

COMMENTARY: EDUCATIONAL AND CLINICAL TRAINING FOR ADDRESSING TOBACCO- RELATED CANCER HEALTH DISPARITIES

Christine E. Sheffer, PhD¹;
Monica Webb Hooper, PhD²;
Jamie S. Ostroff, PhD³

In the United States, tobacco use is a leading contributor to inequities in cancer health among individuals for many ethnic, racial, sexual minority, and other minority groups as well as individuals in lower socioeconomic groups and other underserved populations. Despite remarkable decreases in tobacco use prevalence rates in the United States over the past 50 years, the benefits of tobacco control efforts are not equitably distributed. Tobacco-related disparities include higher prevalence rates of smoking, lower rates of quitting, less robust responses to standard evidence-based treatments, substandard tobacco treatment delivery by health care providers, and an increased burden of tobacco-related cancers and other diseases.

Among the multiple critical barriers to achieving progress in reducing tobacco treatment-related disparities, there are several educational barriers including a unidimensional or essentialist conceptualizations of the disparities; a tobacco treatment workforce unprepared to address the needs of tobacco users from underserved groups; and known research-to-practice gaps in understanding, assessing, and treating tobacco use among underserved groups.

We propose the development of competency-based curricula that: 1) use intersectionality as an organizing framework for relevant knowledge; 2) teach interpersonal skills, such as expressing sociocultural respect, a lack of cultural superiority, and empathy as well as skills for developing other-oriented therapeutic relations; and 3) are grounded in the science of the evidence-based treatments for tobacco dependence. These curricula could be disseminated nationally in multiple venues and would represent significant progress toward addressing tobacco-related disparities. *Ethn Dis.* 2018;28(3):187-192; doi:10.18865/ed.28.3.187.

TOBACCO-RELATED HEALTH DISPARITIES PERSIST DESPITE DECREASED CIGARETTE SMOKING

Tobacco use remains the leading preventable cause of cancer.¹ Tobacco control efforts have decreased the prevalence of cigarette smoking in the United States over the past 50 years, but the benefits of these efforts are not distributed equitably, and there are remarkable socioeconomic, racial/ethnic minority, sexual minority, and other tobacco-related cancer health and other health disparities.¹ Tobacco-related disparities include a higher prevalence of daily smoking, lower rates of quitting, less robust responses to standard evidence-based treatments, less access to treatment, inadequate delivery of evidence-based tobacco use treatment by health care providers, and an increased burden of

tobacco-related cancers and other tobacco-related diseases.^{1,2} For example, individuals of lower socioeconomic status (SES) smoke at nearly three times the rate of higher SES individuals; 16.7% of non-Hispanic Black adults in the United States smoke cigarettes compared with 15.1% of US adults overall;^{3,4} and sexual minorities experience significant unexplained disparities in tobacco-related disease.⁵ All leading cancer control and health policy organizations endorse the importance of addressing tobacco-related disparities.^{6,7}

Tobacco cessation dramatically improves health and assistance provided by health care professionals greatly improves the odds of cessation.^{8,9} Despite similar levels of motivation to quit and as many or more quit attempts, lower SES and racial/ethnic minority smokers are less likely to quit smoking compared with higher SES and non-Hispanic

Keywords: Tobacco; Smoking; Minority Groups; Vulnerable Populations; Cancer

¹ Department of Health Behavior; Roswell Park Cancer Institute; Buffalo, NY

² Case Comprehensive Cancer Center; Case Western Reserve University; Cleveland, OH

³ Department of Psychiatry & Behavioral Sciences; Memorial Sloan Kettering Cancer Center; New York, NY

Address correspondence to Christine E. Sheffer, PhD; Associate Member and Associate Professor of Oncology, Department of Health Behavior; Carlton House, Room 402; Roswell Park Cancer Institute; Buffalo, NY 14263; 716.845.1186; christine.sheffer@roswellpark.org

White smokers.⁴ Remarkable disparities in receiving assistance to quit tobacco from health care providers persist.¹⁰ Moreover, as currently delivered, evidence-based tobacco treatments are less effective for many groups including African Americans and Blacks, individuals in lower SES categories, and women.^{9,11}

Treating tobacco dependence effectively among individuals who experience tobacco-related disparities

Treating race and ethnicity as simply confounds of SES disregards the distinct experiences of being a racial and/or ethnic minority and being of lower SES that lead to unique sets of multiple and cumulative influences on efforts to quit smoking.

