

Proceedings of the  
**Australian Smoking Cessation Conference 2013**

Sydney, Australia  
6–8 November 2013



Publication of this supplement was supported by the Australian Smoking Cessation Conference 2013. The abstracts included in this supplement have been peer-reviewed under the supervision of the Editor-in-Chief of *Journal of Smoking Cessation* prior to publication, but may still be cited.

## **Section: Introduction to Special Supplement of the Journal of Smoking Cessation**

Welcome to this Special Supplement of The Australian Smoking Cessation Conference

The theme of this Conference is Translating the Science into Clinical Practice and the abstract content published herein reflects this theme.

It has been a challenge over the last decades to have the notion of nicotine dependence accepted into the minds of the public, let alone our medical and paramedical colleagues.

That individuals may need intensive help to cease smoking is evident when we are confronted by patients who continue to smoke in the face of what is clearly and evidently contrary to their best interests. Within this supplement are presentations that reflect the complex issues of competing imperatives, the sometimes overwhelming struggle with nicotine addiction and withdrawals and the equally overwhelming social and medical harm this causes.

As the scientific knowledge of the causes of tobacco dependence increases it has become evident that treatment may not be a “one size fits all” option. There are significant individual differences in the speed of liver metabolism of nicotine and the inherited capacity to metabolise smoking cessation medications as well as other inherited brain responses to nicotine. We must therefore assess and investigate each smoker who has difficulty in quitting, individually in order to best achieve a successful and permanent outcome. This Conference endeavours to go some way towards informing our colleagues how to achieve this outcome.

We thank all of those involved with the conception and administration of this Conference.

Renee Bittoun  
Colin Mendelsohn  
Chloe Sharp  
Tracey Greenberg  
Gillian Gould

The Events Authority

## **Overview of the Proceedings: ASCC Scientific Committee**

The Scientific Committee was thrilled to receive so many high calibre abstracts for oral and poster presentations. We were faced with the challenge of fitting these submissions into the two day conference program, but we believe the selected abstracts in the Special Issue of The Journal of Smoking Cessation are stimulating, informative, and will provoke much discussion. The following abstracts represent a range of international presenters who will showcase research and innovations in smoking cessation across various populations, settings, service providers and models.

Examples of some of the innovative content includes using genetic information to help tailor smoking cessation methods, novel uses of currently available nicotine replacement therapy (NRT) products, initiatives to foster engagement and improve access to smoking cessation supports and a review of psychological wellbeing after cessation.

Importantly, many abstracts focus on helping people considered to be among the most vulnerable populations to quit smoking. These include Aboriginal and Torres Strait Islander peoples, Maori people, refugees, people with mental health and other chronic conditions, pregnant women, adolescents, and children. Several abstracts centre on initiatives and programs tailored to the needs of Aboriginal and Torres Strait Islander populations from urban and rural/remote areas. These programs are community-led or based on meaningful engagement with communities to ensure programs are culturally appropriate. Features of these initiatives include enlisting family and support people, central involvement of Aboriginal Health Workers, motivational interviewing and integration with primary care.

We received several abstracts describing smoking cessation programs targeting young people and pregnant women. Plenary and parallel sessions will address tobacco dependence in adolescence and strategies for clinicians working with these young people and parents who smoke. An overview of smoking during and after pregnancy will set the scene for an update of evidence-based behavioural support strategies and the benefit/risk profile of various pharmacotherapies for smoking cessation during pregnancy.

People living with chronic conditions, including people with asthma, HIV/AIDS, or mental health issues, may face unique challenges when attempting to quit smoking. Leveraging hospitalisations to enhance smoking cessation outcomes are featured in the abstracts of this Special Issue. Case studies depicting novel use of NRT and controlling rapid weight gain in people with HIV/AIDS will pose useful examples for smoking cessation practitioners. Potential utility of smoking cessation programs in various health settings, including psychiatric, addiction treatment, and community mental health, is argued in this Issue. Also noteworthy is a talk that will clarify harm potential of Varenicline, in response to recent publications that have sparked controversy.

Innovations in service models and practitioner training were prominent in abstract submissions. Trialling new models of smoking cessation services integrated with primary care and healthy lifestyle programs, including multidisciplinary approaches, and involvement of practice nurses, pharmacists, and general practitioners as smoking cessation practitioners are exciting initiatives in health services. Following the roll-out of new tobacco control policy, several abstracts reported on anti-tobacco systems changes in health settings and strategies for improvement.

Finally, in light of new products entering the market, hot topics, including the ethics of engagement with and accountability of the tobacco industry, will stimulate debate and discussion. All in all, based on abstracts submitted, we have a lively and stimulating conference event. We appreciated the work that went into these abstract submissions and hope that this event will continue to stimulate research, innovative interventions and continuing professional development for this, the most important health issue of our time.

The Scientific Committee  
Australian Smoking Cessation Conference, November 2013  
Michelle DiGiacomo  
George Klein  
Lee Hogarth  
Renee Bittoun

## Invited Speaker Abstracts

(in alphabetical order from speaker's surname)

### **From treatment silos to integrated treatment: Addressing tobacco use among substance users**

Professor Amanda Baker  
University of Newcastle, Australia

People who misuse alcohol and other drugs report very high rates of smoking. Compared to other smokers, they also tend to smoke more heavily and report higher rates of nicotine dependence. Adverse consequences of such high rates of heavy smoking include chronic ill health and premature mortality. There is accumulating evidence that people who misuse alcohol and other drugs are concerned about their smoking and that addressing smoking does not undermine treatment for substance misuse. Although smoking cessation treatment can be effective among substance misusers, and some progress has been made towards incorporating such treatment into clinical services, tobacco and substance use treatment silos remain. Our research group has been investigating the effectiveness of a healthy lifestyles approach to help to break down barriers to provision of smoking cessation treatment among substance misusers. A healthy lifestyles approach is appealing to clients and staff and addresses multiple other risk factors for chronic illness. This treatment approach is described with regards to face-to-face, telephone, internet and group modalities. Addressing co-existing mental health problems among smokers with substance misuse problems is also possible within this context, with examples given.

### **“Quit 4 Baby”, an Australian, multi-strategic project aimed at smoking cessation in pregnant smokers, utilising a web site and targeting a variety of health professionals.**

Dr Lyndon Bauer

With the release of Australian Guidelines offering some support to the use of NRT in Pregnancy<sup>1,2</sup> Northern Sydney Central Coast Health Promotion Service launched an initiative aimed at increasing smoking cessation interventions among Midwives, Obstetricians, GPs, and in particular Pharmacists. We proposed that Pharmacists often acted as the “gate keeper” for advice around nicotine and were well placed to either start discussions around its use, or unfortunately anecdotally exclude its use even when suggested appropriately. We found an excellent level of engagement by pharmacists. Recurrent themes from health professionals include: reluctance for women to report smoking in pregnancy; a sense that in the hands of some clinicians who see large numbers of pregnant smokers, the cessation rate is extremely low, and that the reuptake rate after delivery for women who quit early in pregnancy is substantial. With an increasing concern around nicotine's impact on the foetus and little clear evidence of NRT efficacy in pregnancy, it is becoming increasingly difficult for clinicians to weight up the risk benefit ratio as suggested by guidelines. We have seen a reduction in local reported smoking during pregnancy, but part of this reduction may be a reporting issue.

- 1) [http://www0.health.nsw.gov.au/pubs/2006/pdf/ncg\\_druguse.pdf](http://www0.health.nsw.gov.au/pubs/2006/pdf/ncg_druguse.pdf)
- 2) <http://www.racgp.org.au/download/documents/Guidelines/smoking-cessation.pdf>

## **An overview of smoking in Aboriginal and Torres Strait Islander people, with a special focus on the hidden social determinants of Aboriginal health**

David Copley

Smoking amongst Aboriginal & Torres Strait Islanders is more than three times more common than the rest of the population and has serious effects on the health of this community.

The reasons behind the high rates of smoking will be explored in some detail, with a special emphasis on the Hidden Social Determinants of Aboriginal Health such as Grief and Loss. The resulting “Aboriginal Distress” is poorly understood and not often discussed, but it is a major contributor to Indigenous smoking and its adverse effects on Indigenous health.

The cultural and social factors which are linked to smoking in Indigenous communities will also be addressed as well as the burden of disease resulting from smoking.

Finally we will examine how the understanding of these issues or causations can aid in the development of culturally appropriate tobacco cessation programs and brief interventions. Current best practice intervention strategies and principles and the evidence supporting them will be discussed with an emphasis on providing practical advice for clinicians.

Using these strategies, we hope to help Aboriginal clients, their families and communities to reduce the current high rates of smoking and prevent early uptake by young Aboriginal & Torres Strait Islander men and women.

## **The onset, timeframe, trajectory and assessment of tobacco dependence in adolescence**

Professor Joseph R DiFranza

Those wishing to treat tobacco dependence must have a clear understanding of this medical condition. Recent advances in our understanding of tobacco addiction allow us to recognize its earliest manifestations. Half of youths show signs of addiction by the time they have smoked 20 cigarettes, and the most vulnerable individuals report symptoms of addiction after their first cigarette. Genetics plays a big role. Physical dependence proceeds through 3 stages in all smokers: wanting, craving and needing. Progression through the stages of physical dependence correlates strongly ( $r = .86$ ) with changes in brain structure. In addition to the progression through the stages of physical dependence, clinicians should be familiar with the Latency to Withdrawal, i.e., the delay after finishing a cigarette to the onset of nicotine withdrawal. In novice smokers, a single cigarette can keep withdrawal at bay for weeks. However, as addiction strengthens, the Latency to Withdrawal shortens progressively, such that withdrawal can begin within a few minutes of finishing a cigarette in heavy smokers. We will discuss 4 validated measures of tobacco dependence useful for evaluating and treating adolescents (and adults): the Latency to Withdrawal, the Stages of Physical Dependence, the Hooked on Nicotine Checklist, and the Autonomy Over Tobacco Scale.

## **Approaches to adolescent smoking cessation**

Professor Joseph R DiFranza

For decades, adults have seriously underestimated the degree of difficulty adolescent smokers have with smoking cessation. Even adolescent smokers who have not yet progressed to smoking on a daily basis have relapse rates comparable to those of long-term adult smokers. Indeed, daily smoking is typically the result of addiction, rather than its cause. The frontal lobes of the brain that are responsible for self control do not fully mature until the mid-twenties and this may contribute to difficulty with maintaining abstinence. Many of the smoking cessation approaches that are successful with adults do not work with adolescents. Nevertheless, smoking cessation programs for adolescents have been shown to help. School-based group counselling increases success with cessation. In a review of 64 teen cessation studies, Sussman found an overall quit rate of 11.8% for the intervention groups versus 7.5% for controls, indicating that a net 4.3% of participants quit as a result of their participation. Successful strategies included social influences, cognitive-behavioural, and motivation enhancement approaches. Higher quit rates were found for programs with at least 5 sessions. Pharmacological aids such as nicotine replacement and bupropion, while safe, have not shown consistent benefits in adolescents. Experiences to date underscore the importance of preventing the onset of tobacco use.

## **Nicotine replacement therapy: Recent advances**

Dr Stuart Ferguson

In Australia, it has been estimated that smoking results in ~15,000 deaths/year. Helping smokers to quit will reduce the death and disease caused by tobacco. Numerous studies have been conducted over the last two decades aimed at developing novel compounds for smoking cessation, with some notable successes. An often over-looked approach, however, is to optimise the use of existing smoking cessation methods and agents: improvements in quit rates can come from innovations in the way currently available treatments are used. This presentation will focus on recent studies examining alternate ways that nicotine replacement medications can be used to more effectively to treat tobacco dependence and to aid cessation. In particular, evidence will be reviewed investigating the use of Nicotine Replacement Therapy (NRT) prior to quitting (including as an aid to smoking reduction prior to quitting), and the combination of multiple forms of NRT during a quit attempt. The theory behind these new uses of NRT, proposed mechanism of action, and the available efficacy data for these various approaches will be presented. Finally, behavioural factors (e.g., treatment adherence) and individual differences that impact on NRTs efficacy will also be explored. These findings have implications for regulation and clinical use of NRT.

## **Evidence-based smoking cessation: the English experience**

Dr Andy McEwen

In support of the Framework Convention on Tobacco Control (FCTC) the World Health Organization (WHO) introduced the MPOWER measures to assist in the country-level implementation of effective interventions to reduce the demand for tobacco. *Offer help to quit tobacco use* is one of these measures and this presentation will describe how England instigated and developed a free-at-point-of-delivery national smoking cessation service in 1999, and the lessons learned from the past 10 years of operation. In this time English stop smoking services have treated over 5 million smokers (from over 225,000 in 2002 to nearly 800,000 in 2011). The number of four-week CO-validated quitters totals 1,850,000 but there is variation in success rates between different local services.

The National Centre for Smoking Cessation and Training (NCSCCT) was set up to address this variation and this presentation will look at the contribution the NCSCCT has made to translating evidence into practice by training over 10,000 stop smoking practitioners in evidence-based behaviour change techniques.

