

Tobacco in Australia

Facts & Issues

Relevant news and research

3.22 Poorer quality of life and loss of function

Last updated August 2020

Research:

LaRowe, LR, & Ditre, JW. (2020). Pain, nicotine, and tobacco smoking: current state of the science. *Pain*, 161(8), 1688-1693. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/32701828>

LaRowe, LR, & Ditre, JW. (2020). Pain, nicotine, and tobacco smoking: current state of the science. *Pain*. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32205529>

Lee, EJ. (2020). Correlations among pain, depressive symptoms, constipation, and serotonin levels in smokers and non smokers. *Perspect Psychiatr Care*. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32202333>

Schneider, BJ, & Ehsanian, R. (2020). Effects of smoking on pain intensity in patients with chronic pain: are there clinical implications? *Ann Palliat Med*. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32156126>

Parekh, TM, Bhatia, S, Cherrington, A, Kim, YI, Lambert, A, Iyer, A et al. (2019). Factors influencing decline in quality of life in smokers without airflow obstruction: The COPDGene study. *Respir Med*, 161, 105820. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31759270>

Cui, Y, Forget, EL, Torabi, M, Oguzoglu, U, Ohinmaa, A, & Zhu, Y. (2019). Health-related quality of life and economic burden to smoking behaviour among Canadians. *Can J Public Health*. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31493265>

Sagtani, RA, Thapa, S, & Sagtani, A. (2019). Smoking and Quality of Life - Is there really an association? Evidence from a Nepalese sample. *PLoS One*, 14(9), e0221799. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31490943>

Siahpush, M, Levan, TD, Nguyen, MN, Grimm, BL, Ramos, AK, Michaud, TL, & Johansson, PL. (2019). The Association of Physical Activity and Mortality Risk Reduction Among Smokers: Results From

tobaccoinaustralia.org.au

Tobacco in Australia

Facts & Issues

1998-2009 National Health Interview Surveys-National Death Index Linkage. *J Phys Act Health*, 1-7. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31387083>

Viana, DA, Andrade, FCD, Martins, LC, Rodrigues, LR, & Dos Santos Tavares, DM. Differences in quality of life among older adults in Brazil according to smoking status and nicotine dependence. *Health Qual Life Outcomes*, 2019. 17(1), 1. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30606205>

Bendayan, R, Cooper, R, Muthuri, SG. Lifetime cigarette smoking and chronic widespread and regional pain in later adulthood: evidence from the 1946 British birth cohort study. *BMJ Open*. 2018 Aug 29;8(8):e021896. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30158227>

Smit, T, Peraza, N, Garey, L, Langdon, KJ, Ditre, JW, Rogers, AH, Manning, K, Zvolensky, MJ. Pain-related anxiety and smoking processes: The explanatory role of dysphoria. *Addict Behav*. 2018 Aug 10;88:15-22. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30103097>

Gu, F, Li, XF, Xu, JF, Gao, GH, Wu, YF, Zhou, CC. Effect of nicotine dependence on quality of life and sleep quality in patients with lung cancer who continue to smoke after diagnosis. *J Thorac Dis*. 2018 May;10(5):2583-2589. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29997919>

LaRowe, LR, Kosiba, JD, Zale, EL, Ditre, JW. Effects of nicotine deprivation on current pain intensity among daily cigarette smokers. *Exp Clin Psychopharmacol*, Jul 2018. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30035576>

Daskalopoulou, C, Stubbs, B, Kralj, C, Koukounari, A, Prince, M, Prina, AM. Associations of smoking and alcohol consumption with healthy ageing: a systematic review and meta-analysis of longitudinal studies. *BMJ Open*. 2018 Apr 17;8(4):e019540. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29666127>

Nelson, HD, Lui, L, Ensrud, K, Cummings, SR, Cauley, JA, Hillier, TA. Associations of Smoking, Moderate Alcohol Use, and Function: A 20-Year Cohort Study of Older Women. *Gerontol Geriatr Med*. 2018 Mar 22;4:2333721418766127. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29619404>