requires understanding the complex interplay between intersecting factors, including race and ethnicity, SES groups, sex/gender, sexual orientation, and mental / behavioral health. For instance, smoking prevalence rates are significantly higher among non-Hispanic Black men (20.9%) than among non-Hispanic Black women (13.3%).³ Cigarette smoking contributes to 20%-48% of the gap in Black-White life expectancy at age 50 for men, but not women.¹²

Individuals from many communities of color are over-represented in lower SES categories and suffer disproportionately from mental/behavioral health disorders.¹³ Smoking disparities between lesbian-gay and heterosexual Black adolescents are greater than those for similar White adolescents.¹⁴ These statistics illustrate just a few of the interactions between race, ethnicity, SES, sex/gender, sexual orientation, and mental illness.

Because the magnitude of smoking-related health disparities across socioeconomic groups is greater than across racial groups and other groups, it has been suggested that the effects of factors such as race and ethnicity can be fully explained by socioeconomic factors,¹⁵ but in fact, the influences of SES, race, ethnicity and other factors are quite different. For example, racial and ethnic minority identity involves a constellation of racially driven stressors and environmental factors separate from and additive to SES.¹⁵ Treating race and ethnicity as simply confounds of SES disregards the distinct experiences of being a racial and/or ethnic minority and being of lower SES that lead to unique sets of multiple and cumulative influences on efforts to quit smoking.

CRITICAL BARRIERS TO ACHIEVING PROGRESS IN TOBACCO-RELATED HEALTH DISPARITIES

Among the multiple critical barriers to achieving progress in reducing tobacco treatment-related disparities there are several educational barriers.

1) A unidimensional view of disparities contributes to an inadequate assessment of the unique challenges experienced among tobacco users from many underserved groups.

Traditional conceptualizations of disparities are essentialist in nature, tending to identify the role and impact of individual factors on disparate outcomes separately without consideration of the cumulative, interactive, and exponential effects of multiple factors. For instance, clinical and research perspectives often discuss racial disparities, socioeconomic disparities, sex/gender disparities, or sexual minority disparities with little systematic assessment of how these social influences overlap and interact for individuals in context.

2) A tobacco treatment workforce unprepared to understand, assess, and treat tobacco users from underserved groups.

The clinical workforce (eg, physicians, nurses, mental health practitioners, allied health professionals) is not prepared with the clinical proficiencies needed to deliver effective tobacco treatment to tobacco users from underserved groups.^{6,7} These clinical proficiencies include the capacity to: a) understand tobacco-related disparities at the individual, community, and systems levels; b) assess the full scope of potential influences on efforts to quit tobacco among tobacco users from underserved groups; and c) develop effective comprehensive and empathetic tobacco treatment plans that incorporate, as appropriate, individual-level values, perspectives, strengths, capacities, and experiences.

3) Known research-to-practice gaps exist in regard to conceptualizing and adapting treatment for tobacco users from underserved groups.

Research reflecting multidimensional approaches to conceptualizing, assessing, and treating tobacco users from underserved groups has yet to be translated into clinical approaches. For instance, Leventhal et al developed a multilevel transdisciplinary model to facilitate the understanding of tobacco treatment disparities, called the Sociopharmacology of Tobacco Addiction.¹⁶ Sheffer et al applied a model of health disparities developed by Adler and colleagues¹⁷ to adapt standard treatment of tobacco dependence for smokers in lower SES groups that incorporated the perspectives of African Americans.^{18,19} Webb Hooper et al applied a deep-structure and surface-structure approach²⁰ to adapt standard tobacco treatment for African Americans.²¹ The Webb Hooper and Sheffer approaches were shown to increase the short-term abstinence rates among lower SES and African Americans.^{18,21} Research-informed clinical approaches derived from these and other studies that benefit underserved populations have yet to be disseminated broadly or codified into recommendations or best practices.

CURRICULA TO ADDRESS EDUCATIONAL BARRIERS IN TOBACCO TREATMENT

We recommend the development, evaluation, and broad dissemination of curricula for addressing critical barriers in tobacco treatment clinical education.

At present, to our knowledge, there are no identified curricula for educating and training our clinical workforce to be more effective at treating populations that experience tobacco-related disparities. These curricula should be made available for training a multidisciplinary clinical workforce to effectively understand, assess, and treat tobacco use among underserved groups. For the development of such curricula, we make the following recommendations.

