DECREASING SMOKING & VAPING USE

PROVIDED BY: MONASH HEALTH LIBRARY	**DATE:** 2 MAY 2023

Please find following a summary of a literature search and relevant results. All articles can be provided in full - email library@monashhealth.org for a list of the articles you require.

QUESTION

Population health approaches towards decreasing tobacco and vaping (e-cigarette) use and its associated harms.

SEARCH LIMITS

English-language, last 5 years.

SEARCH METHODOLOGY

A systematic search was conducted for literature. The results were screened by two librarians using Covidence. See the Appendix for the PRISMA chart, search terms, and Medline search strategy.

DATABASES SEARCHED

- Medline – index of peer reviewed articles across health sciences and medicine.
- Embase – index of biomed and pharmacological peer reviewed journal articles.
- Emcare – index of nursing, allied health, critical-care medicine and more.
- Grey literature – Google, Google Scholar, Trip database, Biomed Central Proceedings.

RESULTS

All articles can be provided in full text - email library@monashhealth.org a list of articles you require.

GENERAL RESOURCES

ONLINE RESOURCES (GREY LITERATURE)

VicHealth Local Government Partnership. **Strengthening tobacco control at a local level.** November 2022. Web link
- Recommends the following implementation actions as quick wins - amplify anti-smoking campaigns, promote smokefree events and activities for children and families, promote smoking cessation programs, develop a comprehensive smokefree policy, implement your comprehensive smokefree policy.

Cardiac Society of Australia and New Zealand. **Position statement: Smoking and vaping cessation**. September 2021 Web link
- Quitlines are recommended for multi-session behavioural intervention because of their accessibility and because they use tailored protocols for specific groups, including for Aboriginal and/or Torres Strait Islander Peoples through the 'Aboriginal Quitline'.

- It is strongly advised that all health professionals provide brief advice using the Ask, Advise, Help (AAH) model. The aim of brief advice is to promote smoking cessation and to provide or facilitate uptake of treatment.
- There is very limited evidence for the most effective way to quit vaping. Behavioural interventions should be recommended for all people who vape to minimise health harms and address the behavioural and emotional aspects of dependence

National Instiute for Health and Care Excellence (NICE). **Tobacco: preventing uptake, promoting quitting and treating dependence**. November 2021. [Web link]
- pp26… Stop-smoking interventions - behavioural interventions, medicinally licensed products, nicotine-containing e-cigarettes, Allen Carr's Easyway in-person group seminar.
- pp30… Advice on nicotine-containing e-cigarettes. These recommendations are for people providing stop-smoking support or advice to adults.

Parliament of Australia. Select Committee on Tobacco Harm Reduction. **Report**. December 2020. [Web link]
- Section 6.21 - The committee supports the Australian Government's current goal of 10 per cent smoking prevalence by 2025. To achieve this target, daily smoking prevalence must fall to minimal levels; tobacco access and supply must be significantly reduced and accordingly Australia must renew its efforts in evidence-based strategies to reduce smoking prevalence
- Recommendation 1. 6.24 - The committee recommends that the Australian Government outline concrete measures to meet the target of reducing smoking rates to below 10 per cent by 2025 and beyond
- Recommendation 2. 6.25 - The committee recommends that the Australia Government continue to invest in evidence-based strategies that are proven to reduce tobacco use and take-up, and in particular, consider renewed investment in a new national anti-smoking campaign.

Australian Government. Department of Health. Therapeutic Goods Administration**. Proposal to prevent the uptake of nicotine containing e-cigarettes by ever users (adolescents and young adults), to support smoking cessation and to reduce nicotine poisonings of children**. December 2020. [Web link]
- pp 6… The public health problem s 1-13
- pp48… Option 2. Public awareness campaign – smoking cessation / stop initiation of use of e-cigarettes

COMMUNITY HEALTH CARE

Terzi, et al. (2023). **Effectiveness of non-pharmacological community-based nursing interventions for smoking cessation in adults: A systematic review.** Public health nursing, 40(1), 195-207. Web Link
The purpose of this systematic review was to determine the effectiveness of non-pharmacological community-based nursing interventions for smoking cessation in adults. Nurses were found to perform intensive behavioral support, brief-advice and mTobacco cessation interventions. These were effective on changing knowledge, belief and attitudes. No sufficient evidence on the cessation rate and the non-relapse rate was found. This review puts forward that non-pharmacological community-based smoking cessation interventions by nurses has an impact on changing knowledge, belief and attitudes in adult smokers. Findings can encourage public health nurses to use their counsellor role more actively. Improving the health literacy of the adult smokers via these findings can facilitate their intention to behavior change. Findings can be a useful resource for policy makers and governments in controlling the smoking epidemic.

Lewis, et al. (2021). **Optimising health systems to deliver tobacco-dependence treatment**. ERS Monograph, 2021, 118-135. Full text
While HCPs lack training in smoking cessation, health systems lack engagement with preventive care; few offer a system-level intervention or a full package of best practice cessation services. There is a need to incorporate innovative and system-level cessation interventions into healthcare and community settings, as part of wider tobacco action plans. This chapter describes successful examples of system-level tobacco cessation interventions from primary care to secondary care, community programmes and internet support in the UK and Canada. We describe national models, such as in Denmark where these separate services can be incorporated into a unified service, and finally look at international collaborations where different aspects of each system can be adapted across countries.