Han, S, Patel, B, Min, M, Bocelli, L, Kheder, J, Wachholtz, A, Wassef, W. Quality of life comparison between smokers and non-smokers with chronic pancreatitis. *Pancreatology*. 2018 Apr;18(3):269-274. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29500114>

tobaccoinaustralia.org.au

Tobacco in Australia

Facts & Issues

Nduaguba, SO, Ford, KH, Rascati, K. The Role of Physical Activity in the Association between Smoking Status and Quality of Life. *Nicotine Tob Res.* 2018 Mar 15. pii: 4936981. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29554318>

Timmermans, EJ, Huisman, M, Kok, AAL, Kunst, AE Smoking cessation and 16-year trajectories of functional limitations among Dutch older adults: Results from the Longitudinal Aging Study Amsterdam. *The journals of gerontology. Series A, Biological sciences and medical sciences*, 73(12), 1722-1728. <https://doi.org/10.1093/gerona/gly009>

Bertin, C, Zerhouni, O, Perriot, J, de Chazeron, I, Brousse, G, Flaudias, V. Relationship between Tobacco Craving and Quality of Life among French Students: Results of a Cross-Sectional Study. *Subst Use Misuse.* 2017 Nov 27:1-7. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29172869>

Kojima, G, Iliffe, S, Jivraj, S, Liljas, A, Walters, K. Does current smoking predict future frailty. *Age and Ageing.* Available from: <https://academic.oup.com/ageing/article/doi/10.1093/ageing/afx136/4062212/Does-current-smoking-predict-future-frailty-The>

Lopez-Nicolas, A, Trapero-Bertran, M, Munoz, C. Smoking, health-related quality of life and economic evaluation. *Eur J Health Econ.* 2017 Jul 26. doi: 10.1007/s10198-017-0919-1. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/28748308>

Ditre, JW, Zale, EL, Heckman, BW, Hendricks, PS. A measure of perceived pain and tobacco smoking interrelations: pilot validation of the pain and smoking inventory. *Cogn Behav Ther*, 2016. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/27871214>

Joswig, H, Stienen, MN, Smoll, NR, Corniola, MV, Chau, I, Schaller, K, Hildebrandt, G, Gautschi, OP. Effects of smoking on subjective and objective measures of pain intensity, functional impairment and health-related quality of life in lumbar degenerative disc disease. *World Neurosurg.* 2016 Nov 22. pii: S1878-8750(16)31208-6. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/27888086>

Lankhorst, MA. Smoking and chronic pain. *J Pain Palliat Care Pharmacother*, Nov 2016. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/27797644>

Agahi, N, Fors, S, Fritzell, J, Shaw, BA. Smoking and physical inactivity as predictors of mobility impairment during late life: exploring differential vulnerability across education level in Sweden. *J Gerontol B Psychol Sci Soc Sci*, 2016. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/27449220>

tobaccoinaustralia.org.au

Tobacco in Australia

Facts & Issues

Villiers-Tuthill, A, Copley, A, McGee, H, Morgan, K. The relationship of tobacco and alcohol use with ageing self-perceptions in older people in Ireland. BMC Public Health. 2016 Jul 22;16:627. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27448397>

Ditre, JW, Heckman, BW, Zale, EL, Kosiba, JD, Maisto, SA. Acute analgesic effects of nicotine and tobacco in humans: a meta-analysis. Pain, 2016. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27023418>

Ditre, JW, Zale, EL, Heckman, BW, Hendricks, PS. A measure of perceived pain and tobacco smoking interrelations: pilot validation of the pain and smoking inventory. Cogn Behav Ther, 2016. 1-13. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/27871214>

Hong, JY, Han, K, Shin, DH, Chun, EM. Quality of life analysis and smoking correlation in symptomatic spine osteoarthritis: a nationwide health survey analysis of an elderly population with EQ-5D. PLoS One, 2016. ;11(3):e0151315. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26991429>

Qi Gan, W, Estus, S, Smith, JH. Association between overall and mentholated cigarette smoking with headache in a nationally representative sample. Headache. 2016;56(3):511-8. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26926358>

Verlinden, VJ et al. The associations of alcohol, coffee and tobacco consumption with gait in a community-dwelling population. European Journal of Clinical Nutrition, 2016 Jan;70(1):116-22. Available from; <http://www.ncbi.nlm.nih.gov/pubmed/26220568>