## **Behavioural support**

Dr Andy McEwen

Receiving behavioural support during a quit attempt roughly doubles smokers' chances of quitting successfully (about the same effect as single dose NRT), but do we know what the most important components of behavioural support are?

Before embarking on developing training and assessment systems for stop smoking practitioners the National Centre for Smoking Cessation and Training (NCSCCT) developed a reliable taxonomy of behaviour change that allowed us to code group-specific behaviour change techniques for smoking cessation. Seventy-four behaviour change techniques were identified (and subsequently converted into learning objectives to form the national training standard for England) and fourteen were found to be associated with higher short-term self-reported quit rates.

The NCSCCT Training and Assessment programme is founded upon these evidence-based behaviour change techniques and has been found to significantly improve knowledge and skills of practitioners undergoing the training and passing the assessments. The NCSCCT's training, assessment and certification system provides a degree of quality assurance for individual stop smoking practitioners, their employers and, most importantly, to smokers.

## **Overview of Smoking during Pregnancy**

Professor Cheryl Oncken

Dr. Oncken will review the epidemiology of smoking during pregnancy and postpartum, risk factors for continued smoking during pregnancy, maternal and child health effects of prenatal tobacco exposure, and the effects of smoking on lactation.

The prevalence of smoking during pregnancy is 6–22% in high income countries. In Australia, maternal smoking rates are approximately 13.5%, with a rate as high as 50% amongst indigenous women. Although 25–45% of women quit spontaneously after learning of pregnancy, the majority of pregnant smokers continue to smoke during pregnancy. Risk factors for continued smoking include a lower socioeconomic status, younger age, having a partner who smokes, mental disorders, and higher levels of addiction. Among women who quit smoking in pregnancy, approximately 70% relapse within the first year after delivery. Women who smoke postpartum produce less milk, and are less likely to breastfeed.

Maternal smoking increases the risk of spontaneous abortion, placental complications, delivering a low birth weight or preterm infant, and sudden infant death syndrome. Health risks in children include cognitive and behavioural effects, as well as asthma and obesity.

In summary, smoking during pregnancy and postpartum is a significant public health problem in need of public health and clinical interventions.

## **Treatment of Smoking during Pregnancy**

Professor Cheryl Oncken

This presentation will focus on the treatment of women who smoke during pregnancy. Maternal smoking is associated with a number of health risks to mother and infant. Despite the risks, most women do not quit smoking during pregnancy. The presentation will discuss various different types of behavioural treatment interventions that have been examined in pregnant women, and their overall impact on smoking cessation rates.

Although medications are recommended for most smokers, a paucity of data exists in pregnant women. Given the significant health risks of smoking during pregnancy, and the potential of pharmacotherapy to increase quit rates, a need exists to examine the safety and efficacy of pharmacotherapy for smoking cessation during pregnancy. This presentation will also review what is known regarding the benefit/risk profile of various pharmacotherapies for smoking cessation during pregnancy.

Future directions for research regarding interventions for smoking cessation during pregnancy will also be discussed.

## **Supporting pregnant Aboriginal and Torres Strait Islander women to quit smoking**

Dr Megan Passey

Rates of smoking among pregnant Aboriginal and Torres Strait Islander women are three times as high as among non-Indigenous pregnant women, with consequent increases in adverse outcomes. Multiple factors contribute to this disparity, including the underlying high prevalence of smoking in Indigenous communities; poor understanding of the harms of smoking and the benefits of quitting; and poor skills in smoking cessation among antenatal care providers who may also be reluctant to address smoking.

However, pregnancy provides an excellent opportunity to address smoking as women are highly motivated to do the 'best for baby', expect antenatal providers to address smoking and substance use and see providers repeatedly. Quitting programs need to address the underlying drivers of smoking including the social and household environment, the stresses associated with pregnancy, and possible use of other substances, while building on the woman's underlying motivation to help her baby and be a good role model for her family. Input from Aboriginal women in developing programs and resources will enhance cultural appropriateness and acceptability, leading to increased engagement with Aboriginal women. Approaches that involve the broader Aboriginal community, through partnerships with other local services, will help to shift community attitudes and provide additional support to women.

## **The Epidemic of Tobacco Use among those with Co-occurring Mental Health and Addictive Disorders: Addressing Myths & Barriers**

Associate Professor Judith Prochaska

Tobacco prevalence is two to four-fold greater among those with co-occurring mental health or addictive disorders relative to the general population with serious health consequences.

Relative to other medical specialties, psychiatrists are the least likely to address tobacco with their patients. This presentation will review the weight of the evidence to address prevailing myths and barriers that have limited provision of tobacco cessation treatment in psychiatric and addiction treatment settings, most centrally: beliefs that those with mental health or addictive disorders need to smoke, are not motivated to quit, are unable to quit, and that quitting smoking will harm mental health recovery and/or sobriety from other substances of abuse. The presentation will consider the tobacco industry's role in promoting smoking in this vulnerable group including funding of research on the self-medication hypothesis, marketing to vulnerable populations, and interest in efforts to gain exemption from hospital-wide smoking bans in the US. Recent tobacco treatment clinical trials have reported encouraging findings with psychiatric populations; findings will be presented with discussion of practical applications and consideration of future directions.

## **Varenicline for Tobacco Cessation: Quantifying the Harm Potential**

Associate Professor Judith Prochaska

Varenicline, a novel tobacco cessation aid, binds with high affinity and selectivity to  $\alpha 4\beta 2$  nicotinic acetylcholine receptors in the brain. The partial agonist activity induces modest receptor stimulation that attenuates the symptoms of nicotine withdrawal. In addition, by blocking the ability of nicotine to activate  $\alpha 4\beta 2$  nicotinic acetylcholine receptors, varenicline inhibits the surges of dopamine release that are believed to be responsible for the reinforcement and reward associated with tobacco use. Comparative trials have demonstrated the effectiveness of varenicline for quitting smoking and sustaining abstinence relative both to placebo and to bupropion, and recent multiple treatment metaanalyses have concluded varenicline's superiority to nicotine replacement therapy.

Varenicline, however, also has been at the center of controversy concerning potential serious adverse events, both neuropsychiatric and cardiovascular in nature. This presentation will report on the science underlying the efficacy of this tobacco cessation aid and evidence of neuropsychiatric and cardiovascular serious adverse effects. Discussion will include practical considerations for use of varenicline in patients with and without mental illness.



## **Interventions for smoking cessation in hospitalised patients**

Professor Nancy Rigotti

A hospital admission provides a good opportunity to help people stop smoking because hospitals require temporary tobacco abstinence and the illness prompting the admission may increase a smokers' perceived vulnerability to the harms of tobacco use, providing a 'teachable moment' for change. Finally, illness brings smokers to the healthcare setting, where smoking cessation interventions can be provided. Over 50 controlled trials of smoking interventions starting in the hospital have been conducted worldwide. Their results, summarized in a systematic review, show that starting smoking cessation counselling and medication in the hospital improves long-term smoking cessation rates by 40% but only if treatment continues for a month or more after discharge. Translating this research to routine practice is now the challenge. We need to identify cost-effective models that can be widely adopted and advocate for their adoption by hospitals and health care systems. The presentation will summarize the evidence of efficacy for hospital-initiated smoking interventions and describe new approaches, including new communication technologies, for sustaining treatment during the transition from hospital to home.

## **Remote and urban Indigenous smoking: considerations for tobacco cessation practice**

Jan Robertson

Smoking prevalence rates of over 80% in some remote Australian Aboriginal communities pose a significant challenge for cessation clinicians.

We have recently completed a five year tobacco intervention study in three remote communities in Arnhem Land, Northern Territory. The aim was to understand what can work to reduce tobacco use in these settings. Data collected during the Top End Tobacco Project included community baseline tobacco use surveys ( $n = 400 \geq 16$  years), interviews with local and regional stakeholders ( $n = 82$ ) and observational notes.

We report on challenges which, for clinicians, include: lack of immediate access to a wide range of cessation medicines and a principal obligation to provide acute patient care. For those trying to quit there is limited intensive quit support available. The processes of nicotine addiction are poorly understood. Constant exposure to environmental tobacco smoke was cited most frequently as cause for relapse. Furthermore, the high prevalence of cannabis use and common practice of mixing cannabis with tobacco also was noted to have implications for cessation support.

This presentation will provide some considerations for cessation practice in both remote and settings such as the involvement of Aboriginal Health Workers, the local cultural context of tobacco use, and strategies to reduce cue exposure.

## **KidsQuit program and practical advice for clinicians**

Associate Professor Susan Towns

KidsQuit, an e-Learning program on Smoking Cessation for clinicians working in a paediatric health care setting, was developed at The Children's Hospital at Westmead and launched in 2008. The program is an interactive and educational tool to provide health professionals with simple strategies for advising adolescents, parents and carers with smoking cessation advice as well as strategies to reduce exposure to Second Hand Smoke.

Opportunistic brief intervention by health professionals to adolescents, parents and carers regarding improving their health by smoking cessation has demonstrated efficacy and is advised to be part of every day clinical practice. Providing smoking cessation training addresses one of the greatest barriers to routine brief intervention and improves confidence and knowledge in providing simple advice and assistance to parents and/or adolescents on the health effects of smoking. Kidsquit will be discussed in further detail with results of its evaluation within hospital, community youth health and school based settings presented demonstrating its efficacy and accessibility to a range of professionals working with high risk adolescent populations.

Practical and evidence based strategies for clinicians working with adolescents and parents who smoke will be presented and discussed.

## Genetics and pharmacogenetics of smoking and implications for therapy

Professor Rachel Tyndale

Genetic variation among people can influence the success for quitting smoking. For example, nicotine is metabolically *inactivated* to cotinine by the liver enzyme CYP2A6. Slow nicotine metabolizers smoke less and have better rates of smoking cessation in the placebo arm of clinical trials, suggesting an overall greater success in quitting smoking in the absence of pharmacotherapy (Patterson et al., 2008; Ho et al., 2009). CYP2A6 also predicted the effectiveness of transdermal nicotine where the odds of abstinence were reduced by 30% with each quartile of faster metabolism (OR = 0.72, C.I. = 0.57–0.90,  $p = .005$ ) (Lerman et al. 2006; Schnoll 2009, Lerman et al., 2010). Bupropion is metabolically *activated* to hydroxybupropion by the genetically variable enzyme CYP2B6. Higher hydroxybupropion concentrations (per  $\mu\text{g/mL}$ ) resulted in better smoking cessation outcomes (Week 3, 7 and 26 OR = 2.82, 2.96 and 2.37,  $P = 0.005–0.040$ ) which was not observed with bupropion levels (OR = 1.00–1.03,  $P = 0.59–0.90$ ) (Zhu et al., 2012). Genetic variation in CYP2B6, the enzyme that metabolizes bupropion to hydroxybupropion, was identified as a significant source of variability in hydroxybupropion formation. Thus assessing the variability in CYP2A6 or CYP2B6, or other genes which influence cessation, could be used to optimize treatment choice and dose in order to enhance smoking cessation rates.

## Blue moods and black lungs: Relevance of depression subtypes for smoking cessation

Professor Kay Wilhelm

Smoking rates in Australia are among the world's lowest following decades of proactive public health policy and good smoking cessation treatment resources. Those who continue to smoke often have mental and physical health comorbidities. Depression is an important role per se and also because of its impact on other comorbidities. However, 'depression' is not a homogeneous construct and the various depression types have different treatments and differing implications for smoking cessation.

This paper will review a number of depression types (major depression with and without melancholic features, depression in context of medical illness and of personality disorders) to illustrate this point in terms of practical approaches to assessment, treatment and implications for smoking cessation.

## Helping people with severe mental illness to quit smoking

Professor Robyn Richmond

The first Australian National Report Card on Mental Health concluded that "the reduced life expectancies and poor health of people with the most severe mental illnesses . . . is a national disgrace and it should be a major public health concern". The life expectancy of people with schizophrenia or bipolar disorder is 12 to 19 years shorter than that of the general population. Cardiovascular disease is the single largest cause of death. A major cardiovascular risk factor is smoking. Although smoking rates in Australia have decreased significantly to 15%, prevalence among those with a mental illness remains high: 70% among those with schizophrenia and 60% among those with bipolar disease.

Tobacco use is regarded as a chronic health condition requiring repeated smoking cessation advice, treatment and monitoring. The Australian guidelines identify at high risk those with a mental illness. The guidelines recommend use of the 5 As approach to smokers with a mental illness: Ask, Assess dependence and motivation to quit, Advise, Assist the smoker to quit with evidence based cognitive behavioural therapy and pharmacotherapy, and Arrange follow up to monitor progress. Results from two Australian randomised control trials are described. Higher proportions of smokers with a psychotic illness who completed all treatment sessions had quit smoking at all follow up occasions compared to those in the control group.