Umnuaypornlert, et al. (2021). **Community Health Workers Improve Smoking Cessation When They Recruit Patients in Their Home Villages.** Journal of primary care & community health, 12(101518419),
Full text
Community health workers (CHWs) can play a vital role in many aspects of healthcare, particularly for underserved communities, but it is unclear what factors are most important in determining the

success of CHW-based programs. We wanted to assess what factors contribute to the effectiveness of CHWs in a smoking cessation program. We trained CHWs in 3 areas regarding smoking cessation: knowledge, attitude, and practice (KAP). The training program utilized the 5A's as approach. CHWs actively sought out people addicted to cigarettes to participate. Patients received support from CHWs and a team of medical professionals for a year. A smoking cessation program combining CHWs and pharmacists was effective. Key factors were having CHWs that are respected and established in their communities, using CHWs who know their patients and can provide individually tailored solutions, and empowering CHWs with intensive training.

Eliasson, et al. (2018). **Comparison of trends in cardiovascular risk factors between two regions with and without a community and primary care prevention programme.** European Heart Journal, 39(Supplement 1), 76. Full text

The effect of interventions for the primary prevention of cardiovascular disease (CVD) based either in primary health care or in the community is debated due to lack of evidence. The XX Intervention Programme is an individual and community-based public health programme that comprises the whole county of XX. Some residents, 40, 50 and 60 years of age, are invited to a standardised health examination and a health dialogue at their local primary health care centre. In the neighbouring county YY, no such programs have been implemented. We aimed to analyse if trends in CVD risk factors in the intervention area differed from those in the control area. Blood pressure, glucose and smoking improved at a faster rate in the county with a community and primary care-based intervention than in the county without such an intervention.

DENTAL / ORAL HEALTH CARE

Bendotti, et al. (2021). **Utilisation of a brief tobacco smoking cessation intervention tool in public dental services.** Health promotion journal of Australia : official journal of Australian Association of Health Promotion Professionals, 32 Suppl 2(9710936), 367-377. Web link

Dental practitioners have an important opportunity to promote smoking cessation. This study aimed to determine completion rates for the standardised Smoking Cessation Pathway, and smoking cessation practices, confidence levels and attitudes of dental practitioners. High-risk populations for tobacco use are frequently utilising WMOHS, however not all patients who smoke received smoking cessation support. Understanding and addressing barriers to smoking cessation promotion in oral health care settings may improve general and oral health outcomes for patients. SO WHAT?: Targeted training and utilisation of team-based models of care may better enhance delivery and uptake of the Pathway within the public dental setting, thus improving services to a high-need population and reducing smoking rates in priority populations.

McClure, et al. (2018). **Oral Health Promotion and Smoking Cessation Program Delivered via Tobacco Quitlines: The Oral Health 4 Life Trial**. American journal of public health, 108(5), 689-695. Full text

To assess the effects of a novel oral health promotion program (Oral Health 4 Life; OH4L) delivered through state-funded tobacco quitlines. Using a semipragmatic design to balance experimental control and generalizability, we randomized US quitline callers (n = 718) to standard care or standard care plus OH4L. We followed participants for 6 months to assess effects on professional dental care and smoking abstinence. At 6 months, professional dental care and abstinence did not significantly differ between arms, but abstinence favored the experimental arm and was significantly higher among experimental participants at 2 months in a complete case sensitivity analysis. OH4L was not effective for promoting dental care, but integrating oral health counseling with quitline counseling may offer some advantage for smoking cessation.

DIGITAL TOOLS

Fulton, et al. (2021). **A digital behaviour change intervention to increase booking and attendance at Stop Smoking Services: the MyWay feasibility RCT**. Southampton (UK): NIHR Journals Library; 2021 Apr. Full text
Smokers are far more likely to quit for good with support from NHS Stop Smoking Services. However, with fewer people accessing these services, there is a need for better ways to promote Stop Smoking Services to smokers. StopApp™ is a single-use web application (app) designed to overcome concerns smokers might have about Stop Smoking Services. The web app makes it easy for people to book an appointment directly, in a location and at a time of their choosing. This feasibility trial sought to identify whether or not smokers could be recruited by testing which setting is best to recruit smokers from, and by testing the acceptability of the methods and survey questions (measures). Several participants were also interviewed about their experience of the study. The most successful method of recruitment and retention of participants was through social media. We found that, with recruitment driven wholly or mainly by social media, it is possible to recruit and retain sufficient smokers to assess the effectiveness and cost-effectiveness of StopApp.

Perski, et al. (2019). **Trends in and factors associated with the adoption of digital aids for smoking cessation and alcohol reduction: A population survey in England.** Drug and alcohol dependence, 205(ebs, 7513587), 107653. Full text
Digital smoking cessation and alcohol reduction aids are widely available in England. To estimate their public health impact, researchers need to consider their adoption in the target population. We assessed adoption rates, and characteristics of adopters, of digital smoking cessation and alcohol reduction aids in England. 3655 smokers and 2998 high-risk drinkers (defined as a score of >4 on the Alcohol Use Disorders Identification Test-Consumption; AUDIT-C) who had made a past-year quit/reduction attempt were surveyed as part of the Smoking and Alcohol Toolkit Studies between January 2015-October 2018. We found that digital smoking cessation and alcohol reduction aids are rarely used by smokers or high-risk drinkers attempting to quit/cut down in England, indicating that most of the target population is not being reached. Despite overall digital access improving, adoption rates remained similarly low between 2015-2018.