Enhance the Understanding and Conceptualization of Disparities

Health disparities emerge from a variety of social, psychological, environmental, and biological determinants across the lifespan.^{17,22} A multidimensional, transdisciplinary dynamic conceptualization of the generation and maintenance of tobacco-related disparities is likely to provide a more effective and meaningful understanding of the multiple social determinants of tobacco treatment disparities among clinicians.

We recommend using the concept of intersectionality as a framework for integrating the knowledge domains essential for developing curricula to address tobacco treatment-related disparities. Intersectionality conceptualizes the social constructions that we use to categorize individuals and populations (eg, race, ethnicity, socioeconomic position, sex/gender, sexual orientation, etc.) as dynamic unequal social relationships among groups of people rather than biological, genetic, psychological, or other individual attributes, and is focused on how these relationships act as social determinants.^{23,24} Intersectionality conceptualizes the development

and persistence of disparities in terms of interlocking social and structural systems; it recognizes that individuals have multiple identities and that assigning one category as primary denies the influence and interaction of other identities, influences, and social categories.²³ We see intersectionality as a potential unifying framework for clinical training that might productively integrate existing tobacco disparities conceptualizations, models, and research and enable clinical training to focus on understanding influences that produce and maintain disparities *across* rather than between underserved groups (eg, stress, discrimination, stigma, social context).

Educational activities that utilize the concepts of intersectionality are likely to include the development of relevant vocabulary (eg, marginalization, privilege, culture, class, implicit bias, micro-aggressions, structural stigma) and interactive activities that demonstrate or illustrate important concepts. For instance, after completing a brief reading on intersectional theory, trainees might break into groups, spend 5-10 minutes defining a list of specified terms, and then process definitions with the entire class.²⁵ Trainees might practice applying these concepts by describing their own or another's specific social location in terms of multiple identities and then interpret a pre-specified standard treatment approach from each of these perspectives.

Develop Competency-based Curricula that Advance the Proficiencies Clinicians Need to Treat Tobacco Use among Underserved Groups

Clinicians from multiple disciplines who engage in other-oriented

therapeutic relations characterized by sociocultural respect and a lack of cultural superiority are needed to fully understand, empathize with, assess, and treat tobacco users from underserved groups.²⁶ This type of therapeutic relationship is based on specific competencies and skills and necessarily integrates the strengths, capacities, and resiliencies of group membership as well as the challenges many groups experience. Many clinicians are not provided training that supports the development of these competencies,

Many clinicians are not provided training that supports the development of these competencies, and they harbor significant implicit and explicit biases in addition to misconceptions about the evidence-based treatments for tobacco dependence.^{7,27}

and they harbor significant implicit and explicit biases in addition to misconceptions about the evidence-based treatments for tobacco dependence.^{7,27} A competency-based curriculum that facilitates the development of these proficiencies in addition to relevant knowledge will provide generations of clinicians the training they need to effectively provide evidence-based

treatment for tobacco dependence in a patient-centered, empathetic manner informed by understanding the multiple pathways that contribute to tobacco treatment disparities.

We envision curriculum that: uses intersectionality as a framework for integrating relevant disparities-related frameworks; teaches sociocultural respect and a lack of cultural superiority; places a significant emphasis on empathy and other-oriented therapeutic relations; and is grounded in the science of the evidence-based treatment of tobacco dependence. Competencies might include demonstrating cultural competence and a broad understanding of concerns relevant to underserved populations in general as well as the presence of significant within-group heterogeneity. The approach could incorporate and / or build on existing cultural competency training programs. Skill sets might include: the identification of stereotypes and their impact on individuals; the demonstration of how to avoid biases through self-reflection; performing accurate individual assessment among individuals from underserved groups; and demonstrating strategies for developing adapted evidence-based treatments. Topics might include: the structural and institutional barriers that drive disparities; structural barriers to evidence-based treatment; reasonable patient distrust and how to gain trust during the initial encounter; the contributions of micro-aggressions, global and multi-dimensional stress (eg, discrimination and resulting distress) affecting patient stress and distress levels; supporting patient management of these stressors; understanding how social categories interact with the effects of stigma as-

sociated with tobacco use; multiple tobacco product use, menthol flavoring, and treatment outcomes; the effects of neighborhood-level influences (eg, the availability of loosies – single loose cigarettes, the retail environment); and factors associated with underutilization of pharmacotherapy. These topics cut across underserved groups and are likely to provide a foundation for clinicians to develop the competencies and skill sets they need to more effectively treat tobacco dependence among underserved populations.

