase the number of hits. This search produced 379 results, of which 41 remained after inclusion/exclusion criteria were applied. Additional sources were utilised as the review was written.

**Result.** Strong family relationships are protective against illicit substance use for under-25s, with conflicting results for licit substance use. Healthy peer relationships protect against substance use, particularly in the academically-stressful university environment. All Jamaican under-25s appear to be susceptible to peer pressure, which increases the likelihood of substance use. Spirituality is protective against substance use, although male Rastafarians are more likely to use cannabis. Certain forms of childhood maltreatment make use of particular substances more likely. University students and under-18s brought up in single-parent families are key sub-groups to target with interventions. Further research on mechanisms by which these determinants work, particular religions and which determinant has the greatest effect is recommended.

**Conclusion.** Various factors can protect against or predispose to substance use in Jamaican under-25s. This review, and future research, can help inform policy decisions and intervention design for the key sub-groups found.

**A randomised controlled trial to investigate the effectiveness of sustained photoprotective behaviour in xeroderma pigmentosum after intervention**

Tamara Searle1,*, Jessica Walburn1 and Sam Norton2

1IoPNN King’s College London, University of Birmingham and 2IoPPN King’s College London

*Corresponding author.

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**Aims.** This study aimed to investigate whether an intervention designed to improve photoprotective behaviours is effective at changing behaviour and whether any change could be maintained.

**Background.** Xeroderma Pigmentosum (XP) is a rare condition in which patients are at risk of malignancies when exposed to ultra-violet radiation (UVR). Sufferers must take extra precautions to protect themselves from UVR. They must apply sunscreen to exposed skin, wear thick clothing, gloves, and a UVR-protective visor. Treatments include preventative photoprotective measures; the use of sunscreen and protective clothing. Additionally, frequent eye and skin examinations are required and swift removal of any premalignant lesions.

**Method.** In this randomised controlled trial, 16 participants with XP were given questionnaires at 4 time points; baseline, post-intervention, 5 months and 9 months post-intervention. The intervention involved 7 one-on-one counselling sessions, as well as telephone consultations. Counselling sessions encouraged photoprotection adherence, self-efficacy and discussions of any barriers to improving photoprotective behaviour. This study focused on psychosocial variables, attitudes and photoprotection. Questionnaires included the photoprotection self-efficacy questionnaire, Self-Reported Behavioural Automaticity Index, Short Warwick-Edinburgh Mental Wellbeing Scale, Quality of Life and Brief Photoprotection Adherence Questionnaire.

**Result.** The intervention was shown to have no significant effect on participants’ questionnaires scores. Univariate ANCOVA revealed a group effect between follow-up 1 (FU1) and follow-up 2 (FU2); \( \eta^2 = 0.432 \) for self-efficacy in wearing photoprotective clothing. A group effect was identified from BL to FU1 and FU1 to FU2; \( \eta^2 = 0.343 \) and \( \eta^2 = 0.378 \) respectively in how often participants reapplied sunscreen to their face when outside for longer periods. Univariate ANCOVA revealed no group or time effect for the other outcome variables; for example, sunscreen self-efficacy.

**Conclusion.** The intervention had no significant effect on photoprotective behaviour questionnaire scores. Future research could focus on recruiting more participants globally to generate more statistically powered results. Research should focus on producing a maintainable intervention so that any positive change would produce better long-term health outcomes. This study lays the foundations for future XP research, which will be vital to improve understanding and enhance photo protective behaviour.