Custodio L, Carlson CR, Upton B, Okeson JP, Harrison AL, et al. The impact of cigarette smoking on sleep quality of patients with masticatory myofascial pain. J Oral Facial Pain Headache, 2015; 29(1):15-23. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25635956>

Varol, Y et al. The impact of active and former smoking on the severity of obstructive sleep apnea. Sleep & Breathing, 2015 Dec ;19(4):1279-84. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25801280>

al'Absi, M et al. Circulating leptin and pain perception among tobacco-dependent individuals. Biological Psychology, 2015 Apr; 107:10-5. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25720946>

Goldenberg M, Danovitch I, and IsHak WW. Quality of life and smoking. Am J Addict, 2014; 23(6):540-62. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25255868>

tobaccoinaustralia.org.au

Tobacco in Australia

Facts & Issues

Mesquita, R, Goncalves, CG, Hayashi, D, Costa, VD, Teixeira, DD, de Freitas, ER, et al. Smoking status and its relationship with exercise capacity, physical activity in daily life and quality of life in physically independent, elderly individuals. *Physiotherapy*, 2014. Available from:

<http://www.ncbi.nlm.nih.gov/pubmed/25108641>

Petre B, Torbey S, Griffith JW, De Oliveira G, Herrmann K, et al. Smoking increases risk of pain chronification through shared corticostriatal circuitry. *Hum Brain Mapp*, 2014. Available from:

<http://www.ncbi.nlm.nih.gov/pubmed/25307796>

Dzubur, A, Mehic, B, Dzubur, A, Filipovska-Musanovic, M, Denjalic, A, Hasanbegovic, I. Quality of life for tobacco smokers in relation to their socioeconomic status. *Med Glas (Zenica)*, 2014. 11(1), 210-215. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/24496366>

Brook JS, Zhang C, Rubenstone E, and Brook DW. Insomnia in Adults: The Impact of Earlier Cigarette Smoking From Adolescence to Adulthood. *J Addict Med*, 2014. Available from:

<http://www.ncbi.nlm.nih.gov/pubmed/25325299>

Krishnan V, Dixon-Williams S, and Thornton JD. Where there is smoke...there is sleep apnea: exploring the relationship between smoking and sleep apnea. *Chest*, 2014; 146(6):1673-80. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25451354>

Coste, J, Quinquis, L, D'Almeida, S, Audureau, E. Smoking and health-related quality of life in the general population. Independent relationships and large differences according to patterns and quantity of smoking and to gender. *PLoS ONE*, 2014. 9(3), e91562. Available from:

<http://www.ncbi.nlm.nih.gov/pubmed/24637739>

Galaznik, A, Chapnick, J, Vietri, J, Tripathi, S, Zou, KH, Makinson, G. Burden of smoking on quality of life in patients with chronic obstructive pulmonary disease. *Expert Rev Pharmacoecon Outcomes Res*, 2013. 13(6), 853-860. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/24219055>

Becona, E, Vazquez, MI, Miguez Mdel, C, Fernandez del Rio, E, Lopez-Duran, A, Martinez, U, Pineiro, B. Smoking habit profile and health-related quality of life. *Psicothema*, 2013. 25(4), 421-426.

Available from: <http://www.ncbi.nlm.nih.gov/pubmed/24124772>

3.22.1 Poorer health related quality of life

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Tobacco in Australia

Facts & Issues

Milic, M, Gazibara, T, Pekmezovic, T, Kistic Tepavcevic, D, Maric, G, Popovic, A et al. (2020). Tobacco smoking and health-related quality of life among university students: Mediating effect of depression. *PLoS ONE*, 15(1), e0227042. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31914158>

Rajabi, A, Arefnezhad, M, Erfanpoor, S, Esmaeilzadeh, F, Arefnezhad, M, & Hasani, J. (2019). Cigarette Smoking and Health-related Quality of Life in the General Population of Iran: Independent Associations According to Gender. *Int J Prev Med*, 10, 188. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31807258>

Kao, YH, Celestin, MD, Yu, Q, Moody-Thomas, S, Jones-Winn, K, & Tseng, TS. Racial and Income Disparities in Health-Related Quality of Life among Smokers with a Quit Attempt in Louisiana. *Medicina (Kaunas)*, 2019. 55(2). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30781893>