Tsoh, et al. (2018). **Interactive Mobile Doctor (iMD) to Promote Patient-Provider Discussion on Tobacco Use among Asian American Patients in Primary Care: A Pilot Study**. Journal of the American Board of Family Medicine : JABFM, 31(6), 869-880. Full text
This study examined the feasibility, acceptability, and efficacy of an interactive "Mobile Doctor" intervention (iMD) for Korean and Vietnamese American men, population groups with high smoking prevalence rates. The iMD delivers 5As (Ask, Advise, Assess, Assist, and Arrange) via tailored in-language video messages on a mobile tablet to Korean and Vietnamese male daily smokers right before a health care visit. A single-group trial was conducted with Korean- and Vietnamese-speaking patients at a federally qualified health center. Outcomes were assessed by self-reported surveys obtained postvisit and 3-month follow-up, and by examining electronic health record (EHR) progress notes from 3 consecutive primary care visits to evaluate impacts. Results showed that iMD is feasible and acceptable to Korean and Vietnamese male smokers, including those who were not intending to quit smoking. It is a promising tool for increasing patient-provider discussion of tobacco use and possibly smoking cessation among Asian American male smokers.

Williams, et al. (2018). **Exploring Online Asynchronous Counseling With Tobacco Treatment Specialists in the QUIT-PRIMO and National Dental PBRN HI-QUIT Studies: Who Uses It and What Do They Say?** American journal of health promotion : AJHP, 32(5), 1170-1177. Full text
To describe the content of messages sent by smokers through asynchronous counseling within a Web-based smoking cessation intervention. The participants were adults older than 19 years who were

current smokers and interested in quitting. Participants throughout the United States referred to a Web-based cessation intervention by their medical or dental provider or by clicking on a Google advertisement. We conducted a qualitative review of 742 asynchronous counseling messages sent by 270 Web site users. Messages were reviewed, analyzed, and organized into qualitative themes by the investigative team. Qualitative analysis yielded 7 basic themes-Talk about the Process of Quitting, Barriers to Quitting, Reasons to Quit, Quit History, Support and Strategies for Quitting, Quitting with Medication, and Quit Progress. The most common theme was Support and Strategies for Quitting with 255 references among all messages. We found rich communication across the spectrum of the quit process, from persons preparing to quit to those who had successfully quit. Asynchronous smoking cessation counseling provides a promising means of social support for smokers during the quit process.

EDUCATION FOR HEALTH CARE PROVIDERS

Ho, et al. (2022). **Utilization of the Youth Quitline as an opportunity for an undergraduate nursing students to deliver smoking cessation counseling as their clinical placement: An implementation of a service-learning model**. Nurse education today, 112(ned, 8511379), 105330. Full text
Although healthcare professionals play an important role in smoking cessation, their adoption of such practices is relatively low because of inadequate training. To address this issue, we incorporated a service-learning model to operate the Youth Quitline. Undergraduate nursing students were trained and received supervision while delivering smoking cessation counseling through the Youth Quitline as their clinical placement. From January-June 2021, students conducted 105 outreach activities to identify 3142 smokers in the community, and provided telephone counseling for 336 smokers via Youth Quitline. Compared with baseline, significant improvements were observed in students' knowledge, attitudes and practices regarding smoking cessation and tobacco control at 3-month follow-up. The clinical placement improved students' knowledge, attitudes and practices regarding smoking cessation and tobacco control, enhancing their competency in providing support to assist smokers to quit in their future practice. Incorporating the service-learning model in existing community-based services can provide additional venues for nursing students to practice.

Cofta-Woerpel, et al. (2018). **A tele-mentoring tobacco cessation case consultation and education model for healthcare providers in community mental health centers**. Cogent Medicine, 5(1), 1430652. Full text
Smoking prevalence among individuals with mental and behavioral health needs is considerably higher compared to the general population, but evidence-based smoking cessation therapies are underutilized in mental and behavioral healthcare settings, despite the fact that these treatments are both safe and effective. The goal of this paper is to present the background, design and pilot of Project TEACH (Tobacco Education and Cessation in the Health System) developed to improve clinical practice by offering specialized training in the provision of smoking cessation interventions to care providers in community mental health centers in Texas. This is achieved through engaging the expertise of clinicians at the MD Anderson Cancer Center's Tobacco Treatment Program and disseminating this expertise to care providers by means of a novel tele-mentoring approach called Project ECHO (Extension for Community Healthcare Outcomes). Evaluation of our pilot ECHO training project demonstrated that the training was very well received and resulted in self-reported enhancement of the providers' professional practice.

PHARMACY SERVICES

Appalasamy, et al. (2022). **Effects of educational interventions on the smoking cessation service provided by community pharmacists: A systematic review**. Research in social & administrative pharmacy : RSAP, 18(9), 3524-3533. Full text

This systematic review aimed to evaluate the effectiveness of educational interventions on the smoking cessation service provided by community pharmacists. Included studies reported that educational interventions can improve pharmacists' self-efficacy, knowledge, and attitude toward smoking cessation, as well as pharmacists' smoking cessation practices. Though the evidence is limited, improvement in the effectiveness of community pharmacy based smoking cessation services has also been observed. Any form educational interventions can positively impact improve community pharmacists' self-efficacy, knowledge, and attitude toward smoking cessation, as well as pharmacists' smoking cessation practices, but it is currently uncertain whether these outcomes are able to translate into higher effectiveness of the community pharmacy based smoking cessation services.