## **Smoking cessation clinical practice guidelines: a tool for translating evidence to practice**

Professor Nicholas Zwar

Clinical practice guidelines are defined as “systematically developed statements to assist practitioner and patient decisions about appropriate healthcare for specific clinical circumstances”. They are tools used by healthcare professionals to assist in clinical decision-making and to improve healthcare for patients. This presentation describes the process of development and dissemination of the smoking cessation clinical practice guidelines produced by the Royal Australian College of General Practitioners (RACGP). *Supporting smoking cessation: a guide for health professionals 2011* is an update of previous smoking cessation guides produced by the RACGP. It incorporates research developments in both the science and practice of cessation support and is based on evidence and guidelines from countries with similar population profiles. The publication covers not only updated information on pharmacotherapy but also key messages in regard to the role of health professionals, who should be offered support, issues for high prevalence populations and those with special needs. The publication is aimed at a broad range of health professionals and was endorsed by key stakeholder organisations. The guide has been disseminated in hard copy and electronically. The guide has been one of the most frequent downloads from both the RACGP website and the [treatobacco.net](http://treatobacco.net) website which lists guidelines from around the world.

## **Supporting smoking cessation in primary care: early results of the Quit in General Practice study**

Professor Nicholas Zwar

Despite falling prevalence of smoking, tobacco use remains one of the major preventable causes of death and illness in the Australian population. General Practice interventions to support smoking cessation can be effective but are often underutilised. New models of enhanced cessation support in primary care are needed, such as practice nurse (PN) involvement. This three arm cluster randomised controlled trial compared support provided by the PN with Quitline referral with usual GP care. PNs in the Quit with PN arm undertook six hours of education and were then supported by mentoring phone calls. Participants aged 18 and over were recruited in the practice by trained research assistants. All study participants were offered free nicotine patches. Outcome assessment was by computer assisted telephone interview conducted by research staff blind to group allocation. Primary outcome measures were self-reported sustained and point prevalence abstinence at three month and 12-month follow up points. A total of 101 practices and 2390 patients took part in the study. The loss to follow-up at 12 months was 17.6%. The presentation will provide early quantitative results from the study and also report on qualitative feedback through semi-structured interviews with Practice Nurses and GPs.

## Concurrent Sessions Abstracts

(in alphabetical order from first author's surname)

### 1. The Use of QCSRF and NEEDNT Questionnaires to Monitor Weight Gain Post Cessation

Amer Siddiq, AN. Adamson, S. Schroder, R. Sellman, D.

National Addiction Centre  
University of Malaya, Malaysia

#### Poster Presentation

**Introduction** Weight gain is a concern for clients wanting to quit smoking. The use of the Questionnaire on Craving for Sweet and Rich Food (QCSRF) and the Non-Essential Energy-Dense Nutritionally deficient food (NEEDNT) questionnaire may be useful in the clinical setting to complement weight and body mass index (BMI) measurements. This study aims to validate these instruments and describe their ease of use. **Method** The QCSRF and NEEDNT were administered to 256 New Zealand smokers who planned to quit smoking and who were participants in a longitudinal observational study. **Results** The QCSRF was found to have similar factor structure as the original study. The QCSRF was correlated with the NEEDNT ( $r_s = 0.273$ ,  $N = 256$ ,  $p < 0.01$ ). **Discussion** The QCSRF was found to have similar validity in measuring craving for sweet and rich food as the original study. The correlation with NEEDNT was expected and reassuring. Both instruments were easily used in the clinic setting, taking 10 minutes to complete. The NEEDNT is used as an alternative for a food diary and creates opportunities to discuss healthy eating. Therefore these instruments may be useful to monitor certain foods as possibilities of weight gain on quitting smoking.

### 2. Ethnic differences of tobacco smoking during pregnancy and the birth weight: Tailoring cessation programs

Balazs, P. Greczner, A. Rakoczi, I. Foley, K.

Semmelweis University, Budapest, Hungary

#### Poster Presentation

**Background:** Roma are Hungary's greatest minority (8%) with low socioeconomic status (SES) and the worst low birth weight (LBW) outcomes. Tobacco smoking during pregnancy (TSDM) is widespread among Roma, affecting heavily the babies' BW. **Methods:** In a retrospective cohort study of singleton babies' mothers ( $N = 12,417$ ), we separated the self-identified Roma ( $n = 3,054$ ), and non-Roma ( $n = 7,538$ ), LBW ( $n = 880$ ) and normal BW ( $n = 9,712$ ) cases. We used logistic regression to assess factors that contribute to LBW ( $p \leq .05$ ) and linear regression to measure differences among BW babies ( $p \leq .05$ ). **Results:** Comparing Roma/non-Roma subsamples, the LBW frequency was 12.9% versus 6.4%, TSDM 87.9% versus 47.4%, teenage pregnancy 9.1% versus 0.9%, and BMI-underweight 21.2% versus 10.0%. Being Roma was not significant in the logistic regression model, however TSDM increased the probability of LBW two-fold (95%CI = 1.74–2.56), the BMI-underweight by 1.9 (95%CI = 1.56–2.28). In the linear regression model, being Roma lowered average birth-weight (118.6 gram (95%CI = 88.1–149.1) with TSDM (186.3 gram; 95%CI = 159.5–213.0), BMI-underweight (230.9 gram 95%CI = 201.4–260.4) and the mother's age.

### **3. Smoking in Mental Health Services: New solutions for an old problem.**

Barnfield, J. Haslam, A.

Monash Health

#### **Poster Presentation**

It is commonly accepted that most people with a diagnosis of a mental illness smoke cigarettes, and it is often the experience of patients that the influence of smokers in mental health services can support and even encourage the addiction. In the 3 years since Monash Health commenced its smoke free policy the implementation of that policy in the mental health services has been fragmented. Several units fully supported the policy, while others applied for exceptions and continued to openly disagree with the policy. With full management support of a smoke free environment, the Mental Health Program introduced a range of new strategies to assist in retraining our clinicians in the management of nicotine addiction and a smoke free environment. This paper will explore the strategies that have been implemented by the program, exploring both the staff and consumer approaches that are supporting our policy, and helping our consumers to reduce and manage their nicotine addiction.

### **4. Opinions of Smokers with a Mental Health Illness to harm Reduction Strategies for their Smoking.**

Barone, M. Bittoun, R. Mendelsohn, C. Glozier, N. Elcombe, E.

Smoking Research Unit, Brain & Mind Research Institute, University of Sydney

#### **Poster Presentation**

The purpose of this research is to identify the opinions of smokers with a mental illness towards Nicotine Replacement Therapy (NRT) interventions. Research suggests that whilst smokers with mental illness appear as motivated to quit as smokers without mental illness their outcomes are poorer. An untested approach is a strategy of harm-reduction, with a secondary intention as a 'gateway to quitting', as found in using NRT whilst continuing to smoke. It was hypothesized that mental health patients may show an increased likelihood to use this intervention if educated on the facts of this option. Participants (N = 43) were asked four questions evaluating their knowledge of NRT with respect to its safety, harm reduction, health and financial benefits during concomitant tobacco smoking. After responding participants were given information on harm minimisation benefits of NRT and then- re-evaluated on their opinion on concomitant smoking and NRT 66% showed a significant shift in their opinion and indicated they would consider using NRT as a 'gateway' to smoking cessation. Educating smokers with a mental illness in the concomitant use of NRT as a potential 'gateway to quitting', indicates an increased likelihood of these smokers using such an intervention and the possibility that this group of smokers may achieve higher successful cessation rates.

## 5. No More Nyumree

Bentley, G. Davis, J.

Wheatbelt Aboriginal Health Service

### Oral Presentation

No More Nyumree is a Coalition of Australian Governments (COAG)-funded program to address the identified need for smoking cessation by Aboriginal people living in the Wheatbelt. It is successfully achieving this by a combination of: • initial and ongoing consultation with Aboriginal people across the region about the program design and development • its cultural relevance and acceptance • delivery of the support program by culturally acknowledged health professionals including trained Aboriginal Health Workers Best practice evidence (including implementation strategies) from the program include the value of brief motivational yarning to encourage attitudinal change by shifting an individual's expectations and provision, without charge, of quitting assistance products for the 12-week support period. The cultural security of the No More Nyumree program is cited by participants as being their initial attraction to becoming involved and from there, being able to reach their own decision to quit. Motivational yarning is a key element in providing cultural security. It is client-centred and more of a way of being with clients than a counselling technique. Its goals are both to help resolve ambivalence and to increase the client's intrinsic motivation so that change arises from within rather than being imposed from without.

## 6. The Ethical Dilemma of Recommending Nicotine Delivery Devices

Bittoun, R.

Smoking Research Unit, Brain & Mind Research Institute, University of Sydney

### Oral Presentation

Nicotine is potentially highly addictive but is otherwise relatively benign medically. Nicotine, is not synthetic and is extracted from tobacco plants, owned by tobacco manufacturers. Nicotine for nicotine replacement therapies (NRT) is also sourced from the tobacco industry. Tobacco smoking has short term as well as long term serious health consequences. The agenda of Tobacco Treatment Specialists (TTS) is to save lives and minimise illness. This paper will discuss the complex ethical decisions made by TTS regarding nicotine delivery devices such as oral snuff and electronic cigarettes, openly manufactured and promoted by the tobacco industry. Are they smoking cessation tools? Are they dependence producing? Should these products be in the hands of the pharmaceutical industries exclusively? Should they be regulated by government in order to control and tax these products? Should these products be available only to the addicted (hence prescribed only) or freely available to the general population to improve potential population health, risking initiation, addiction and lifelong consumerism. Medical ethics requires that we recommend less harmful products. Is this harm minimisation justified for the addicted when we are thus directly engaging with the tobacco industry with corporate histories of mass marketing tobacco products?

## **7. Drawing Forward; Mental Health Consumers & Cartoons**

Bocking, J.

Australian Capital Territory Health

### **Poster Presentation**

Mental health consumers are more than twice as likely to smoke cigarettes than the rest of the population and tend to start smoking earlier, smoke more heavily, more efficiently and for more years than other smokers. Despite this, tailored interventions and prevention strategies are rare. One recent response is the introduction of smoke-free policies in inpatient units. Little is known about how to support consumers during their smoke-free admission. Learn about a consumer-led program that combines cartooning with motivational interviewing. Enjoy the cartoons!

## **8. Community mental health services and smoking cessation care: an unrealised potential**

Bowman J, Bartlem K, Freund M, Knight J, McElwaine K, Wye P, Wiggers J.

Psychology, University of Newcastle

### **Oral Presentation**

Background: Community mental health (CMH) services have been recognised as important avenues for providing smoking cessation care to smokers with a mental illness, however little research has examined the extent to which this care is provided. Methods: A cross-sectional computer assisted telephone interview survey was conducted within one area health service in NSW, Australia. 1,418 clients of CMH services were asked about their smoking status, desire to quit, smoking cessation care received, and the acceptability of receiving such care. Results: Preliminary analysis demonstrates a high prevalence of smoking (51%). 73% of participants reported having been asked their smoking status during CMH appointments. Of those who reported being current smokers, 66% were provided with any advice to quit, and 2% offered a referral to Quitline. Despite these low levels of care, participants reported a high desire to quit, with 63% seriously thinking about quitting smoking, and high level of acceptability towards receiving smoking cessation care. Conclusions: The need to address smoking for CMH clients is considerable, given the high prevalence of smoking, desire to quit, and levels of acceptability towards receiving smoking cessation care. Despite such need, current levels of smoking cessation care are sub-optimal within CMH services.

## **9. Prevalence of Smoking among Students in Selected Public and Private Schools in Cagayan de Oro City, Philippines**

Canencia, O. Palmes, N. Ibonia, S. Descallar, C.

Mindanao University of Science and Technology

### **Poster Presentation**

Smoking cessation is an intervention to reduce tobacco-related mortality in the short and medium term and therefore should be part of an overall comprehensive program on tobacco-control policy of any country. This study primarily aims to find out the underlying factors on the prevalence of smoking among students in public and private schools in Cagayan de Oro City, Philippines. Specific objectives are to: (1) identify smoking pattern in relation to experiences with cigarette smoking and some related variables, (2) determine the major factors that influence smoking, such as peer pressure, media advertisement, cool factor, (3) find out the attitude of the student towards smoking, (5) identify schools' initiatives and strategies on smoking cessation or prohibitions among teen students; and (6) draw-out policy recommendations for local government units to formulate city ordinance related to smoking cessation ads related policy amendments. This further utilized the survey correlation method with a standardized survey instrument from the Department of Health. The general findings revealed that smoking is prevalent in any form of environment and may have a big influence on students, other people to smoke. Children and teens are more likely to smoke if their parents and siblings smoke. Generally, the overall predictor variables such as peer influence, cool factor, coping with problems, media influences and family member who smoke including age and gender contributed significantly to the smoking pattern of the students.