Dube, SR, Liu, J, Fan, AZ, Meltzer, MI, & Thompson, WW. Assessment of age-related differences in smoking status and health-related quality of life (HRQoL): Findings from the 2016 Behavioral Risk Factor Surveillance System. *J Community Psychol*, 2019; 47(1), 93-103. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30506930>

Song, F, Bachmann, MO, Aveyard, P, Barton, GR, Brown, TJ, Maskrey, V et al. Relapse to smoking and health-related quality of life: Secondary analysis of data from a study of smoking relapse prevention. *PLoS One*, 2018. 13(11), e0205992. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6245517/pdf/pone.0205992.pdf>

Efendi, V, Ozalevli, S, Naz, I, & Kilinc, O. The effects of smoking on body composition, pulmonary function, physical activity and health-related quality of life among healthy women. *Tuberk Toraks*, 2018. 66(2), 101-108. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30246652>

Miguez, MC, Lopez-Duran, A, Martinez-Vispo, C, Fernandez Del Rio, E, Martinez, U, Rodriguez-Cano, R, Becona, E. Health-related quality of life among smoking relapsers. *Psicothema*. 2018 Feb;30(1):27-32. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29363467>

Rezaei, S, Karami Matin, B, Kazemi Karyani, A, Woldemichael, A, Khosravi, F, Khosravipour, M, Rezaeian, S. Impact of Smoking on Health-Related Quality of Life: A General Population Survey in West Iran. *Asian Pac J Cancer Prev*. 2017 Nov 26;18(11):3179-3185. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29172297>

Charafeddine, R, Demarest, S, Cleemput, I, Van Oyen, H, Devleeschauwer, B. Gender and educational differences in the association between smoking and health-related quality of life in

tobaccoinaustralia.org.au

Tobacco in Australia

Facts & Issues

Belgium. *Prev Med*. 2017 Dec;105:280-286. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/28964851>

Nooijen, CFJ, Moller, J, Forsell, Y, Ekblom, M, Galanti, MR, Engstrom, K. Do unfavourable alcohol, smoking, nutrition and physical activity predict sustained leisure time sedentary behaviour? A population-based cohort study. *Prev Med*. 2017 May 18;101:23-27. Available from:

<http://www.ncbi.nlm.nih.gov/pubmed/28529160>

Staff, J, Maggs, J. Alcohol and Cigarette Use From Ages 23 to 55: Links With Health and Well-Being in the Long-Term National Child Development Study. *J Stud Alcohol Drugs*. 2017 May;78(3):394-403.

Available from: <http://www.ncbi.nlm.nih.gov/pubmed/28499106>

Zimbudzi, E, Lo, C, Ranasinha, S, Gallagher, M, Fulcher, G, Kerr, PG, Russell, G, Teede, H, Usherwood, T, Walker, R, Zoungas, S. Predictors of Health-Related Quality of Life in Patients with Co-Morbid Diabetes and Chronic Kidney Disease. *PLoS One*. 2016 Dec 19;11(12):e0168491. Available from:

<http://www.ncbi.nlm.nih.gov/pubmed/27992595>

Emamvirdi, R, Hosseinzadeh Asl, N, Colakoglu, FF. Health-related quality of life with regard to smoking, consumption of alcohol, and sports participation. *Iran Red Crescent Med J*. 2016 May 11;18(7):e27919. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27651950>

Jia, H, Lubetkin, EI. Dose-response effect of smoking status on quality-adjusted life years among U.S. adults aged 65 years and older. *J Public Health (Oxf)*, 2016. Available from:

<http://www.ncbi.nlm.nih.gov/pubmed/27613764>

Tian, J et al. Smoking status and health-related quality of life: a longitudinal study in young adults. *Qual Life Res*, 2016 Mar;25(3):669-85. Available from:

<http://www.ncbi.nlm.nih.gov/pubmed/26310284>

Ware, JE, Gandek, B, Kulasekaran, A, Guyer, R. Evaluation of smoking-specific and generic quality of life measures in current and former smokers in Germany and the United States. *Health Qual Life Outcomes*, 2015. 13(1), 128. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26276447>

3.22.2 Impaired activities of daily living (ADL) and instrumental ADL

tobaccoinaustralia.org.au

Tobacco in Australia

Facts & Issues

Amiri, S, & Behnezhad, S. (2019). Smoking as a risk factor for physical impairment: a systematic review and meta-analysis of 18 cohort studies. *J Addict Dis*, 1-14. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/31809656>