QUIT PROGRAMS

Kerr, et al. (2019). **Impact and Effectiveness of a Stand-Alone NRT Starter Kit in a Statewide Tobacco Cessation Program**. American journal of health promotion : AJHP, 33(2), 183-190. Web link

To examine 2-week nicotine replacement therapy (NRT) starter kit quit outcomes and predictors and the impact of adding this new service on treatment reach. Treatment reach increased 3-fold after adding the 2-week NRT starter kit service option to QUITPLAN Services compared to the prior year (1.86% vs 0.59%). Among all participants enrolling in QUITPLAN services during a 1-year period, 83.8% (13 026/15 536) registered for a starter kit. Among starter kit respondents, 25.6% reported being quit for 30 days at the 7-month follow-up. After controlling for other factors, using all NRT and selecting more cessation services predicted quitting. An NRT starter kit brought more tobacco users to QUITPLAN services, demonstrating interest in cessation services separate from phone counseling. The starter kit produced high quit rates, comparable to the quit line in the same time period. Cessation service providers may want to consider introducing starter kits to reach more tobacco users and ultimately improve population health.

Mann, et al. (2019). **The Potential Impact of the New York State Smokers' Quitline on Population-Level Smoking Rates in New York.** International journal of environmental research and public health, 16(22), Full text

Receiving smoking cessation services from telephone quitlines significantly increases quit success compared with no intervention or other quitting methods. To affect population-level smoking, quitlines must provide a sufficient proportion of smokers with effective interventions. Nationally, quitlines reach around 1% of adult smokers annually. From 2011 through 2016, the average annual reach of the New York State Smokers' Quitline (NYSSQL) was 2.9%. We used data on the reach and cessation outcomes of NYSSQL to estimate its current impact on population-level smoking prevalence and to estimate how much reach would have to increase to achieve population-level smoking prevalence reductions. We estimate NYSSQL is associated with a 0.02 to 0.04 percentage point reduction in smoking prevalence in New York annually. Given their reach, quitlines are limited in their ability to affect population-level smoking. Increasing quitline reach may not be feasible and would likely be cost-prohibitive. It may be necessary to re-think the role of quitlines in tobacco control efforts. In New York, the quitline is being integrated into larger efforts to promote cessation through health systems change.

Mundt, et al. (2020). **Financial incentives to Medicaid smokers for engaging tobacco quit line treatment: maximising return on investment.** Tobacco control, 29(3), 320-325. Full text
Low-income smokers experience greater difficulty in quitting smoking than do other smokers. Providing financial incentives for treatment engagement increases smoking cessation success. This study models the cost-effectiveness of varying levels of financial incentives to maximise return on investment (ROI) for engaging low-income Medicaid recipients who smoke to take calls from a tobacco quit line. Modelling from the results suggests that financial incentives in the amount of $20 per call for taking the first four quit line calls and $70 for taking a fifth quit line call maximise ROI to engage low-income smokers with evidence-based smoking cessation treatment.

Mundt, et al. (2019). **Paying Low-Income Smokers to Quit? The Cost-Effectiveness of Incentivizing Tobacco Quit Line Engagement for Medicaid Recipients Who Smoke.** Value in health : the journal of the International Society for Pharmacoeconomics and Outcomes Research, 22(2), 177-184. Full text
To determine the cost-effectiveness of an incentive-based stop-smoking intervention that paid Medicaid recipients who smoke to take calls from a tobacco quit line. A cost-effectiveness analysis was conducted alongside a randomized controlled trial. The analysis was conducted from a health care systems perspective on the basis of costs and effectiveness over a 6-month follow-up. The study ICER compares favorably with other smoking treatments, such as varenicline combined with proactive telephone counselling. Use of financial incentives to engage with tobacco quit line treatment is a cost-effective option to enhance smoking cessation rates for low-income smokers.

Brown, et al. (2019). **Self-Incentives Uniquely Boost Cessation in Community-Based Stop Smoking Programs: Randomized Controlled Trial.** Annals of Behavioral Medicine, 53(5), 442-452. Full text
Self-incentives offer a plausible alternative to paying smokers to quit but have not yet been tested in a randomized controlled trial. The present study tested whether, compared with a control group, prompting smokers explicitly to self-incentivize if they abstain from smoking for a week or a month encouraged sustained abstinence. One hundred and fifty-nine smokers were recruited from stop smoking clinics and randomized to an active control condition (asked to form a plan to quit, n = 65) or one of two intervention conditions in which they were asked to form implementation intentions designed to ensure that they incentivized themselves if they had not smoked at all by the end of (a) the week (n = 44) or (b) the month (n = 50). The main outcome measure was self-reported abstinence at 3- and 6-month follow-ups, which was biochemically verified at baseline and in a subsample at 3-month follow-up. Ensuring that smokers self-incentivized boosted significantly the effectiveness of the stop smoking program. Self-incentivizing implementation intentions could be implemented at low cost with high public health "reach" to change many health behaviors beyond smoking.

Popp, et al. (2018). **Cost-effectiveness of enhancing a Quit-and-Win smoking cessation program for college students**. The European journal of health economics : HEPAC : health economics in prevention and care, 19(9), 1319-1333. Full text
We conducted a cost-effectiveness analysis and model-based cost-utility and cost-benefit analysis of increased dosage (3 vs. 1 consecutive contests) and enhanced content (supplemental smoking-cessation counseling) of the Quit-and-Win contest using data from a randomized control trial enrolling college students in the US. For the cost-utility and cost-benefit analyses, we used a microsimulation model of the life course of current and former smokers to translate the distribution of the duration of continuous abstinence among each treatment arm's participants observed at the end of the trial (N = 1217) into expected quality-adjusted life-years (QALYs) and costs and an incremental net monetary benefit (INMB). Multiple contests appear to dominate a single contest from a societal perspective. Funding agencies seeking to promote population health by funding a Quit-and-Win contest in a university setting should strongly consider offering multiple consecutive contests.