## **10. Baseline self-reported reasons for smoking in predicting smoking abstinence or cigarette reduction at short and long-term follow-up for people with schizophrenia**

Clark, V. Baker, A. Filia, S. Richmond, R: Todd, J

School of Medicine & Public Health, University of Newcastle

### **Oral Presentation**

Individuals with schizophrenia have high rates of cigarette smoking and nicotine dependence. Elevated smoking and reduced quit rate, places this population at high risk of cardiovascular diseases (CVD). We examined whether self-reported reasons for smoking are useful predictors of successful quit attempts or successful cigarette reduction. As part of a randomised control trial addressing smoking and CVD risk reduction, reasons for smoking were assessed at baseline, with smoking variables measured at baseline, 15-weeks and 12-months. A confirmatory factor analysis (CFA) was completed on the Reasons for Smoking Questionnaire. The three factors derived from the CFA were entered into a model containing age, gender, treatment condition, sessions attended, lifetime psychosis diagnosis and baseline cigarettes per day. The 'activation-stimulation' factor, gender and global assessment of functioning were significant predictors of short-term point-prevalence abstinence, only gender remained a significant predictor at long-term follow-up. Females were more likely to be abstinent in the short-term. For 50% or greater cigarette reduction, the 'activation-stimulation' and sessions attended were predictive at short-term follow-up, whereas only number of treatment sessions attended was predictive of cigarette reduction at 12-month follow-up. Self-reported reasons for smoking in schizophrenia appear to be related to treatment outcome and are worthy of further research.



## **11. Practice-based Evidence: Psychological Interventions for Smoking Cessation in People with a Lived Experience of Severe Mental Illness**

Dixon, S.

Royal Brisbane & Women's Hospital, Metro North Hospital & Health Service

### **Oral Presentation**

It is well established that people living with severe mental illness (SMI) are as motivated as other smokers to quit. While research has demonstrated the effectiveness of pharmacotherapies and psychosocial interventions in promoting quitting in the general population, the neurobiological and psychosocial complexity of nicotine dependence in people with SMI requires treatment tailored to the individual. Despite this, the literature offers limited guidance as to how to tailor and deliver smoking cessation treatment for people with SMI. Community mental health services are well-placed to offer smoking cessation support, given that such services are often the sole providers of healthcare to people with SMI. In this presentation, I will describe a novel flexible approach to smoking cessation with people with SMI, developed and tested over two years' of practice. Measures of nicotine dependence and other assessment tools suited for work with people with SMI will be discussed. I will provide an overview of the psychological factors noted to perpetuate smoking behaviours amongst mental health consumers, including the role of smoking-related cognitions, the negative symptoms of schizophrenia, the social and subjective norms to smoke amongst people with SMI, poor emotion regulation skills and ways to manage these. Finally, recommendations for the use of behavioural interventions and psychological therapies for smoking cessation with people SMI will be made.

## **12. The Good, the Bad and the Ugly: Lessons Learnt While Implementing a Smoking Cessation Program in a Community Mental Health Setting**

Dixon, S.

Royal Brisbane & Women's Hospital, Metro North Hospital & Health Service

### **Poster Presentation**

People with a severe mental illness (SMI) are five times more likely to smoke than the general population. Although research has demonstrated the effectiveness of pharmacotherapies and psychosocial interventions for smoking cessation, they are not routinely implemented in community mental health services - which are ideally placed to offer smoking cessation services to people with SMI. Clinicians in these settings often maintain therapeutic relationships with people with SMI that allow longitudinal assessment of tobacco use, on-going management of psychiatric and smoking medications and provision of relapse prevention support. In this presentation I will explore a novel smoking cessation program conducted in a Queensland community mental health setting over the past 2 years. I will describe the program including assessment tools used, typical treatment plans and provide an overview of outcomes of the clients engaged to date. I will additionally explore the implementation of the program focusing on the impact of staff and mental health service users' beliefs about smoking and smoking cessation on uptake. Opportunities to encourage culture change around smoking cessation in this setting and practice recommendations will be made.

### **13. Quitline & General Practice: Enhancing Success in Quitting**

Evans, T. Frame, M.

Cancer Council SA/Quit SA

#### **Oral Presentation**

Referrals to Quitlines from GPs and other health professionals improve quitting success (Borland et al. 2008; Perry et al. 2005). QuitSA prioritizes work with General Practice to further enhance the success of this relationship. Although many GPs around Australia currently refer to Quitlines to fulfil the PBS requirement that eligible patients for smoking cessation medications (varenicline and nicotine patches) enter a 'comprehensive support and counselling program', significant numbers of GPs don't refer. It is, therefore, important to identify barriers to referral and strategies to enhance Quitline relationships with General Practice. Since August 2010 the SA Quitline has significantly increased referral numbers with over 3,000 referrals being received in 2012. This is double the number received prior to that date and more than 50% of new cases created. Strategies developed to increase referral numbers and build better relationships with General Practice include collecting data on 'verbal' referrals utilizing the GPSA health provider registry database, identifying high/low referring practices and/or regions and targeting those practices where referrals are low, promoting the online referral and the link to the referral template for Medical Director, providing tailored levels of feedback for GPs, and promotion of the Quitline and easy referral options via GP education sessions, conferences and newsletters. This presentation will expand on the process that Quit SA has worked through to build effective working relationships with general practice, relationships that are a critical aspect of effective tobacco control. Borland R, Bamford JM, Bishop N et al. In-practice management versus quitline referral for enhancing smoking cessation in general practice: a cluster randomized trial. *Fam Pract* 2008; 25: 382–9. Perry RJ, Keller P, Fraser D, Fiore M. Fax to quit: a model for delivery of tobacco cessation services to Wisconsin residents. *WMJ* 2005; 104: 37–44.

### **14. The perceived risks and benefits of quitting in smokers diagnosed with severe mental illness participating in a smoking cessation intervention: Gender differences and comparison to smokers without mental illness.**

Filia, S.L. Gurvich, C.T. Baker, A.L. Richmond, R and Kulkarni, J.

Monash Alfred Psychiatry Research Centre (MAPrc)

#### **Oral Presentation**

The prevalence of smoking and the resultant impact on the health, well-being and lifespan of people experiencing severe mental illness, such as schizophrenia and bipolar affective disorder, is significantly disproportionate to smokers in the general population. Every effort needs to be given to providing smoking cessation interventions tailored to this population. The current study is the first to explore the perceived risks (e.g. craving; negative affect) and benefits (e.g. improved health and self-esteem) of quitting in 200 smokers with psychosis participating in a smoking cessation intervention. Males and females generally had similar ratings of the perceived risks and benefits of quitting. Female smokers had significantly higher risk ratings of weight gain and negative affect than males. Females also had significantly stronger beliefs about the benefits of quitting on their self-esteem than males. Compared to smokers in the general population also seeking smoking cessation treatment, the current sample of smokers with psychosis demonstrated fewer gender differences and lower ratings of perceived risks and benefits of quitting. The pattern of risk and benefit ratings in smokers with psychosis was similar to those of non-treatment seeking smokers in the general population. The significance and clinical implications of these results will be discussed.

## **15. Tobacco smoking during the pregnancy and factors supporting cessation**

Fogarasi-Grenczer, A. Rákóczi, I. Foley, K.L. Balázs, P.

Semmelweis University, Faculty of Health Sciences, Institute of Health Promotion and Clinical Methodology, Department of Family Care Methodology.

### **Poster Presentation**

Background: Smoking prevalence is 33% among adult women and 30% among adolescents. Most women in Hungary do not spontaneously quit when they learn they are pregnant. Methods: In a retrospective cohort study, we collected data of mothers delivered with live-born babies in 2009 and 2011. Logistic regression was used to assess factors ( $p \leq 0.05$ ) correlated with cessation during the pregnancy. Results: Among 12,088 mothers, there were smoking prior to pregnancy 5,068 and 3,209 (63.3%) who continued to smoke during pregnancy. The age-group related proportions of those who continued smoking / consuming a cigarette in every 30 minutes / and cessation are: 1 (<18) 35.8% / 63.1% / 16.8%; 2 (18–23) 37.4% / 63.2% / 23.2%; 3 (24–34) 17.1% / 55.6% / 45.9%; 4 ( $\geq 35$ ) 17.6% / 57.6% / 38.6%. Factors hindering cessation are unemployment (OR:1.9; 95%CI = 1.48–2.46), Roma ethnicity (OR:3.1; 95%CI = 2.35–4.17), unexpected pregnancy (OR:1.84; 95%CI = 1.45–2.34), basic or less education (OR:2.99; 95%CI = 2.32–3.86), smoking husband/partner (OR:1.8; 95%CI = 1.4–2.3), and deep poverty (OR:1.46; 95%CI = 1.09–1.96). Conclusion: Low socioeconomic status markedly decreases the probability of cessation. 50% of expectant mothers are smoking a cigarette every 30 minutes in all age groups. While planning interventions there must be considered also the age related differences. It is critical to identify interventions that promote cessation among disadvantaged pregnant women for the welfare of mothers and babies.

## **16. Making Tobacco Companies Pay For Smoking Cessation**

Francey, N.

### **Oral Presentation**

It has long been argued that the tobacco industry should pay for the harm caused by their products. In Australia, a 2011 proposal for litigation by Australian States to recover the health costs associated with smoking was raised with the Ministerial Council of Health Ministers. This proposal was referred to the Commonwealth for further action but the Commonwealth has taken the view that the matter is primarily one for the States and Territories. Whilst this proposed litigation potential on account of tobacco companies conspiring to engage in misleading or deceptive conduct in contravention of the former Trade Practices Act 1974 (Cth), Fair Trading Acts of the various States and Territories and/or under the Australian Consumer Law, scope also exists to obtain remedies to prevent or reduce harm. Ahead of any such legal action, however, it may be preferable to conduct an inquiry into the tobacco industry with a view to obtaining a settlement with tobacco companies ahead of litigation. The above proposal could provide for:

- Funded advertising by tobacco companies admitting to wrongdoing.
- Funded or subsidized smoking cessation products and/or counselling services etc.
- Funded or subsidized medical treatment for smoking related disease, including early screening/intervention measures.

## 17. Managing Mental Health Mindfully in Smoking Cessation

Frijlink, T. Marsh, L. Thompson, J.

Knox Community Health Service

### Oral Presentation

Knox Community Health Service: Tobacco Free Clinic A Bio-psycho-social Model for Co-occurring mental health and smoking concerns Author: Tanja Frijlink, Lorraine Marsh and Jenni Thompson Presenters: Tanja Frijlink and Lorraine Marsh Key words: Tobacco Free Clinic, Community Health, Co-occurring conditions, Counselling, bio-psycho-social model (my suggestions) Abstract: Managing Mental Health Mindfully in Smoking Cessation This presentation will provide an overview of the Knox Community Health Tobacco Free Clinic based in the Outer Eastern suburbs of Melbourne. This program commenced as an Early Intervention in Chronic Disease initiative in 2008 and has sustained momentum with positive outcomes. The Tobacco Free Clinic sits within the Alcohol and other Drug programs. As such a bio-psycho-social counselling model has been integrated into our practice. Evidence based Clinical Guidelines for the model have been developed and embedded into a multi-disciplinary community health service. The model includes:

- A bio-psycho-social assessment of multiple and complex needs
- Pharmacotherapy interventions
- A bio-psycho-social addiction counselling model: Person centred approach Motivational Interviewing (M.I.) Acceptance and Commitment Therapy (ACT) Strength based approach Mindfulness Interventions
- Integrated and collaborative work with oral, mental & primary health services
- Collection and collation of client population data including mental health diagnosis and client outcomes
- A shame sensitive approach that is welcoming, empathic, hopeful and reduces stigma through mindful use of language.

Integration and implementation of this model supports the spirit of collaboration, compassion and partnership with the client, mental health services and primary care givers, improving health outcomes. We are happy to share resources, ideas and templates with those who are interested.

## 18. An exploratory study on tobacco smoking and betel quid use among Burmese refugees in Australia

Furber, S. Jackson, J. Johnson, K. Sukara, R. Franco, L.

Illawarra Shoalhaven Local Health District

### Oral Presentation

Anecdotal evidence suggests that there are high rates of smoking among Burmese men in Wollongong, Australia. A qualitative study was undertaken to explore the beliefs and experiences of Burmese refugees in Wollongong on smoking to guide the development of smoking cessation interventions. Three focus groups were conducted with Burmese refugees. Ten semi-structured interviews were conducted with service providers involved with Burmese refugees. Qualitative content analysis was used to categorise responses to the questions. Participants were aware of the health effects of tobacco smoking but had little knowledge of support for quitting. Many participants chewed betel quid and were unaware of the health consequences. Service providers noted the lack of resources on smoking and betel quid use for Burmese people. Smoking cessation interventions for Burmese people should consider the co-related use of betel quid due to the possibility of inadvertently encouraging use of betel nut as an alternative to tobacco.

## **19. Characteristics of smokers participating in a randomised controlled trial evaluating a system change smoking cessation intervention**

George J, Thomas D, Bonevski B, Taylor S, Poole S, Weeks G, Dooley M, Abramson M.

Monash University.