Optimize the Well-established Tobacco Treatment Training Infrastructure

The Council for Tobacco Treatment Training Programs (the Council; www.ctttp.org) provides a strong foundation for supporting the development and dissemination of specialized clinical training in the treatment of tobacco dependence among underserved groups. The Council is an established organization that accredits programs that train Tobacco Treatment Specialists. The accreditation process was predicated on the development of a comprehensive collection of 11 Tobacco Dependence Treatment Core Competencies each with corresponding skill sets.²⁸ Currently, there are 19 Council-accredited tobacco treatment training programs led by established leaders in tobacco treatment training and practice. Smokers treated by clinicians with specialist training are more likely to achieve long-term abstinence than smokers treated by clinicians without specialist training.²⁹

Council-accredited programs train clinicians from multiple disciplines (eg, physicians, psychologists, nurses,

pharmacists, social workers, respiratory therapists, dentists, counselors, community health workers) and who work in a wide variety of health care settings including primary care, cancer settings, hospitals, quitlines, community health centers, specialty clinics, dental offices, mental health and substance use treatment settings. This infrastructure and the collective clinical and scientific expertise among the accredited programs are well-positioned to coordinate the identification of specific core competencies and skill sets needed by clinicians to best serve populations who experience tobacco-related disparities and contribute to the curricular content.

CONCLUSIONS

Tobacco-related disparities are a significant contributor to cancer health disparities; thus, reducing and ultimately eliminating cancer and other tobacco-related disparities is a public health priority. While a multi-level and multidisciplinary approach is needed to address tobacco-related disparities, an initial step might be to address educational barriers by developing and evaluating competency-based curricula for educating and training clinicians to be more effective at treating populations who experience tobacco-related disparities. These curricula could be adapted for separate clinician groups and be widely disseminated among multiple disciplines in multiple venues raising the clinical proficiencies of the workforce who provide treatment for tobacco dependence to underserved groups. This commentary highlights the im-

portance of the problem, the nature of the problem in terms of tobacco treatment and provides recommendations to address current educational barriers.

Recognizing the need to support the understanding of the problem among clinicians differently might be an important first step. In the context of clinical training and particularly in the context of the evidence-based treatment of tobacco dependence, intersectionality is a novel and viable framework for conceptualizing and integrating knowledge relevant to the development and maintenance of tobacco-related disparities. Experiences of smoking cigarettes and trying to quit overlap across populations; yet, with each layer of social disadvantage, these experiences are likely to be increasingly unique. Therefore, interactions among social identities and their correlates with treatment success and other factors requires attention in the clinical context. Simultaneously, it is important for clinicians to recognize that social groups are not monolithic and individual differences will determine the relevance of these identities to life experiences and tobacco use. Moreover, interpersonal skills such as other-oriented therapeutic relations, expressing socio-cultural respect and a lack of cultural superiority, and the recognition of personal biases will complement the assumptions of a conceptual framework based on intersectionality. Education of this type might also enable clinicians to be advocates for their patients and contribute to the solution in other ways in an informed manner. Ideally these curricula would be a collaborative multidisciplinary effort with significant input from experts in developing these specific interpersonal skills, the treatment of tobacco de-

pendence, and in training health care providers to treat tobacco dependence.

There are many researchers and clinicians who can make significant contributions to the development of tobacco treatment disparities curricula and there are likely several organizations who have the capacity and willingness to coordinate such an effort. The Council is well-positioned to contribute to this effort. The Council, composed of the talents and expertise from the Council-accredited programs, has the infrastructure, interest, capacity, and tobacco-related expertise to coordinate such a collaboration, develop the needed core competencies and skill sets, establish training content, and incorporate evaluative elements. While there are multiple venues for dissemination, the Council-accredited programs are also well-positioned to contribute to dissemination through the current clinical training infrastructure in which clinicians from multiple disciplines participate. The dissemination of these curricula would represent significant progress toward addressing tobacco-related treatment disparities and tobacco-related disparities in general.

CONFLICT OF INTEREST

Dr. Sheffer is a member of the board of directors for the Council for Tobacco Treatment Training Programs.