SOCIAL MEDIA

Lyu, et al. (2021). **Vaping discussion in the COVID-19 pandemic: An observational study using Twitter data.** PLoS ONE, 16(12 December), e0260290. Full text
With the spread of COVID-19, significant concerns have been raised about the potential increased risk for electronic cigarette (e-cigarette) users for COVID-19 infection and related syndromes. Social media is an increasingly popular source for health information dissemination and discussion, and can affect health outcomes. This study aims to identify the topics in the public vaping discussion in COVID-19-related Twitter posts in order to get insight into public vaping-related perceptions, attitudes and concerns, and to discern possible misinformation and misconceptions around vaping in the COVID-19 pandemic. We found a substantial amount of anti-vaping discussion and dominantly negative sentiment around vaping during COVID-19, a sharp contrast to the predominantly pro-vaping voice on social media in the pre-COVID-19 period. Continued monitoring of social media conversations around vaping is needed, and the public health community may consider using social media platforms to actively convey scientific information around vaping and vaping cessation.

Hefler, et al. (2020). **Facebook-Based Social Marketing to Reduce Smoking in Australia's First Nations Communities: An Analysis of Reach, Shares, and Likes**. Journal of medical Internet research, 22(12), e16927. Full text
Facebook is widely used by Australia's First Nations people and has significant potential to promote health. However, evidence-based guidelines for its use in health promotion are lacking. This study reports on an analysis of the reach and engagement of Facebook posts with smoking prevention and cessation messages posted by ACCHOs in the Northern Territory, Australia. Facebook posts with nonlocally produced content can be an important component of a social media campaign run by local health organizations. With the exception of nonlocally produced content, we did not find a definitive set of characteristics that were clearly associated with reach, shares, and reactions. Beyond reach, shares, and likes, further research is needed to understand the extent that social media content can influence health behavior.

Manas, et al. (2019). **Exploring the Social Structure of a Health-Related Online Community for Tobacco Cessation: A Two-Mode Network Approach**. Studies in health technology and informatics, 264(ck1, 9214582), 1268-1272. Full text
Unhealthy behaviors, such as tobacco use, increase individual health risk while also creating a global economic burden on the healthcare system. Social ties have been seen as an important, yet complex factor, to sustain abstinence from these modifiable risk behaviors. However, the underlying social mechanisms are still opaque and poorly understood. Digital health communities provide opportunities to understand social dependencies of behavior change because peer interactions in these platforms are digitized. In this paper, we present a novel approach that integrates theories of behavior change and Exponential Random Graph Models (ERGMs) to understand structural dependencies between users of an online community and the behavior change techniques that are manifested in their communication using an affiliation network. Results indicate population specific traits in terms of individuals' engagement in peer communication embed behavior change techniques in online social settings. Implications for personalized health promotion technologies are discussed.

O'Donnell, et al. (2022). **What Helps and What Hinders the Creation of a Smoke-free Home: A Qualitative Study of Fathers in Scotland.** Nicotine and Tobacco Research, 24(4), 511-518. Full text
Few studies have explored fathers' views and experiences of creating a smoke-free home, with interventions largely targeting mothers. This study aimed to identify barriers and facilitators to fathers creating a smoke-free home, to inform future intervention development. Fathers' abilities to create a smoke-free home are shaped by a range of capabilities, opportunities, and motivations, some of which relate to their role as a father. Establishing a fuller understanding of the contextual and gender-specific factors that shape fathers' views on smoking in the home will facilitate the development of interventions and initiatives that fathers can identify and engage with, for the broader benefit of families and to improve gender equity and health. Our findings can inform future development of father-centered and household-level smoke-free home interventions. They identify fathers' views and experiences and help reframe smoking in the home as a gendered family-wide issue, which is important in building consensus on how best to support parents to create a smoke-free home. Our findings highlight the need for additional research to develop understanding of the ways in which gender-related aspects of family structures, heterosexual relationships, and child living arrangements influence home smoking rules and how to tailor interventions accordingly.

Scarinci, et al. (2022). **Efficacy of a Gender-Relevant Smoking Cessation Intervention Among Women in Brazil: Findings from a Group Randomized Controlled Trial**. Journal of Women's Health, 31(11), 1620-1629. Web link
There is scarcity of smoking cessation programs that take gender into account during its development, implementation, and evaluation. We evaluated the efficacy of a theory-based, culturally, and gender-relevant smoking cessation intervention delivered by Community Health Workers (CHWs) among Brazilian women that augments the smoking cessation program offered through the public health system (PHS). A total of 328 women current smokers (100% cigarette smokers) were recruited across 8 towns in a tobacco producing state in Brazil between 2014 and 2017. Four towns were randomly assigned to the intervention (12 home visits by a CHW and a scheduled appointment to attend the smoking cessation program at the PHS) and four towns to the control condition (scheduled appointment to attend the cessation program at the PHS). The primary outcome was self-reported 7-day smoked tobacco abstinence at 7-month follow-up with biochemical verification. Conclusion(s): A theory-based, culturally, and gender-relevant intervention, delivered by CHWs, can successfully promote smoking cessation among women.

Matthews, et al. (2019). **Adaptation of a Proactive Smoking Cessation Intervention to Increase Tobacco Quitline Use by LGBT Smokers.** Progress in community health partnerships : research, education, and action, 13(5), 71-84. Full text
The study purpose was to evaluate the content of a proactive population health management intervention aimed at promoting uptake of smoking cessation treatments offered by the Illinois Tobacco Quitline (ITQL) among lesbian, gay, bisexual, and transgender (LGBT)-identified smokers. This study represents a partnership between a community-based health center and university researchers. As part of the study, focus groups and in-depth interviews were conducted with LGBT smokers (N = 30). First, we conducted focus groups to obtain feedback on the readability, acceptability, and motivational salience of a targeted and nontargeteed proactive outreach letter. The development and testing of population-based and cost-effective interventions is critical to the reduction of LGBT smoking disparities. The study protocol and intervention materials were well-received by participants. In a future study, we will evaluate the efficacy of the intervention in increasing use of the quitline among LGBT smokers.