### **Oral Presentation**

Background: Intensive smoking cessation interventions initiated during hospitalisation are effective, but currently underused. Methods: A randomised controlled trial is underway at three Victorian public hospitals comparing GIVE UP FOR GOOD<sup>©</sup> – an intensive system change smoking cessation intervention delivered by a trained pharmacist – to standard care. The primary outcomes are carbon monoxide validated abstinence at six and 12 months. Results: A total of 600 participants have been recruited – mean ( $\pm$ SD) age  $51 \pm 14$  years and 64% male. The baseline median (IQR) confidence to quit was low 5 (3 – 8), however the motivation to quit was very high 9 (6.5 – 10). The majority of participants were either in the preparation (intended to change in one month [23%]) or action (already made changes [53%]) stage on the ‘readiness to quit ladder’. Majority were daily smokers, started smoking before the age of 18, and had smokers in their social circle or at home. Many of them reported quit attempts in the previous 12 months; almost half of them preferred to quit with the help of medicines in their future quit attempts. Conclusion: GIVE UP FOR GOOD<sup>©</sup> has the potential to increase abstinence rates in hospitalised smokers and if effective, could be considered for wider implementation.

## **20. Smoking cessation program targeting pregnant women and partners of pregnant women: scope for a pharmacist-led initiative in antenatal clinics**

George, J, Shanks, T, Vorlander, R, Oostvogels L, Wolke L, Bonevski B, Wong S, Stewart K.

Monash University.

### **Oral Presentation**

Exposure to active and environmental tobacco smoke is common during pregnancy. A three-phased study was carried out at the The Royal Women’s Hospital to investigate the scope for a pharmacist-led smoking cessation service in the antenatal setting. • Response rates for the anonymous questionnaire were 93.7% (374/399) among pregnant women and 91.6% (282/308) among partners. Current smokers (25 pregnant women and 50 partners) were less educated, unemployed, had lower income, and had smokers in their social circle. Nicotine replacement was the most frequent method to assist quitting, although most smokers did not use anything. The majority had thought about, or had made plans to quit in the near future, which should be achievable given the low nicotine dependence and the high motivation. • A smoking cessation program targeting pregnant women and partners ( $n = 8$ ) which included pharmacist education and pharmacotherapy as required, with follow-ups at one week and one month was pilot tested. • Its effectiveness in achieving long-term abstinence confirmed by CO breath test at 36 weeks of pregnancy was then carried out ( $n = 24$ ). A pharmacist-led smoking cessation program targeting pregnant women and partners is viable in the antenatal setting, but recruitment and retention of participants are challenging.

## **21. NZ's WERO Team Stop Smoking Contest: Triggering Mass Quitting**

Glover, M. Cowie, N. Paton, C. Kira, A., Moetara, W.

Centre for Tobacco Control Research.

### **Oral Presentation**

For NZ to become smokefree by 2025 (< 5% smoking) innovative, more effective cessation methods need to be used by far more smokers more regularly. New strategies need to also appeal to and work for Indigenous people (Māori have 41% and NZ resident Pacific people 26% smoking prevalence) and other high prevalence priority groups to reduce inequity (18% smoking prevalence in total population). WERO is a team based cessation contest. Teams of 10 quit over 3 months to win a \$5000 first prize for a charity or community group of their choosing. Team progress is publicly shared on the WERO website ([www.wero.me](http://www.wero.me)); iPad/iPhone app; and Facebook page. The pilot (N = 148) CO verified quit rate at the end of the competition was 36%. 26% self-reported being smokefree 3 months later. A second competition (n = 220) resulted in 45% self-reported quit at competition end. On the strength of these results the Ministry of Health has funded WERO to run national and regional competitions over three years. We propose that WERO could be adapted to trigger mass quitting in other countries seeking to reduce high smoking prevalence among indigenous, family-centred and less resourced populations.

## **22. Resourcing 'Aunties' to reduce smoking among pregnant Māori women**

Glover, M. Kira, A. Van Esdonk, T.

Centre for Tobacco Control Research.

### **Oral Presentation**

Smoking prevalence among pregnant Māori women in New Zealand (NZ) is high with 43.5% smoking at first registration with a midwife: which tends to be later in pregnancy (only 42% engage during first trimester). We wondered if 'Aunties' (Māori women who have had their children) could find pregnant women in first trimester and deliver key health messages. A participatory approach guided our work with Māori Community Health Worker groups to pre-test existing and newly developed healthy pregnancy resources. Three focus groups were held with Aunties aged between 35 and 87 in three different regions in NZ. Knowledge about existing cessation, methods and services ranged from very little to years of field experience. Existing nutrition and smokefree resources were considered appropriate and useful. The Aunties wanted to be able to prescribe nicotine replacement products, so a board game was developed to increase their knowledge about addiction. A mnemonic tool in form of a wallet card was developed to help focus delivery of key messages. Ten Aunties were recruited via the focus groups to test the effectiveness of the resources and intervention.

### **23. A national snapshot of anti-tobacco message development for Indigenous smokers in Australia**

Gould GS, Watt K, Cadet-James Y, Stevenson L, McEwen A, Clough AR.

James Cook University

#### **Oral Presentation**

Smoking prevalence remains high in Indigenous Australians. Indigenous peoples prefer culturally-targeted messages, yet only recently have anti-tobacco messages been tailored for Indigenous Australians. We conducted a national survey, about how messages are currently developed for Indigenous smokers, with Aboriginal Medical Services (AMSs), government organisations (GOs), universities and non-government organisations (NGOs) (N = 47). Questions included targeting and theoretical approaches, community consultation, message types and design, campaign types, cultural challenges, recommended actions, resources developed, pre-tests and evaluation. Responses were analysed with non-parametric tests and categorical principal component analysis (CATPCA). A community-orientated, bottom-up approach was popular (47%), 55% used a theoretical framework, 87% a positive appeal, and 38% threat messages; 72% conducted a pretest and 53% evaluated programs. CATPCA revealed two dimensions related to 'cultural understanding' and 'rigour'. Cultural sensitivity was divided into superficial (message 'fit') and deep structure (message salience). AMSs used deep structure in tailoring significantly more than NGOs ( $p < 0.05$ ) and GOs ( $p < 0.05$ ). Cultural challenges included Indigenous artwork, language, stereotypes and delays. Features associated with successful campaigns are being used in Australia for Indigenous smokers. Ideally tailoring should include theoretical, behavioural and cultural aspects with Indigenous advisors, to promote cessation. We recommend refinement of pre-tests and evaluation, and pre-empting cultural challenges.

### **24. Inspiring and educating Australian Indigenous smokers with the Blow Away The Smokes DVD**

Gould GS, Avuri S, Baker F.

James Cook University

#### **Poster Presentation**

The Blow Away The Smokes DVD is a culturally appropriate, evidence-based, self-help resource that can be also viewed with an Aboriginal Health Worker or in a group setting. The DVD production is described using Eakin's phases for producing tailored DVDs: determining goals and objectives, community consultation, drafting the script, selecting cast, filming and editing. Aboriginal community consultation guided the tendering process, script development, casting, locations and messages. Smoking cessation and media experts provided expert advice. Anti-tobacco and cessation messages were positive, re-enforcing and built efficacy. A range of trusted community members, Elders, Indigenous role models and experts presented the messages. Animated sections entertained, educated and changed the pace. People's stories and community dialogues allowed spontaneity and a vox pop documentary feel. The 30-minute DVD was rated highly on scales measuring believability, acceptability, relevance, cultural suitability and effectiveness when pretested. The DVD was launched in December 2011 and distributed (cost-free) through Aboriginal Medical Services, community organisations, and a dedicated website: [www.blowawaythesmokes.com.au](http://www.blowawaythesmokes.com.au). Blow Away The Smokes is a unique and effective health promotion product, developed co-operatively with the local Aboriginal community. It has been favourably received in many locations in Australia and is suitable to educate, inform, inspire and support Indigenous smokers to quit.

## **25. Emergency use of combination NRT in an HIV+ patient presenting to Nicotine Addiction Specialist Clinic**

Harrison, D. Maruszak, H.

The Albion Centre / Prince of Wales Hospital Sydney

### **Oral Presentation**

**Aim:** To present an emergency administration of NRT as a life saving intervention. **Method:** A 54 year old HIV+ male smoker presented to our clinic. Assessment confirmed high level of dependence: FTND (10/10), TTFC < 5 minutes with 10 cigarettes smoked within 1st hour of waking and 50 cigarettes smoked daily. The patient appeared 'ashen' and 'grey' suffering from generalised hypoxia from chronic carbon monoxide poisoning (Expired CO = 62 ppm). Varenicline was specifically requested by the patient. He had severe anxiety and depression (HAD score 13/12). The An ECG indicated advanced left ventricular hypertrophy and arrhythmia. **Intervention:** Due to high risk of acute cardiovascular event 2 × 21mg/24hrs nicotine patches were immediately applied in the clinic. He was advised to smoke when he wanted and not to remove any nicotine patches. **Results:** On return to the clinic 3 days later his Expired CO decreased from 62ppm to 38ppm (46%) and number of cigarettes smoked dropped from 50 to 25 (50%). Rapid decrease in Expired CO indicates a lowering of carboxyhaemoglobin level and immediate better perfusion. 1.0mg varenicline bid was added to combination NRT 1 week later. Fast metabolism of nicotine required titration of NRT to 6 × 21mg/24hrs nicotine patches per day + nicotine spray 4 times every hour (equivalent of 4mg nicotine hourly) + nicotine gum 4 mg + nicotine lozenge 4 mg every 2 hours. Abstinence was comfortably achieved. **Conclusion:** This case study provides a good example where Emergency NRT may be the only life saving option considering patient's cardiovascular status.

## **26. Smoking cessation with mental health clients in the Blue Mountains**

Hohnen, L.

Nepean Blue Mountains LHD.

### **Oral Presentation**

The presentation will be about 3 smoking cessation groups run for mental health clients in the Blue Mountains as part of the NSW Cancer Council's "Tackling Tobacco project" between 2009-2011. Each group was conducted in a Non government agency. In each group 12 clients attended. One group was run in a drop in centre for mental health clients, and 2 were run in a residential setting. At the end of each group over 50% of the clients had stopped smoking. The presentation will discuss the reasons for these results. For example the importance of peers support, free NRT and social contact.



## **27. Development of a Smoking Cessation Course Assessment Questionnaire**

James, A.P.

Lung Health Promotion Centre at The Alfred

### **Poster Presentation**

Development of a Smoking Cessation Course Assessment Questionnaire Background The Lung Health Promotion Centre at The Alfred in Melbourne has conducted a Smoking Cessation Course since 2005. From inception to July 2013 the course has been attended by 451 health professionals. There has been no assessment criteria attached to the course prior to February and it was thought to be important to devise an assessment tool to assess knowledge of the course content. Methodology A pilot questionnaire was devised covering key areas of the course, which was then reviewed for content, structure, comprehension and ease of completion by expert course lecturers, experts from the NHS National Smoking Cessation Training Centre in London and 9 course participants. The final questionnaire consisting of 50 items was first utilised in the course in February 2013. Results When the questionnaire was provided to course participants in February 2013, a return rate of 80% was achieved. The average score on the questionnaire was 94%. Further results based on the July 2013 course will be presented. Conclusion The questionnaire was well received and completed by the majority of course participants with a very high level of accuracy. The questionnaire will be utilised in future Smoking Cessation Courses at the Lung Health Promotion Centre.

## **28. Expanding the smoking cessation workforce: The contribution of vocational education and training**

Jensen, M.

Canberra Institute of Technology

### **Poster Presentation**

Canberra has the lowest smoking rates in Australia with recent estimates from 11% to 13%. However, even Canberra has subpopulations of lower socioeconomic status with high rates of smoking and smoking related chronic illness. Vocational education and training offers solutions by expanding the smoking cessation workforce. The National Health Training Package includes knowledge of smoking cessation and interventions for nicotine dependence. The National Tobacco Strategy 2012 – 2018 recommends the provision of training in smoking cessation to a range of community workers servicing populations with high rates of smoking. The Canberra Institute of Technology has responded to the recommendations by developing a Certificate III in Population Health that includes a tobacco program. The program provides skills in smoking cessation, emphasising effective use of NRT. Twenty community sector workers were enrolled in the first Certificate III in Population Health in 2013. Participants evaluated on the final day of the tobacco program agreed that as a result of the program they were more likely to talk to smokers about quitting and their ability to help smokers quit had improved. The program has provided community workers with the skills and confidence to contribute to the reduction of smoking rates in disadvantaged subpopulations.

## **29. Collaborating to Quit: A whole of mental health service approach to prepare to become a Smoke-Free Zone.**

Jobson, H. Jacobs, T. Roiboit, F. Halliday, L. McAllister, M.

