

P36 EFFECTIVENESS OF INTERVENTIONS TO IMPROVE SELF-MANAGEMENT FOR ADOLESCENTS AND YOUNG ADULTS WITH ALLERGIC CONDITIONS: A SYSTEMATIC REVIEW

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Aims This systematic review aimed to review the literature on interventions for improving self-management and wellbeing in adolescents and young adults (11-25 years) with allergic conditions, including asthma.

Methods A search strategy was constructed using Cochrane Database of Systematic Reviews, MEDLINE, Embase and Psycinfo. Studies had to be controlled trials or randomised control trials. Databases were searched to February 10, 2019. Quality assessments and data extraction were undertaken independently by two reviewers.

Results A total of 30 papers reporting data from 27 studies were included. Studies were conducted in the USA (k=17); Netherlands (k=2); Iran (k=2); Australia (k=2); Jordan (k=1); Canada (k=1); UK (k=1); Germany (k=1). Interventions were of 4 main types: psychological (k=9); E-health (k=8); educational (k=4); peer led (k=5); with 1 intervention focused on breathing re-training. All interventions were for asthma. Psychological interventions used cognitive behavioural or motivational interviewing methods, emotional disclosure, stress management or problem solving to improve health outcomes. Significant improvements in the intervention group compared to the control group were found for self-esteem, quality of life, self-efficacy, coping strategies and mood alongside improvements in asthma symptoms. E-Health interventions included the use of web-based computer tailored information, telecommunication compressed videos or mobile applications. Significant improvements were seen across most studies in inhaler technique, adherence, quality of life and in asking questions about asthma medication, triggers and environmental control. Educational interventions included group sessions focusing on asthma prevention and management, individual coaching sessions and nurse-led asthma clinics. They demonstrated significantly improved management of asthma symptoms, improved controller medication use and increased use of a written management plan, reduction in symptoms and improved quality of life. The peer led interventions included the Triple A (Adolescent Asthma Action) programme and a peer-led camp based on the Power Breathing Programme. Improvements were found for self-efficacy, school absenteeism and quality of life.

Conclusion Although significant improvements were seen across all intervention types, many studies were small feasibility or pilot studies and no studies for allergic conditions other than asthma met the inclusion criteria. Large longitudinal interventional studies across the range of allergic conditions are required to strengthen the evidence base.

P37 OPTIMISING ORAL ISOTRETINOIN DOSING FOR YOUNG PEOPLE WITH SEVERE ACNE

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Acne affects many young people and can have a profound effect on self-image. Treatment is based on a stepwise approach starting with topical treatments and escalating to oral treatments. Isotretinoin is a vitamin A derivative which is a very effective treatment for acne which is nodulo-cystic or scarring. Isotretinoin has a number of side effects, including reports of low mood and suicide. In the UK the pharmaceutical licence restricts prescribing to dermatologists. Published guidelines recommend a variety of different dosing schedules of oral isotretinoin for acne. Whilst there is no clear consensus on the optimal dosing strategy to reduce relapse, the available literature suggests 0.5-1.0 mg/kg/day with a cumulative dose of 120-150 mg/kg and treatment duration of at least 6 months. In practice, dosing of isotretinoin may be influenced by tolerability of physical and psychological adverse effects. We present a quality improvement project using retrospective cases to evaluate our departmental isotretinoin dosing practice in young people to determine whether (1) we optimise dosing to reduce relapse based on published guidelines, (2) how screening and monitoring for physical and psychological health, in conjunction with acne related quality of life (QoL), influenced clinicians' dosing decisions. Forty-two young people were included. Results showed 53% patients reached a cumulative dose of 120 mg/kg, and treatment duration was less than 6 months in 36%. Reasons for dose limitation were physical (26%) and psychological (21%) adverse effects. Measures of depressive symptoms improved in 74% and acne related QoL improved in 89.5% of cases at the end of treatment. Our data show that target total dose, dose duration and peak dose was not achieved in many of our patients and that physical or psychological adverse effects are limiting factors in achieving therapeutic targets. No serious adverse effects were reported and the measures of depressive symptoms and acne related quality of life improved during treatment. Uncertainty remains as to how to optimise dosing to reduce relapse rate. Further research is needed to determine the relapse rate of adolescence acne following isotretinoin treatment and the optimal dosing strategy to reduce relapse including the possibility of low dose isotretinoin regimens.

P38 A TRANSITION EVENING IS AN EFFECTIVE WAY TO DELIVER THE NICE QUALITY STANDARD AND IS POPULAR WITH SERVICE USERS

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Aims With a population of almost 500 general respiratory patients aged between 14 and 18 years, we developed a transition evening to deliver patient-centred, quality care. Our aim

was to improve the quality of our transition service by increasing knowledge of the transition process and surpassing the NICE Quality Standard (QS140).