GROUPS – PREGNANT SMOKERS

Galiatsatos, et al. (2020). **Association between neighborhood socioeconomic status, tobacco store density and smoking status in pregnant women in an urban area**. Preventive Medicine, 136, 106107. [Full text](link)

The objective of this study is to assess the relationship between tobacco store density, neighborhood socioeconomic status, and neighborhood rates of maternal smoking during pregnancy. Fifty-five community areas in Baltimore City were summarized using data from the Neighborhood Health Profiles. Associations between tobacco store density and smoking while pregnant in a community were determined using Moran's I and spatial regression analyses to account for autocorrelation. The fully adjusted model took into account the following community-level socioeconomic variables as covariates: neighborhood median income, percentage of those living in poverty, percentage of uninsured, and percentage of persons with at least a college degree. In conclusion, tobacco store density and neighborhood socioeconomic factors were associated with prevalence of maternal smoking while pregnant. These findings support the need to further assess and develop interventions to reduce the impact of tobacco store density on smoking behaviors and health risks in communities.

Kurti. (2020). **Reducing tobacco use among women of childbearing age: Contributions of tobacco regulatory science and tobacco control**. Experimental and Clinical Psychopharmacology, 28(5), 501-516. [Web link](link)

Tobacco use has unique, adverse health consequences for reproductive-aged women, particularly should these women become pregnant. Thus, successful efforts to reduce tobacco use among this population have strong potential to improve public health and reduce health disparities. The present review examines contributions to reducing tobacco use among women of childbearing age. Tobacco control efforts include developments in pharmacological and psychosocial approaches to promoting tobacco cessation, mHealth interventions, and tobacco control policy. Emerging issues pertinent to ongoing efforts to reduce tobacco use within the domains of both tobacco regulatory science and tobacco control are also reviewed, including e-cigarettes, comorbid health conditions, course of tobacco and other drugs of abuse, and obstacles to the dissemination and implementation of evidence-based treatment and policy. Although the past decade has seen numerous important contributions to reducing tobacco use among reproductive-aged women within both domains, existing obstacles must be surmounted to continue reducing tobacco use and protecting health among this population.

GROUPS – PUBLIC HOUSING RESIDENTS

Jassal, et al. (2020). **Alignment of medical and psychosocial sectors for promotion of tobacco cessation among residents of public housing: A feasibility study.** International Journal of Environmental Research and Public Health, 17(21), 1-11. [Full text](link)

The inequity in cessation resources is at the forefront of the recently enacted US smoking ban in public housing facilities. This pre-post, non-randomized pilot study assessed the feasibility of a smoking cessation program targeting smokers in Baltimore City public housing. The study implemented a four-phased, 10-week, community-based cessation program using a joint academic-housing partnership that provided on-site cessation pharmacotherapy, behavioral counseling, and psychosocial/legal services. The community-led strategy involved: (1) two-week smoking cessation training for lay health workers; (2) screening and recruitment of smokers by housing authority residential leadership; (3) four-week resident-led cessation using evidenced-based strategies along with wraparound support services; (4) formative evaluation of the intervention's acceptability and implementation. Though a reduction in smoking behaviors was not broadly observed, we elucidated modifiable social, educational, and physical features that could enhance the likelihood of smoking cessation among public housing residents.

Brooks, et al. (2018). **Twelve-Month Outcomes of a Group-Randomized Community Health Advocate-Led Smoking Cessation Intervention in Public Housing**. Nicotine & tobacco research : official journal of the Society for Research on Nicotine and Tobacco, 20(12), 1434-1441. Full text
Lower rates of smoking cessation are a major reason for the higher prevalence of smoking among socioeconomically disadvantaged adults. Because barriers to quitting are both more numerous and severe, socioeconomically disadvantaged smokers may benefit from more intensive intervention. We sought to determine whether a smoking cessation intervention delivered by public housing residents trained as Tobacco Treatment Advocates (TTAs) could increase utilization of cessation resources and increase abstinence. An intervention delivered by peer health advocates was able to increase utilization of treatment programs and smoking abstinence among public housing residents. In this study among smokers residing in public housing, an intervention delivered by peer health advocates trained in motivational interviewing, basic smoking cessation skills, and client navigation significantly increased abstinence at 12 months.

GROUPS – VULNERABLE POPULATIONS

Mannan. (2020). **Gains in life expectancy in the Australian population due to reductions in smoking: comparisons between interventions targeting the population versus interventions in a specific high risk group**. BMC public health, 20(1), 1478. Full text
Four decades of population-based tobacco control strategies have contributed to substantial reduction in smoking prevalence in Australia. However, smoking prevalence is still double in socially disadvantaged groups compared to those that are not. But not all tobacco control strategies successfully used in the general population is effective in specific high-risk population groups. Hence, an effective way to reduce smoking in high risk population groups may include targeting them specifically to identify and support smokers to quit. In this backdrop, we examined whether tobacco control interventions at the population-level are more effective in increasing life expectancy among Australians compared to interventions targeting a high risk group or a combination of the two when smoking prevalence is reduced to 10 and 0% respectively. Targeting high-risk population groups having substantial fraction of smokers in the population can strongly complement the existing population-based smoking reduction strategies. As population and high risk approaches are both important, the national prevention policies should make judicious use of both to maximize health gain.