Sunshine Coast Hospital and Health Service

### **Oral Presentation**

The life expectancy gap between the general population and people with mental illness is widening. This is largely attributable to the high rates of smoking. In 2007, the SCMHS implemented a sudden smoking ban. This resulted in distress, defensiveness, and protest amongst staff and consumers and was unsuccessful. Lack of success is common among mental health services who attempt to become smoke-free. Yet the need for action to address the significant related health issues was essential. Therefore, the SCMHS embarked upon a strategic approach to change. This comprised of 4 phases: 1) Preparation: consultations with stakeholders were held to explore concerns, barriers and need for change 2) Developmental: a project plan was produced identifying phases for change and processes were developed to guide the roles for nurses, doctors, consumers and carers. 3) Pre - implementation: This was a lengthy complex process involving education, role expansion, clinical governance, and individualised consumer preparation. 4) Implementation: Took place on the 25 February and continues to progress. This presentation will engage audience in discussion of the barriers and enablers of mental health services becoming successfully smoke-free.

## **30. Aboriginal Quitline**

Lester, D. Bradfield, L. Curry, G

Quitline NSW and ACT.

### **Oral Presentation**

Mortality and morbidity in the Aboriginal and Torres Strait Islander population is impacted by tobacco smoking rates that are at least three times higher than in the overall Australian community. The NSW and ACT Aboriginal Quitline in partnership with the Cancer Institute, ACT Health and the Aboriginal Health and Medical Research Council is providing a more tailored service. Successful contacts with Aboriginal callers have increased from only 10 in January 2012 to a peak of more than 120 per month in late 2012. Contacts early in 2013 averaged 80 per month. Fax referrals by health professionals have increased dramatically. An Aboriginal Quitline Coordinator and Advisor are now working with this community. All Quitline Counsellors have received introductory cultural awareness training and the ongoing presence of Aboriginal Quitline team members enhances this awareness. Since October 2012, 21 workers and 12 students from the Aboriginal Health College have participated in site visits to Quitline. Participation of Quitline Counsellors in community events has increased awareness and understanding of how Quitline works. Some indicators of success are already apparent but much more needs to be learned and to be put into action to prevent disease and promote health more equitably.

### **31. Should we pay pregnant smokers to quit? Preliminary findings of a feasibility trial.**

Lynagh, M. Bonevski, B. Sanson-Fisher, R. Symonds, I. Scott, A. Hall, A. Oldmeadow, C.

University of Newcastle

#### **Oral Presentation**

Abstract Smoking during pregnancy is harmful to the unborn child. Few smoking cessation interventions have been successfully incorporated into standard antenatal care. We aimed to determine the feasibility of using financial incentives for encouraging pregnant smokers to quit. A randomised control trial was conducted to assess the feasibility and potential effectiveness of two varying financial incentives that increased incrementally in magnitude (\$20 vs. \$40AUD), compared to no incentive in reducing smoking in pregnant women attending an Australian public hospital antenatal clinic. Pregnant women who self-report smoking in the last 7 days and whose smoking status was biochemically verified were randomly allocated to one of three groups: a no incentive control group; a \$20 incremental cash reward group; and a \$40 incremental cash reward group. Smoking status was assessed via a touchscreen laptop survey at each clinic visit with saliva cotinine analysis used as biochemical validation. Women in the two incentive groups were eligible to receive a cash reward at each clinic visit during pregnancy if 7-day smoking cessation was achieved. We present the preliminary findings of the trial and discuss their implications in regard to future research, health policy and clinical practice.

### **32. Maari Ma Health Aboriginal Corporation's Smoker's Program**

Lynch, T. Twe, C. Oates, S.

Maari Ma Health Aboriginal Corporation

#### **Oral Presentation**

Maari Ma Health Aboriginal Corporation's Smoker's Program, in far western remote NSW, is best practice when it comes to smoking cessation for Aboriginal people. The program has been in place since 2005 and was developed to be sustainable and a direct part of Maari Ma's Chronic Disease Strategy. Funded by OATSIH, the program was evaluated over 3 years and found up to 24% of participants were successfully ex-smokers after a period of 6 months to the end of 2009. The key features leading to the success of the program are: - being incorporated into the core duties of local health service staff: clients receive a holistic approach to their health care and don't have to go to multiple health practitioners. - a 12-week program that consists of weekly sessions with a dedicated case manager. - case management is specialised to the client (eg pregnant women and chronic disease sufferers) and service delivery is more effective so that clients can receive a variety of clinical supports in conjunction with the program. - all staff, both Aboriginal and non-Aboriginal, implementing the Smoker's Program have completed internal training based on the latest evidence in smoking cessation. - ongoing training is provided through regular internal training updates, live webinar sessions with the University of Sydney. - a visiting smoking cessation specialist attends quarterly for 3 days, providing specialist consultation and education sessions Maari Ma's Smoker's program is a key part of our approach to chronic disease in the far west and is continuing to incorporate evidenced-based best practice into all aspects of our service delivery.

### **33. Predicted high rates of smoking related morbidity in Sydney HIV infected population**

Maruszak, H. Ayalon, A, Bulsara, S, Barnes, T, Begley, K, Chen, D, Cherry, R, Chin, M, Cozier, B, Furner, V, George, R, Green, A, Gold, J, Hennessy, R, Houtzager, L, Levis, J, Mills, T, Purnomo, L, Rivkin, D, Smith, D, Smith, M, Waite, V, Price, T, Wyndham, H.

The Albion Centre / Prince of Wales Hospital Sydney

#### **Oral Presentation**

**Objectives:** To estimate prevalence of tobacco use, level of dependence, demographic data and treatment experience in HIV- positive people in Sydney. **Methods:** Standardized questionnaire administered by a clinician to HIV-positive patients attending the largest outpatient HIV clinic in Australia between February and March 2012. Fagerstrom abbreviated test for nicotine dependence was used. **Results:** All 546 HIV-positive patients approached agreed to participate (100% response rate). The majority (93%) were males with median age 46.0 years (range 18-78). Current tobacco use was reported by 39%, while 38% never smoked and 23% were past smokers. Overall 62% were exposed to tobacco in their lifetime and 80.5% had smoked more than 10 years. A majority (79%) tried to quit but relapsed despite very low (51.8%), low (19.1%) or moderate (20.5%) level of nicotine dependence. The most common methods of quitting were cold turkey, NRT (OTC, over the counter) and cutting down. **Conclusions:** It is estimated that prevalence of smoking in HIV+ population in metropolitan Sydney is at least 2.5 times higher than general population. Despite willingness to cease smoking, methods used by quitters are often not evidence-based nor medically supervised. Health services planners should take into consideration that for a catchment area of 2,500 HIV-positive people, approximately 1000 need access to smoking cessation services.

### **34. Two pathways of controlling rapid weight gain in HIV-positive males treated for tobacco dependence**

Maruszak, H. Harrison, D.

The Albion Centre / Prince of Wales Hospital Sydney

#### **Oral Presentation**

**Aim:** HIV and some antiretroviral medications predispose patients to metabolic syndrome. Smoking cessation may also induce metabolic syndrome associated with weight gain. We compared two pathways of weight gain in HIV+ smokers treated for tobacco dependence. **Method:** Two HIV+ patients (Case A, Case B) attended tobacco addiction clinic. Both were assessed using FTND, Expired CO, TTFC and treated with varenicline 1mg bid followed by the addition of combination NRT titrated to eliminate nicotine withdrawal. Metformin 850mg bid was used when metabolic abnormalities were detected. Patients received nutrition, exercise and psychology support. **Results:** Both patients rapidly gained weight when NRT was added to varenicline. Case A (no metabolic abnormalities) was not compliant with NRT, was chronically exposed to passive smoking, and missed appointments. Case B (glucose resistance and up-regulated glucose-cortisol axis) was compliant with treatment and attended appointments. Case A, due to body image and nicotine withdrawal, relapsed fully back to smoking. His body weight returned to baseline within four weeks and his mood improved. His Expired CO rocketed to 30ppm. Case B committed to conventional treatment, remained abstinent (Exp CO 2ppm) and his BMI gradually decreased to baseline within six months. **Conclusion:** Metformin may be useful in the treatment of rapid weight gain in HIV+ patients with metabolic syndrome. However, strict attendance at clinic, secured supply of combination NRT, avoiding passive smoke and understanding and accepting changes in body image are crucial.

### **35. Butt in to Butt Out- Pharmacist clinical leadership and credentialing improving the management of nicotine dependency**

McGuinness, J. Dean, E. Corben, K. Dooley, M.

Alfred Health

#### **Poster Presentation**

**Aim:** To develop and implement a credentialing program for pharmacists to provide clinical management of nicotine dependency for hospitalised patients. **Methods:** A multidisciplinary working party facilitated key stakeholder consultation to optimise clinical management and formulate collaborative organization-wide guidelines. The program requires candidates attend or review an education session online. Competency assessment involves completion of Quit Victoria's online module and five case studies via SurveyMonkey®. A  $\geq 80\%$  pass mark and causing no patient harm, is assessed as demonstrating competency. Unsuccessful candidates are re-assessed using a verbal case based approach. **Results:** The initial program was delivered across eleven education sessions and three campuses. To date, 110 pharmacists have been assessed competent. 44 (40%) required individualised feedback. 22 (20%) required reassessment before successful completion. Key program features include smoking status identification and documentation during medication reconciliation, nicotine dependency assessment follows as appropriate. Pharmacists provide brief intervention advice, pharmacotherapy may be offered in addition to behavioural management strategies. A specialist pharmacist intensive smoking cessation service for complex dependency has been developed. Any healthcare professional involved in inpatient care can make e-referrals. **Conclusion:** The program has been demonstrated as efficient, effective and sustainable. This initiative has proven successful in extending the clinical pharmacist's role and improving inpatient nicotine dependency management.

### **36. Butt in to Butt Out- Pharmacist clinical leadership and credentialing improving the management of nicotine dependency**

McGuinness, J. Dean, E. Corben, K. Dooley, M.

Alfred Health

#### **Oral Presentation**

**Aim:** To develop and implement a credentialing program for pharmacists to provide clinical management of nicotine dependency for hospitalised patients. **Methods:** A multidisciplinary working party facilitated key stakeholder consultation to optimise clinical management and formulate collaborative organization-wide guidelines. The program requires candidates attend or review an education session online. Competency assessment involves completion of Quit Victoria's online module and five case studies via SurveyMonkey®. A  $\geq 80\%$  pass mark and causing no patient harm, is assessed as demonstrating competency. Unsuccessful candidates are re-assessed using a verbal case based approach. **Results:** The initial program was delivered across eleven education sessions and three campuses. To date, 110 pharmacists have been assessed competent. 44 (40%) required individualised feedback. 22 (20%) required reassessment before successful completion. Key program features include smoking status identification and documentation during medication reconciliation, nicotine dependency assessment follows as appropriate. Pharmacists provide brief intervention advice, pharmacotherapy may be offered in addition to behavioural management strategies. A specialist pharmacist intensive smoking cessation service for complex dependency has been developed. Any healthcare professional involved in inpatient care can make e-referrals. **Conclusion:** The program has been demonstrated as efficient, effective and sustainable. This initiative has proven successful in extending the clinical pharmacist's role and improving inpatient nicotine dependency management.

### **37. Assessing Counselor Effects on Quit Rates and Life Satisfaction Scores at a Tobacco Quitline**

Michael, S. Seltzer, R. Miller, S. Wampold, B.

University of Arizona.

#### **Oral Presentation**

Objective: To evaluate the extent to which a client's successful tobacco quit attempt and subsequent improvement in life satisfaction depend on the quitline counselor assigned to provide the cessation counseling. Methods: A retrospective review of 2,944 Arizona Smokers' Helpline client records was conducted on enrollment, follow-up, and program treatment data. Seven month post-enrollment quit rates were calculated on an intent-to-treat sample for 30-day point prevalence during follow-up surveys. A variance components model was used to estimate counselor effects, that is, the amount of variability in outcomes explained by individual counselor differences. Similar analysis was done to detect presence of counselor effects in clients' Outcome Rating Scale (ORS) scores (Miller, et al., 2003)—a proxy measure of life satisfaction—as they change from intake date to exit date. Results: Statistically significant differences in quit rates (2%) and ORS change scores (2%) were attributable to counselor effects. Conclusions: The results suggest that counselor effects have an impact on quitline outcomes that otherwise might have been overlooked if one assumed that only treatment factors and extraneous factors contributed significantly to outcomes. Additional research is required to determine the sources of counselor effects, as well as whether additional efforts to eliminate these counselor effects can be justified. ORAL Presentation would include updates to published data.

### **38. Association between Quitline Referral Facility Types and Subsequent Client Contact**

Michael, S. Seltzer, R. Guy, M.

University of Arizona

#### **Poster Presentation**

We conducted secondary analysis on Arizona Smokers' Helpline (ASHLine) patient treatment data from April 1, 2009 to March 31, 2011 to assess the relationship between the type of quitline referral facility and initial post-referral staff-patient contact, enrollment, and seven-month quit rates. We used logistic regression to test differences in referral reach rates (# Patients Reached/# Referred), enrollment rates (# Enrollees/# Reached), and quit rates for each facility type. During proactive follow-up post-referral, ASHLine staff was more likely to reach patients referred by community health centres and to enroll patients referred by primary care clinics. When allocating resources to recruit and train healthcare partners for referrals to tobacco cessation programs, healthcare facility type should be considered.