Methods 3 evening events have been held. We have invited 24 young people and their carers to each event. Event structure includes height and weight measurement, lung function and/or inhaler technique and appointment with Respiratory Consultant or Specialist Nurse.

Young people were seen alone as part of the consultation. They were given information, introduced to the Ready Steady Go process and questionnaires were completed. Outcome measures were based on attendance rates, questionnaire feedback and achievement of the NICE Quality Standard.

Results Attendance has been variable. Maximal rates were achieved when appointment letter and personal phone calls were used.

| Clinic | June 2017 | October 2017 | June 2018 |
|-----------------|-----------|--------------|-----------|
| Attendance Rate | 33% | 82.4% | 50% |

The event was very popular with young people and their carers. After all 3 events, 100% of young people understood what transition is and our local approach. 100% of young people felt ready for transition. 100% carers understood the process of transition, felt their child is ready to build independence and found the event useful. The event provides an opportunity to deliver the NICE Quality Standard. For patients who attended, 100% have a transition plan (QS140-1), 100% have had an annual meeting (QS140-2) and 100% have been introduced to our named worker (QS140-3).

Conclusion Our model is popular with young people and their carers. This is a useful way to achieve the Quality Standard for patients in attendance but is time-consuming and labour intensive. The model can be applied to other specialties and to multi-speciality events. We hope to introduce a worker from adult services at our future events to further improve achievement of the NICE Quality Standard QS140-4.

P39 MEETING THE SEXUAL HEALTH NEEDS OF ADOLESCENTS

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Aims This study assessed support for increases in sexuality education and sexual health services for both middle school and high school students. Data is essential to reinforce change in communities with limited sexuality education, services, and related policy, yet with high rates of teen pregnancy and STDs/HIV.

Methods A 22-item survey was developed after an extensive review of existing instruments and feedback from an expert panel. Questions addressed support for specific sexuality education topics and sexual health services at middle and high school levels. Through a University research-polling center, Random-Digit-Dialing methodology for landlines (26.9%) and cell phones (71.3%) was implemented. Surveys were

conducted in English and Spanish. The resulting sample included 615 completed surveys.

Results Despite wide differences in party identification, median household income, population density and racial make-up, the counties' aggregate opinions were very supportive of sexuality education and sexual health services. Of eight sexuality education topics presented, 'HIV and STDs' received the highest support (91% middle school, 96% high school) and 'Gender and Sexual Orientation' received the lowest (71% middle school, 78% high school). Of four sexual health services presented, 'Testing for STDs/HIV' received the highest level of support (61% middle school, 82% high school), while 'Providing Condoms' received the lowest (49% middle school, 69% high school). Additionally, most participants (84-90%) would allow their children to participate in grade level appropriate sexuality education, most (85-89%) support teaching both abstinence and birth control, yet almost half (47%) do not know if sexuality education is taught in their districts. Demographic differences will be presented along with participant perceptions of adolescent sexual behaviors.

Conclusions Overwhelming support for increasing efforts to improve sexual health among adolescents exists. Findings from this study can be used to advance initiatives addressing unplanned pregnancy, STD/HIV infection, healthy relationships and active consent. This data supports components of evidence-based programs and current national efforts to improve adolescent sexual health.

P40 IMPACT OF A BRIEF VIDEO TO IMPROVE NALOXONE KNOWLEDGE IN ADOLESCENTS AND YOUNG ADULTS WITH SEVERE OPIOID USE DISORDER

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Aims Humanity has experienced several opioid crises, but none as devastating as the present one mainly affecting North America. Opioid overdose death rates among United States' youth have tripled since 1999. The aim of this study was to assess the impact of a short educational video on knowledge of naloxone for opioid overdose resuscitation among adolescents and young adults (AYA) with severe opioid use disorder.

Methods AYA receiving outpatient, medication-assisted treatment for severe opioid use disorder were provided a brief educational video when prescribed a naloxone overdose treatment kit. The video reviewed the correct signs of overdose, overdose risks, proper use of naloxone, and order of resuscitation steps. A 5-item survey assessed naloxone knowledge pre- and post-video. A self-completed survey obtained information regarding drug use and overdose experiences. McNemar's test was used to compare the proportion with correct answers pre- and post-video.

Results Of 35 participating AYA, 26 (74%) were female and 32 (91%) white, non-Hispanic. Twenty-two (65%) had witnessed a drug overdose. Of witnessed resuscitation efforts reported, 15 (43%) observed Emergency Medical Service assistance, 12 (34%) observed 'other efforts', and only 4 (11%) reported witnessing naloxone administration. Five (14%) AYA had experienced a personal drug overdose; the mean number of overdoses was 4 (± 3.32) with heroin being the most