Healey, et al. (2019). **A Cost-Effectiveness Analysis of Stop Smoking Interventions in Substance-Use Disorder Populations**. Nicotine & tobacco research : official journal of the Society for Research on Nicotine and Tobacco, 21(5), 623-630. Web link
Tobacco smoking is highly prevalent among people attending treatment for a substance-use disorder (SUD). In the United Kingdom, specialist support to stop smoking is largely delivered by a national network of stop smoking services, and typically comprises of behavioral support delivered by trained practitioners on an individual (one-to-one) or group basis combined with a pharmacological smoking-cessation aid. We evaluate the cost-effectiveness of these interventions and compare cost-effectiveness for interventions using group- and individual-based support, in populations under treatment for SUD. Smoking-cessation interventions were found to be cost-effective when applied to the SUD population, particularly when group-based behavioral support is offered alongside pharmacological treatment. This analysis has shown that smoking-cessation interventions combining pharmacological treatment with behavioral support can offer a cost-effective method for increasing rates of smoking cessation in populations being treated for a substance-use disorder. Our evaluation suggests that medication combined with group-based behavioral support may offer better value for money in this population compared with interventions using individual support.

Meernik, et al. (2018). **Evaluation of Community-Based Cessation Programs: How Do Smokers with Behavioral Health Conditions Fare?** Community Mental Health Journal, 54(2), 158-165. Full text
Though persons with behavioral health conditions experience large disparities in tobacco use, questions about the efficacy of evidence-based tobacco use treatment remain understudied in community health settings. This evaluation examined outcomes from eight community-based tobacco cessation programs for participants with and without behavioral health conditions (n = 974 participants). The majority (64.8%) of participants reported one or more current behavioral health conditions, including mental illness and/or substance abuse. Participants who used cessation medication during the program and who attended more counseling sessions had an increased likelihood of being quit at 4-month follow-up. Quit rates were between 9.8% (intent-to-treat rate) and 30.6% (responder rate); behavioral health status did not negatively affect reported quit rates. Findings add to the growing literature evaluating community-based interventions within the behavioral health population.

GROUPS – YOUTH & YOUNG ADULTS

Trisnowati, et al. (2021). **Health promotion through youth empowerment to prevent and control smoking behavior: a conceptual paper**. Health Education; Bradford Vol. 121, Iss. 3, (2021): 275-294. Full text
This paper aimed to review globally the empowerment programs for the prevention and control of smoking behavior among youths, to examine the role of empowerment in health promotion, to explore the stages of health promotion through community empowerment strategies including planning, implementation and evaluation. Finally, this paper will develop a model of youth empowerment to prevent and control smoking behavior that reflects theory and experience drawn from the literature. This paper provides information about the stages of youth empowerment, and a conceptual framework of youth empowerment for the prevention and control of smoking behavior. Youth empowerment is done through the direct involvement of youth in programs starting from program design, planning, implementation and evaluation. Indicators of the success of the empowerment process are reflected in the increase in the empowerment domain. Meanwhile, the output of empowerment can be seen from the individual- or group-level changes. Originality/value: This paper proposes a model of youth empowerment for the prevention and control of smoking behavior among youths based on theory and experience in the field.

Petteway, et al. (2019). **Toward an Intergenerational Model for Tobacco-Focused CBPR: Integrating Youth Perspectives via Photovoice.** Health promotion practice, 20(1), 67-77. Full text
The CEASE and Resist youth photovoice project was developed as part of the Communities Engaged and Advocating for a Smoke-free Environment (CEASE) CBPR collaboration in Southwest Baltimore. With the broader CEASE initiative focused on adult smoking cessation, CEASE and Resist had three aims: (1) elucidate how youth from a high-tobacco-burden community perceive/interact with their local tobacco environment, (2) train youth as active change agents for tobacco-related community health, and (3) improve intergenerational understandings of tobacco use/impacts within the community. Fourteen youth were recruited from three schools and trained in participatory research and photography ethics/guiding principles. Youth met at regular intervals to discuss and narrate their photos. This article provides an overview of what their work revealed/achieved and discusses how including participatory youth research within traditionally adult-focused work can facilitate intergenerational CBPR for sustainable local action on tobacco and community health.

Burford, et al. (2018). **Using visual demonstrations in young adults to promote smoking cessation: Preliminary findings from a French pilot study**. Research in social & administrative pharmacy : RSAP, 14(4), 398-400. Web link
A personalised, smoking cessation message was successfully delivered in Australian community

pharmacies to motivate behavioural change in young smoking adults., OBJECTIVE: The purpose of this pilot study was to test the acceptability and effectiveness of the innovative, proven smoking cessation intervention to another population of young adults with a higher prevalence of smoking and associated morbidities., METHODS: Ninety eight university students in Paris, France were recruited to a pilot study (50 intervention: 48 control). All students received smoking cessation counselling sessions and half also received a visual demonstration of themselves, both as a lifelong smoker and non-smoker. There was no statistical significant difference between the groups in smoking dependence at recruitment. At the three month follow-up, the proportion who had attempted to quit smoking were 37% (control) vs 46% (intervention). These percentages suggested a positive result for the intervention, although the difference was not statistically significant (p = 0.39).