### **39. Perception of electronic cigarette as a smoking cessation tool among university students**

Penzes, M. Urban, R. Foley, K.L. Balazs, P.

Semmelweis University Budapest.

#### **Poster Presentation**

E-cigarette is promoted as a smoking cessation tool, but there is debate regarding its use as a gateway to smoking initiation. It is unclear what motivates students to try e-cigarettes. Methods: 717 university students completed an internet-based survey to measure the “pros” and “cons” of trying e-cigarette and we performed principal component analyses on these items. Results: Four “pro” factors were found: health benefit/smoking cessation; curiosity/taste variety; perceived social norms; and convenience when cigarette smoking is not possible. Two “con” factors were found: chemical hazard and danger of dependence. Comparing those who plan versus do not plan to try e-cigarettes, the planners gave lower scores on the health benefit/smoking cessation, chemical hazard and danger of dependence, and gave higher score on curiosity/taste variety. In a logistic regression analysis, only the curiosity/taste variety and smoking status (daily or occasional smokers) were associated significantly with the intention to try e-cigarettes in the future. Conclusions: E-cigarette use is not motivated by intention to quit smoking among university students. The major factor in the intention to try is the curiosity for sensory stimulation.

### **40. Stopping smoking in pregnancy: clinicians' views of organisational support for antenatal smoking cessation guidelines**

Perlen, S. Brown, S.J. Clinton, J. Yelland, J.

Murdoch Childrens Research Institute

#### **Oral Presentation**

Background: Victorian antenatal smoking cessation guidelines have been available to clinicians for a decade. A Victorian population-based survey of recent mothers ( $n = 2,900$ ) in 2008 indicates that implementation in public maternity services has been limited with less than half of women smoking in pregnancy reporting that they received smoking cessation advice and support. Aim: To explore clinicians' experiences of organisational support for antenatal smoking cessation guidelines. Method: Interviews with 20 antenatal midwives and medical practitioners working at two large public maternity hospitals. Results: The majority of clinicians reported their only introduction to smoking cessation guidelines was at the time of orientation to the antenatal clinic. Over half reported receiving no formal training in providing smoking cessation advice and support, and the majority had no further access to professional development opportunities in supporting women to modify their smoking behaviour in pregnancy. Most were aware of the guidelines and identified how they were adopted in clinical practice within the constraints of consultation time, fragmentation of care, rigidity of documentation and organisational resources to support working with vulnerable women and families. Conclusions: Clinicians' report limited training and support around implementing antenatal smoking cessation guidelines. Stronger organisational support is required to support implementation.

#### **41. Getting the mixture right - Our favourite recipe took us eight years**

Phillips, R. Sullivan, C.

Bugalwena Service.

##### **Oral Presentation**

Getting the mixture right – Our favourite recipe took eight years Smoking was and still is a major problem for the Tweed Heads Aboriginal and Torres Strait Islander community. This was highlighted from as far back as 2005 during a community Health Screening Day. Over the past eight years a local Aboriginal Health Promotion Officer and Health Promotion colleague have committed to getting the ingredients right to make a healthier and stronger Tweed Heads community. Using theory as the platform for program development and adapting to local needs, the Bugalwena Quit Smoking Program has evolved into a highly successful cost effective Aboriginal and Torres Strait Islander tobacco cessation program. Key Ingredients: Local Bundjalung woman as coordinator, continuing commitment to cessation, word of mouth advertising, responsiveness to community needs and a home delivery and assessment service using the essential ingredient Nicotine Replacement Therapy. Measures of success: Since improved evaluation (from 2010 onwards) of the 95 participants 70/52% have reduced their smoking intake, 18 have quit, 35 have re-enrolled for another cessation program. Community requests for more continue programs and the current waiting list to join the mix stands at 29.

#### **42. Socioeconomic background of continued smoking during pregnancy in Hungary**

Rakoczi, I. Fogarasi-Grenczer, A. Takacs, P. Foley, K.L. Balazs, P.

Semmelweis University Budapest/Hungary

##### **Poster Presentation**

Background: 33% of Hungary's female population aged  $\geq 15$  years smokes. Nearly half are in reproductive age. Tobacco addiction is a crucial public health problem, especially among pregnant women due to health effects of the mother and foetus. We investigated factors associated with quitting among predominately low-income pregnant women in Hungary. Methods: Our retrospective questionnaire-based data collection targeted mothers of live-born babies in 2009-2011 in four underdeveloped counties and a district in Budapest. Response rate was 73.35% (N = 13,057). We used IBM SPSS v20 for all analyses. Odds ratios (OR) and 95% confidence intervals (CI) were calculated. Results: 52.7% (n = 3,998) had previously tried quitting before pregnancy, and 40.6% (n = 5,299) of women smoked during the pregnancy. Higher education doubled the chance of quitting (OR = 2.64; 95%CI = 2.14–3.25). Smoke-free environment was also significantly correlated with quitting (OR = 1.96; 95%CI = 1.65–2.33). A non-smoking partner more than doubled the chance of cessation (OR = 2.2; 95%CI = 0.67–0.94). Conclusion: Special attention should be given to the family and social context of tobacco use among women in underdeveloped regions in order to significantly reduce tobacco use among pregnant women in Hungary. The Maternity and Child Health Service is in a unique position to offer family-based, in-person assistance and health promotion programs to this population.



### **43. Structured training positively impacts nurse's beliefs and practices on promotion of smoking cessation**

Ross, J. Lim, J. Gupta, D. Michaels, H.

Princess Alexandra Hospital, Metro South Health

#### **Poster Presentation**

Background: Previous studies have shown that training of health professionals is a cost-effective and evidence based strategy to improve smoking cessation rates. A structured programme was implemented in the respiratory ward of a tertiary hospital during 2011 to train ward nurses on assessing smoking dependence and provide brief smoking advice in association with Nicotine Replacement Therapy (NRT) to all identified smokers on the ward. Aim: To examine the perceptions of nursing staff on their role in promoting smoking cessation one year after programme implementation. To compare attitudes, beliefs and practices of nurses in a respiratory ward to those working in a surgical ward. Method: A validated survey of 19 questions was distributed to nurses in a respiratory and a surgical ward. Results: Response rate was 28/44 (67%) respiratory versus 18/34 (52%) surgical. Larger number of respiratory 24 (85%) nurses were providing brief smoking advice as compared to surgical 2 (11%). 4 (14%) respiratory nurses v 14 (78%) surgical found knowledge a barrier. Respiratory nurses believed it was their role to advise patients to quit, were happy to spend the extra five minutes with a smoker, were more confident in providing brief smoking intervention. Conclusion: Implementation of a smoking cessation programme including training of nurses produced differing attitudes comparative to surgical nurses who had not received the programme. Process evaluation and ongoing education is required to maintain and improve current practice on the respiratory ward.

### **44. Implementation of brief smoking intervention (BSI) improves the use of nicotine replacement therapy (NRT) in hospitalised inpatients**

Ross, J. Lim, J. Gupta, D. Michaels, H.

Metro South Health, Princess Alexandra Hospital

#### **Poster Presentation**

Background: A structured programme was implemented in the respiratory ward of a tertiary hospital during 2011 to train ward nurses on assessing smoking status, nicotine dependence and provide brief smoking advice in association with Nicotine Replacement Therapy (NRT) to all identified smokers on the ward. Aim: Determine the proportion of hospital patients identified as smokers and how many of these smokers received NRT in the respiratory ward versus other wards. Method: Retrospective chart audit was conducted in 11 medical and surgical acute wards over 8 days identifying documentation of smoking status and if NRT was commenced. Results: 211 patients were audited. Smokers 44 (21%), non smokers 148 (70%), not recorded 19 (9%). On the respiratory ward 5/25 (20%) were identified as smokers; 2 (40%) received NRT, 2 (40%) refused NRT, 1 (20%) no documented offer. Of remaining wards 39/206 (19%); 12 (31%) received NRT during their hospital stay, 2 (5%) refused NRT, 25 (64%) no documented offer was evident. A higher proportion (80%) was offered NRT in the respiratory ward than the other wards (36%). Conclusion: In all wards inpatient smoking status was assessed, although the offer of NRT was better on the respiratory ward compared to other wards. Implementation of a ward based BSI programme should be extended to all wards.

#### **45. Evaluation of the implementation of a smoking ban in two drug and alcohol inpatient withdrawal management units in Sydney**

Ross, L. Kiel, K. Gormley, J.

Sydney South West Area Health Service

##### **Oral Presentation**

Introduction: This study describes the barriers and facilitators to the implementation of a smoke-free policy in two 'closed' inpatient withdrawal management units in Sydney. Methods: A total of 22 staff members participated in either a semi-structured interview or focus group or completed a survey questionnaire. Nineteen current patients participated in semi-structured interviews. Results: Among patients surveyed, the majority (68%) were currently interested in quitting smoking and 95% reported a previous quit attempt of four weeks or more. While most patients (83%) continued to surreptitiously smoke during admission, they reported smoking substantially less cigarettes than usual. Problems with patients' use of nicotine replacement therapy (NRT) during admission contributed to over 50% of patients ceasing NRT use after the first day of admission. Inadequate monitoring of patients' NRT use and withdrawal symptoms by staff also contributed to patients' early cessation of NRT. A lack of consistency and leadership in the enforcement of a complete smoking ban were the main implementation barriers identified by staff. Conclusions: There is a need to more effectively address staff fears about the impact of smoking bans on treatment outcomes. Systems changes are also needed to ensure patients' nicotine withdrawal symptoms and NRT use is appropriately managed.

#### **46. Time course of exhaled carbon monoxide (COex) measurement following performance of the carbon monoxide diffusing capacity (DLCO) test.**

Ruedinger, L. Ross, J. Eckert, B.

Princess Alexandra Hospital, Metro South Health

##### **Poster Presentation**

Time course of exhaled carbon monoxide (COex) measurement following performance of the carbon monoxide diffusing capacity (DLCO) test. Ruedinger L (CRFS), Ross J, Eckert B (CRFS) Respiratory Laboratory, Princess Alexandra Hospital, Brisbane, QLD, Australia Introduction: The DLCO test requires a single full inspiration of a test gas containing approximately 0.3% CO, with a maximum of 5 trials recommended by the ATS/ERS. COex levels are routinely performed in the management of smoking cessation. Previous studies show repeated DLCO testing resulted in an immediate increase in COex (ppm) levels. However the time course and clinical significance of this increase in COex has yet to be ascertained. Aim: Determine the magnitude and time course of COex increase following repeated measures of DLCO. Methods: COex was measured at baseline, then at 0.5, 1, 2, 4, 6, 8 & 24 hours following DLCO measurement. On 4 separate days, subjects were randomised to perform 2,3,4 or 5 DLCO trials. Results: 10 subjects completed the study. The table shows COex in ppm (mean+SD) at baseline and post DLCO trials. There was a statistically significant increase in COex which was sustained up to 8 hours post DLCO ( $p < 0.05$ ). Baseline 0.5 hr 4 hr 8 hr 24 hr 2\*DLCO 2.2 + 0.6 7.5 + 2.0 4.8 + 1.0 3.2 + 1.2 2.4 + 0.7 3\*DLCO 2.5 + 0.7 10.0 + 3.2 6.3 + 1.6 4.0 + 1.4 2.6 + 0.5 4\*DLCO 2.4 + 0.5 11.9 + 3.2 7.4 + 1.9 4.6 + 1.3 2.3 + 0.6 5\*DLCO 2.4 + 0.7 14.6 + 4.8 8.7 + 2.5 5.2 + 1.3 2.4 + 0.7 After 2 DLCO trials, 6 subjects recorded clinically elevated COex (>6ppm) at 30 minutes, falling to 3 @ 2 hours, with all subjects recording levels below 6ppm @ 4 and 8 hours. After 5 DLCO trials all 10 subjects recorded elevated COex levels for at least 2 hours, which were sustained up to 8 hours in 2 subjects. Discussion: COex is a simple method of validating smoking status in subjects attending a smoking cessation clinic. We demonstrated clinically significant and sustained increases in COex post DLCO. Clinical outcome may be affected if subjects perform DLCO testing up to 8 hours prior to COex measurements. Conclusion: DLCO testing should not be performed before COex measurements.

#### **47. A review of the role of community pharmacists in smoking cessation**

Saba, M. Diep, J. Saini, B. Dhippayom, T

Faculty of Pharmacy, University of Sydney

##### **Poster Presentation**

**Aim:** Community pharmacists represent highly accessible professionals. Many studies have been conducted to explore the value of pharmacist-delivered smoking cessation interventions. The aim of this review is to evaluate the effectiveness of such interventions in assisting patients to quit. **Methods:** PubMed, Embase, Scopus, International Pharmaceutical Abstracts (IPA) and ISI Web of Knowledge were searched from inception to May 2013. Original research articles were selected for review, if they addressed the effectiveness of pharmacy-based interventions in smokers versus a control group and reported smoking abstinence rates. The primary outcome of measure was smoking abstinence. Pooled relative risks (RR) with 95% confidence interval (CI) were estimated using the Dersimonian and Laird random effects models. **Results:** Of the 1,906 articles extracted, 6 studies (4 randomised controlled trials and 2 controlled before-after studies) met the inclusion criteria, involving a total of 1,493 smokers. Pharmacist interventions showed better abstinence rates as compared to controls (RR 2.21, 95%CI 1.49–3.29). Compared to the control group, the RR (95%CI) in the intervention group was 3.21 (1.81–5.72) for clinically-validated abstinence and 1.73 (1.19–2.53) for self-reported abstinence. In the intervention group, the RR for short-term and long-term abstinence was 2.27 (1.14–4.50) and 2.43 (1.47–4.03), respectively. **Conclusion:** Pharmacist-led interventions can significantly impact abstinence and quit rates in smokers. Health policy makers should direct incentives for pharmacists to provide such services.