AUTHOR CONTRIBUTIONS

Research concept and design: Sheffer, Webb Hooper, Ostroff; Acquisition of data: Sheffer; Data analysis and interpretation: Sheffer; Manuscript draft: Sheffer, Webb Hooper, Ostroff; Acquisition of funding: Ostroff; Administrative: Webb Hooper, Ostroff

REFERENCES

1. US Department of Health and Human Services. The Health Consequences of Smoking: 50 Years of Progress. A Report of the Surgeon General. Atlanta, GA: US Department of Health and Human Services, Centers for Dis-

- ease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014. Printed with corrections, January 2014. Last accessed May 22, 2018 from <https://www.surgeongeneral.gov/library/reports/50-years-of-progress/full-report.pdf>
2. Fagan P, Moolchan ET, Lawrence D, Fernander A, Ponder PK. Identifying health disparities across the tobacco continuum. *Addiction*. 2007;102(suppl 2):5-29. <https://doi.org/10.1111/j.1360-0443.2007.01952.x> PMID:17850611
 3. Jamal A, King BA, Neff LJ, Whitmill J, Babb SD, Graffunder CM. Current cigarette smoking among adults - United States, 2005-2015. *MMWR Morb Mortal Wkly Rep*. 2016;65(44):1205-1211. <https://doi.org/10.15585/mmwr.mm6544a2> PMID:27832052
 4. Babb S, Malarcher A, Schauer G, Asman K, Jamal A. Quitting smoking among adults - United States, 2000-2015. *MMWR Morb Mortal Wkly Rep*. 2017;65(52):1457-1464. <https://doi.org/10.15585/mmwr.mm6552a1> PMID:28056007
 5. Blosnich J, Jarrett T, Horn K. Disparities in smoking and acute respiratory illnesses among sexual minority young adults. *Hai*. 2010;188(5):401-407. <https://doi.org/10.1007/s00408-010-9244-5> PMID:20496074
 6. Mermelstein R, Fiore MC, Bernstein SL et al. *Tobacco Control Research Priorities for the Next Decade: Working Group Recommendations for 2016-2025*. Rockville, MD: National Cancer Institute; 2016. Last accessed May22, 2018 from <https://cancercontrol.cancer.gov/pdf/nci-tobacco-control-research-priorities-rpt-feb-2016.pdf>
 7. Smedley BD, Stith AY, Nelson AR, eds. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. Washington, DC: National Academy of Science; 2003.
 8. Jha P, Ramasundarahettige C, Landsman V, et al. 21st-century hazards of smoking and benefits of cessation in the United States. *N Engl J Med*. 2013;368(4):341-350. <https://doi.org/10.1056/NEJMsa1211128> PMID:23343063
 9. Fiore MC, Jaén CR, Baker TB and the Tobacco Use and Dependence Guideline Panel. *Treating Tobacco Use and Dependence: 2008 Update. Clinical Practice Guidelines*. Rockville, MD: US Department of Health and Human Services. May 2008. Last accessed May 2018 from <https://www.ncbi.nlm.nih.gov/books/NBK63952/>
 10. Tan ASL, Young-Wolff KC, Carter-Harris L, Salloum RG, Banerjee SC. Disparities in the Receipt of Tobacco Treatment Counseling within the US Context of the Affordable Care Act and Meaningful Use Implementation. *Nicotine Tob Res*. 2017. <https://doi.org/10.1093/ntr/ntx233> PMID:29059372
 11. Smith PH, Bessette AJ, Weinberger AH, Sheffer CE, McKee SA. Sex/gender differences in smoking cessation: A review. *Prev Med*. 2016;92:135-140. <https://doi.org/10.1016/j.ypmed.2016.07.013> PMID:27471021
 12. Ho JY, Elo IT. The contribution of smoking to black-white differences in U.S. mortality. *Demography*. 2013;50(2):545-568. <https://doi.org/10.1007/s13524-012-0159-z> PMID:23086667
 13. Center for Behavioral Health Statistics and Quality. *Key Substance Use and Mental Health Indicators in the United States: Results from the 2015 National Survey on Drug Use and Health* (HHS Publication No. SMA 16-4984, NSDUH Series H-51). 2016. Last accessed May 22, 2018 from <http://www.samhsa.gov/data/>