1 Population Health/ or Residence Characteristics/ or Population Surveillance/ (101265)

2 ((population or communit* or catchment or region or area or suburb*) adj3 health).tw. (102711)

3 ((population or communit*) adj3 (group* or need* or trend* or pattern* or prevalen*)).tw. (86130)

4 (community adj3 (base* or setting* or environment* or deliver*)).tw. (106728)

5 1 or 2 or 3 or 4 (359661)

6 Tobacco/ or Smoking/ or Vaping/ or Nicotine/ (200699)

7 ((tobacco or vaping or vape* or e?cigarette* or smok* or cigarette*) adj5 (population* or communit* or trend* or prevalen* or "use" or problem*)).tw. (72822)

8 6 or 7 (239856)

9 Smoking Prevention/ or Smoking Cessation/ (44673)

10 ((tobacco or vaping or vape* or e?cigarette* or smok* or cigarette*) adj5 (cessation or cease* or decreas* or declin* or reduc* or influenc* or improv* or quit or promot* or treatment* or end?game)).tw. (76390)

11 9 or 10 (93156)

12 (public health adj3 (affect* or effect* or impact* or priorit* or intervention* or model* or program or strateg* or approach* or program* or policies or policy)).tw. (53800)

13 Health promotion/ or Delivery of health care/ or Public Health/ (281013)

14 12 or 13 (322460)
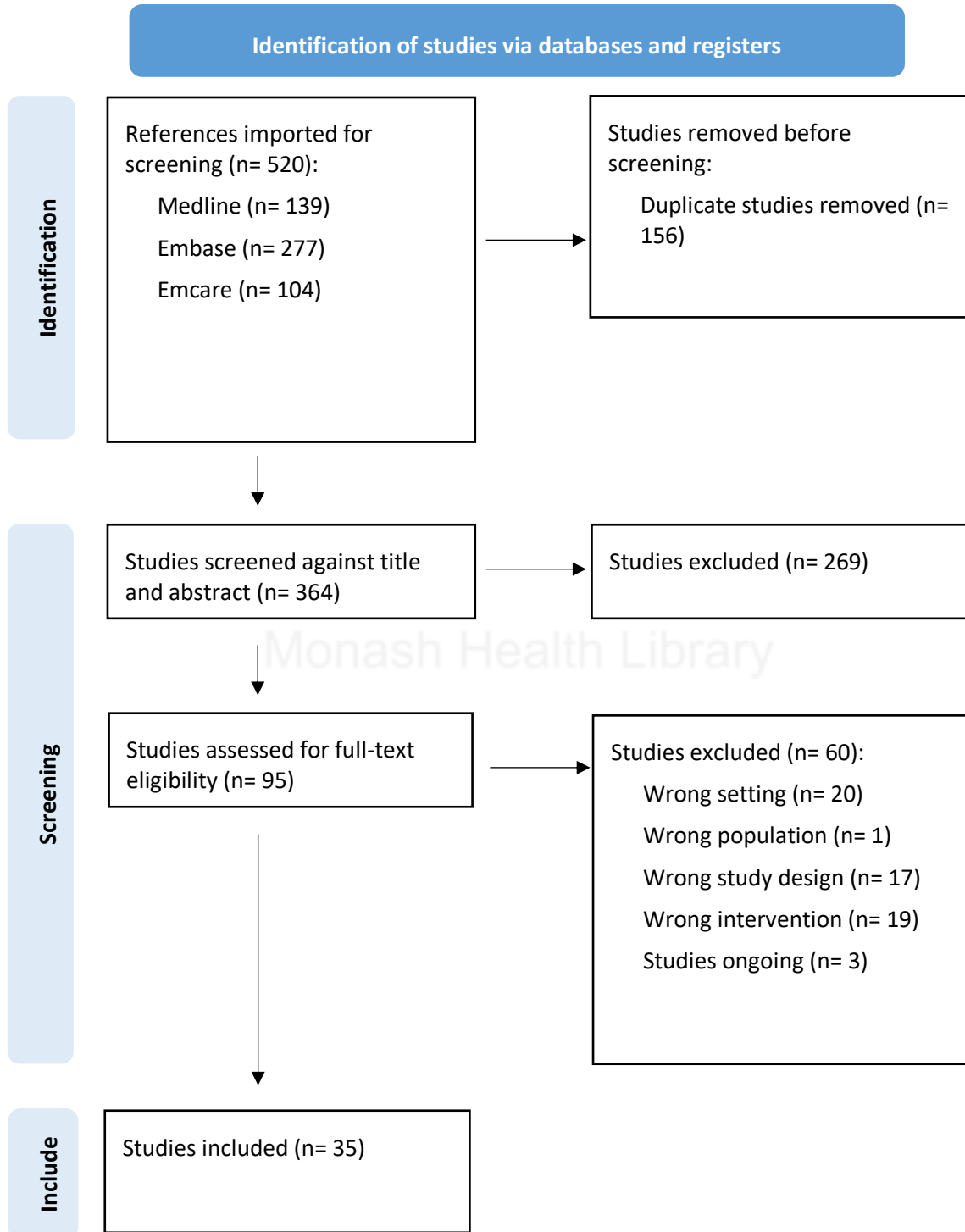
15 5 and 8 and 11 and 14 (680)

16 end?game.ti. (272)

17 (5 or 14) and 16 (57)

18 15 or 17 (735)

19 limit 18 to yr="2018 -Current" (139)

PRISMA CHART

Identification of studies via databases and registers

Identification

References imported for screening (n= 520):

- Medline (n= 139)
- Embase (n= 277)
- Emcare (n= 104)

→ Studies removed before screening:

- Duplicate studies removed (n= 156)

Screening

Studies screened against title and abstract (n= 364) → Studies excluded (n= 269)

Studies assessed for full-text eligibility (n= 95) → Studies excluded (n= 60):

- Wrong setting (n= 20)
- Wrong population (n= 1)
- Wrong study design (n= 17)
- Wrong intervention (n= 19)
- Studies ongoing (n= 3)

Include

Studies included (n= 35)