#### **48. Asthma and smoking – Health-care needs of people with asthma who smoke**

Saba, M. Diep, J. Bittoun, R. Armour, C. Saini, B.

Faculty of Pharmacy, University of Sydney

##### **Poster Presentation**

**Aim:** The proportion of Australians with asthma who smoke is higher than the proportion of smokers in the general population. Research evidence has begun to suggest that people with asthma may take up smoking for different reasons and may have different motivations to keep smoking or quit. The aim of this study is to understand the unique needs of people with asthma who smoke, in terms of smoking cessation initiation, maintenance and preferences. **Methods:** Qualitative, semi-structured, in-depth telephone interviews, with people who have asthma and are concurrent smokers, are being conducted. Participants are being recruited through flyers at various venues such as community pharmacies, general practice surgeries, university campuses, asthma and smoking cessation clinics at tertiary hospitals and an advertisement via the Asthma Foundation website. Interviews are being transcribed verbatim and entered into NVivo® software. Obtained data is being content-analysed for emergent themes using the 'framework approach'. **Results:** Interviews are still in-progress, until data saturation occurs. Results, so far, indicate that majority of smokers believe that smoking tends to worsen their wheezing and cough. Most participants reported that they wanted to quit upon being diagnosed with asthma, but the lack of support, good advice and step-by-step management approaches deemed their failure. **Conclusion:** Given the unique needs of people with asthma who smoke, it is imperative that evidence-based smoking cessation programs be designed and tailored to assist them in effectively quitting smoking.

## **49. For Me and Bub Program**

Scotney, A. Cowburn, R.

Qld Health

### **Oral Presentation**

The For Me & Bub Program aims to increase and maintain the skills of the maternal and child health workforce to deliver culturally effective alcohol, tobacco and other drug (ATOD) brief interventions with their clients so as to encourage and support Aboriginal and Torres Strait Islander women to abstain from substance use, with particular focus on smoking cessation during pregnancy. The Program commenced training throughout the QLD Health, Metro North Hospital and Health services, which will continue until June 2013. The Program will then commence its state-wide roll-out into other Qld Health, Hospital and Health Services until June 2014. For Me and Bub training is divided into two components, the first being an online brief intervention training. The second component is a face-to-face training workshop. The Smokerlyzer (BabyCompact) is provided to all workers who participate and is a tool which measures carbon monoxide levels in expired air with pregnant women. It is a tool used for engaging with clients around smoking cessation. The Smokerlyzer gives two readings: • The number of Carbon Monoxide molecules in a million parts of the mother's air. • The percentage of red blood cells carrying Carbon Monoxide instead of oxygen to the foetus.

## **50. The Paakantji Kiira-Muuku Project: An evaluation of a smoking cessation intervention for remote communities in NSW.**

Tall, J. Brew, B. Jones, T. Buckland, A.

Population Health, Western NSW and Far West Local Health Districts

### **Oral Presentation**

The Paakantji Kiira-Muuku Project is an evaluation of a smoking cessation intervention (The Smokers Program) delivered to seven remote communities in NSW. The aims of the Project were to evaluate the effectiveness of the Smokers Program, identify the enablers and barriers for its success, and identify improvements. Twenty-four percent of Smokers Program participants remained smoke-free at a minimum of 12 months post-Program completion. The Program raised community awareness about the ill-effects of smoking, prompted people to attempt quitting and fostered smoke-free environments. Barriers to the success of the Program included insufficient resources, a less than reliable referral pathway, a Program structure not always supportive of Indigenous clients, lack of access to GPs, Champix prescribing regulations, mental health issues, and clients living in smoking environments. Factors that promoted the success of the Program included client familiarity with the health facility, the provision of subsidised NRT, weekly follow-up contact and Program flexibility. Program success could be improved by recruiting a smoking cessation officer, streamlining the referral pathway, providing easier access to support services, ensuring client follow-up, the use of an electronic-based record system, promoting the Program and changing Champix prescribing regulations.

## **51. Community readiness for smoking in remote Aboriginal homelands**

Tane, M. Zadkovich, S. Dhurrkay, T. Hindmarsh, E.

Kimberley Aboriginal Medical Services Council

### **Oral Presentation**

While the rest of Australia moves towards increasing numbers of smokefree communities, in the very remote regions, amongst Aboriginal communities, smoking remains the norm. A mobile primary health care service based in East Arnhem land is working with the Yolgnu peoples in the remote Homelands using a Community Readiness Model. This approach seeks to assess smoking as a community priority, uses technology to engage clients who smoke, to discourage those who don't (such as children) not to experiment or start smoking, and to encourage a discussion about the meaning of smoking and its impact on the wellbeing of Yolgnu peoples. These strategies are being used as a prerequisite to smoking cessation and the use of pharmacotherapy to quit smoking.

## **52. A systematic review and meta-analysis of changes in psychological well-being after smoking cessation**

Taylor, G. McNeill, A. Girling, A. Farley, A, Lindson-Hawley, N, Aveyard, P.

The University of Birmingham

### **Oral Presentation**

**BACKGROUND:** One of the most common reasons given for smoking is stress-relief. If smoking relieves stress, psychological well-being might deteriorate after cessation. Alternatively, it may be that smoking induces nicotine withdrawal symptoms, such as depression and anxiety. Understanding whether smoking cessation improves or worsens psychological well-being is important in framing public health messages. **METHODS:** We searched for longitudinal studies of adults, in any language, published between inception to April 2012. We included studies which reported baseline and follow-up psychological outcome scores in smokers who quit, and smokers who continued to smoke. Studies were combined using a generic inverse variance meta-analysis to assess the difference in change in psychological outcomes, from baseline to follow-up, between smokers and quitters. **RESULTS:** We included 26 studies. Quitters showed a reduction in anxiety, and continuing smokers increased in anxiety; these changes were significantly different between groups (Standardised mean difference (SMD): $-0.33$ ; 95%CI: $-0.50$  to  $-0.16$ ,  $p = 0.0001$ ). Both groups showed a reduction in depressive symptoms; the reduction was significantly greater in quitters (SMD:  $-0.25$ ; 95%CI: $-0.44$  to  $-0.20$ ,  $P = 0.0001$ ). **INTERPRETATION:** Long-term smoking cessation is associated with an improvement in psychological outcomes. Our effect estimates are equal or larger to those of anti-depressant treatment for symptoms of depression and anxiety.

### **53. Assessing the association between smoking cessation and change in psychological wellbeing, using propensity score matching**

Taylor, G. Girling, A. Aveyard, P.

The University of Birmingham

#### **Poster Presentation**

Background: One of the most common motives for smoking is stress-relief. However, smokers report more symptoms of stress than non-smokers. It is possible that smokers use nicotine to alleviate stress; thus psychological well-being may deteriorate after cessation. Alternatively, smoking may be a cause of stress, while leading smokers to believe it is stress-relieving; therefore an improvement psychological well-being may occur after cessation. To clarify which one of these hypotheses is true we will examine changes in psychological well-being occurring after cessation. Methods: We are analysing data from six randomized trials of nicotine replacement/placebo for smoking reduction, during which 187 people stopped for at least six weeks. Psychological well-being was measured using the SF-36. SF-36 scores will be compared between people who stopped smoking and those who continued smoking, with adjustment for baseline values. We will use propensity score matching to balance the distribution of baseline covariates between groups. This analysis will be completed by October 2013. Conclusions: These data will show whether cessation is associated with a long term change in psychological well-being. If cessation improves psychological well-being, this finding can be used to frame novel public health messages.

### **54. Nicotine addiction and importance and self-efficacy of quitting**

Urbán, R. Vajer, P. Péntzes, M.

Eotvos Lorand University, Institute of Psychology.

#### **Poster Presentation**

The perceived importance and self-efficacy are essential proxies for smoking cessation motivation. Our goal is to examine the determinants of the importance and self-efficacy of quitting in an Internet based sample of smokers motivated to quit. Data were collected from 720 daily smokers who registered on a smoking cessation website and wanted to be contacted later for proactive counseling in quitting smoking. Measures included background variables, items referring the importance of quitting and self-efficacy in quitting, Heaviness of Smoking Index (HSI), Tobacco Dependence Screener (TDS), 11 scales from the Brief Wisconsin Inventory of Smoking Dependence Motives (WISDM-37), partner's smoking status and household rules related to smoking. The lower level of importance of quitting were predicted only by gender (female) and taste-sensory properties scale. However, affiliative attachment, cognitive enhancement, craving scales from WISDM-37 and TDS score predicted lower level of self-efficacy in quitting. Taste-sensory properties reflecting positive reinforcement from smoking can decrease the importance of quitting. In contrast with the importance of quitting, some smoking dependence motives and smoking dependence symptoms are associated with the lower level of perceived self-efficacy related to quitting. Putting more emphasis on these hindering factors in counseling might increase the chance of successful quitting smoking.

## **55. Evidence of change: Increasing nicotine dependence treatment in mental health hospitals**

Wye, P. Wiggers, J. Bowman, J. Constable, J.

The University of Newcastle

### **Oral Presentation**

There remains a significant disparity in smoking prevalence between the general adult population (16%) and among inpatients in mental health hospitals (50%), with minimal treatment provided. This project aimed to translate policy into practice by increasing the provision of nicotine dependence treatment for mental health inpatients who smoke. An evidence-based, multi-strategic intervention was designed to increase adoption of guidelines in 7 mental health inpatient units. Outcomes were measured from medical record audit of all patients discharged from mental health services, with pre-post and time series analysis used to determine results. From 4370 mental health hospital discharges over 20 months, 44% of patients were identified as smokers. Assessment of patient smoking increased from 32% to 48% ( $p = .000$ ) and quit advice increased from 6% to 23% ( $p = .000$ ). Offer of any nicotine replacement therapy increased from 59% to 74% ( $p = .001$ ), and prescription of nicotine replacement therapy increased from 54% to 65% ( $p = .000$ ). Nicotine dependence treatment on discharge record increased from 14% to 32% ( $p = .000$ ). Time series analysis indicates a continued increase in the provision of treatment after completion of the intervention phase. The results suggest that such evidence-based, multi-strategic interventions can significantly increase assessment and treatment of nicotine dependence within mental health inpatient settings, and are sustainable over time.

## Index

Key Words – ALL

- Aboriginal and Torres Strait Islander – 5, 21, 23, 24, 30, 32, 41, 49, 50, 51  
 Abstinence – 10, 47  
 Asthma – 48  
 Brief Intervention – 49  
 Carbon Monoxide – 46, 49  
 Clinical – 35, 36, 40  
 Counseling – 37, 38  
 Drug and Alcohol – 45  
 e-cigarettes – 39  
 Education – 27, 28  
 Emergency – 25  
 Ethics – 6  
 Exhaled CO – 46  
 Financial incentives – 31  
 General Practice – 13  
 Harm Minimisation – 4  
 Health Promotion – 43  
 HIV – 25, 33, 34  
 Hospital – 19, 44  
 Incentives – 21  
 Indigenous (Refer to Aboriginal and Torres Strait Islander)  
     – 5, 21, 23, 24, 30, 32, 41, 49, 50, 51  
 Inpatients – 35, 36, 44, 55  
 Intervention – 28, 50  
 Maori – 22  
 Mental Health – 3, 4, 7, 8, 10, 11, 12, 14, 17, 26, 29, 52, 53, 55  
 Midwife training – 49  
 Morbidity – 33  
 Motivational interviewing – 7  
 Motives – 54  
 Nicotine – 6  
 NRT – 4, 25, 41, 43, 44, 45  
 Nursing Care – 3, 43  
 Online – 21  
 Pharmacotherapy – 51  
 Pharmacy – 19, 20, 35, 36, 47  
 Pregnancy – 2, 15, 20, 22, 31, 40, 42, 49  
 Prevalence – 9  
 Psychology – 54  
 Public Health – 38  
 Questionnaire – 1  
 Quitline – 13, 30, 37, 38  
 Remote community – 50  
 Schizophrenia – 10  
 Self-efficacy – 54  
 Smoke-free policy – 7  
 Special Groups – 2, 18, 22  
 Stress Relief – 53  
 Students – 9, 39  
 Tobacco Industry – 6, 16  
 Training – 43  
 Weight Gain – 1, 34  
 Withdrawal – 45