 14. Corliss HL, Rosario M, Birkett MA, Newcomb ME, Buchting FO, Matthews AK. Sexual orientation disparities in adolescent cigarette smoking: intersections with race/ethnicity, gender, and age. *Am J Public Health*. 2014;104(6):1137-1147. <https://doi.org/10.2105/AJPH.2013.301819> PMID:24825218
 15. Kawachi I, Daniels N, Robinson DE. Health disparities by race and class: why both matter. *Health Aff (Millwood)*. 2005;24(2):343-352. <https://doi.org/10.1377/hlthaff.24.2.343> PMID:15757918
 16. Leventhal AM. The Sociopharmacology of Tobacco Addiction: Implications for Understanding Health Disparities. *Nicotine Tob Res*. 2016;18(2):110-121. <https://doi.org/10.1093/ntr/ntv084> PMID:25890832
 17. Adler NE, Stewart J. Health disparities across the lifespan: meaning, methods, and mechanisms. *Ann N Y Acad Sci*. 2010;1186(1):5-23. <https://doi.org/10.1111/j.1749-6632.2009.05337.x> PMID:20201865
 18. Sheffer CE, Bickel WK, Franck CT, et al. Improving tobacco dependence treatment outcomes for smokers of lower socioeconomic status: A randomized clinical trial. *Drug Alcohol Depend*. 2017;181:177-185. <https://doi.org/10.1016/j.drugalcdep.2017.09.015> PMID:29065390
 19. Evans SD, Sheffer CE, Bickel WK, et al. The Process of Adapting the Evidence-Based Treatment for Tobacco Dependence for Smokers of Lower Socioeconomic Status. *J Addict Res Ther*. 2015;6(1):219. PMID:26435879
 20. Resnicow K, Baranowski T, Ahluwalia JS, Braithwaite RL. Cultural sensitivity in public health: defined and demystified. *Ethn Dis*. 1999;9(1):10-21. PMID:10355471
 21. Webb Hooper M, Antoni MH, Okuyemi K, Dietz NA, Resnicow K. Randomized Controlled Trial of Group-Based Culturally Specific Cognitive Behavioral Therapy Among African American Smokers. *Nicotine Tob Res*. 2017;19(3):333-341. PMID:27613941
 22. Kawachi I, Adler NE, Dow WH. Money, schooling, and health: mechanisms and causal evidence. *Ann N Y Acad Sci*. 2010;1186(1):56-68. <https://doi.org/10.1111/j.1749-6632.2009.05340.x> PMID:20201868
 23. Hankivsky O. Women's health, men's health, and gender and health: implications of intersectionality. *Soc Sci Med*. 2012;74(11):1712-1720. <https://doi.org/10.1016/j.socscimed.2011.11.029> PMID:22361090
 24. May VM. "Speaking into the void"? Intersectionality critiques and epistemic backlash. *Hypatia*. 2014;29(1):94-112. <https://doi.org/10.1111/hypa.12060>
 25. Case KA, Lewis MK. Teaching intersectional LGBT psychology: reflections from historically Black and Hispanic-serving universities. *Psychol Sex*. 2012;3(3):260-276. <https://doi.org/10.1080/19419899.2012.700030>
 26. Hook JN, Davis DE, Owen J, Worthington EL, Utsey SO. Cultural humility: measuring openness to culturally diverse clients. *J Couns Psychol*. 2013;60(3):353-366. <https://doi.org/10.1037/a0032595> PMID:23647387
 27. Steinberg MB, Zimmermann MH, Gundersen DA, Hart C, Delnevo CD. Physicians' perceptions regarding effectiveness of tobacco cessation medications: are they aligned with the evidence? *Prev Med*. 2011;53(6):433-434. <https://doi.org/10.1016/j.ypmed.2011.09.016> PMID:22001686
 28. Sheffer CE, Payne T, Ostroff J, Jolicoeur D. Increasing the quality and availability of evidence-based treatment for tobacco dependence through unified certification of tobacco treatment specialists. *J Smok Cessat*. 2016;11(4):229-235. <https://doi.org/10.1017/jsc.2014.30>
 29. McDermott MS, Beard E, Brose LS, West R, McEwen A. Factors associated with differences in quit rates between "specialist" and "community" stop-smoking practitioners in the english stop-smoking services. *Nicotine Tob Res*. 2013;15(7):1239-1247. <https://doi.org/10.1093/ntr/nts262>