3.22.3 Smoking, low bone density and hip fracture

3.22.4 Diminished general health and accelerated ageing

3.22.5 Smoking and disturbed sleep

Liu, Y, Li, H, Li, G, Kang, Y, Shi, J, Kong, T et al (2020). Active smoking, sleep quality and cerebrospinal fluid biomarkers of neuroinflammation. *Brain Behav Immun*. Retrieved from

<https://www.ncbi.nlm.nih.gov/pubmed/32717405>

Wang, X, Li, W, Zhou, J, Wei, Z, Li, X, Xu, J et al (2020). Smoking and sleep apnea duration mediated the sex difference in daytime sleepiness in OSA patients. *Sleep Breath*. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/32529520>

Gangemi, AJ, Satti, A, Zantah, M, Blair, R, Brewer, B, Ma, G et al (2020). Sleep Duration and Sleep Quality Associated with Better Functional Exercise Capacity in African-American Smokers at Risk for COPD. *Chest*. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32333930>

Amiri, S, & Behnezhad, S. (2020). Smoking and risk of sleep-related issues: a systematic review and meta-analysis of prospective studies. *Can J Public Health*. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/32185746>

Zandy, M, Chang, V, Rao, DP, & Do, MT. (2020). Tobacco smoke exposure and sleep: estimating the association of urinary cotinine with sleep quality. *Health Promot Chronic Dis Prev Can*, 40(3), 70-80.

Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32162509>

Gross, G, Maruani, J, Vorspan, F, Benard, V, Benizri, C, Brochard, H et al (2020). Association between coffee, tobacco, and alcohol daily consumption and sleep/wake cycle: an actigraphy study in euthymic patients with bipolar disorders. *Chronobiol Int*, 1-11. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/32048536>

tobaccoinaustralia.org.au

Tobacco in Australia

Facts & Issues

Jaster, JH. (2020). COPD-and-smoking-induced "down regulation" of CO₂-related vasoconstriction in the brain during CPAP for sleep apnea may paradoxically reduce risk of cardiovascular events. *Sleep Breath*. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32103396>

Cox, F. (2019). Cigarette smoking increases persistent pain intensity and interference, impairs function and sleep. *Evid Based Nurs*. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31704886>

Hsu, WY, Chiu, NY, Chang, CC, Chang, TG, & Lane, HY. (2019). The association between cigarette smoking and obstructive sleep apnea. *Tob Induc Dis*, 17, 27. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31582938>

Sujarwoto, S. (2019). Sleep Disturbance in Indonesia: How Much Does Smoking Contribute? *Behav Sleep Med*, 1-14. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31633392>

Kawada, T. (2019). Smoking and obstructive sleep apnoea with special reference to sex and age. *J Oral Rehabil*. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31449322>

Bateson, M, Aviv, A, Bendix, L, Benetos, A, Ben-Shlomo, Y, Bojesen, SE et al (2019). Smoking does not accelerate leucocyte telomere attrition: a meta-analysis of 18 longitudinal cohorts. *R Soc Open Sci*, 6(6), 190420. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31312500>

Yang, Y, Gao, X, Just, AC, Colicino, E, Wang, C, Coull, BA et al (2019). Smoking-Related DNA Methylation is Associated with DNA Methylation Phenotypic Age Acceleration: The Veterans Affairs Normative Aging Study. *Int J Environ Res Public Health*, 16(13). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31277270>

Khan, RJ, Gebreab, SY, Gaye, A, Crespo, PR, Xu, R, & Davis, SK. (2019). Associations of smoking indicators and cotinine levels with telomere length: National Health and Nutrition Examination Survey. *Prev Med Rep*, 15, 100895. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31193582>

Liao, Y, Xie, L, Chen, X, Kelly, BC, Qi, C, Pan, C et al. (2019). Sleep quality in cigarette smokers and nonsmokers: findings from the general population in central China. *BMC Public Health*, 19(1), 808. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31234809>

Tobacco in Australia

Facts & Issues

Bielicki, P, Trojnar, A, Sobieraj, P, & Wasik, M. (2019). Smoking status in relation to obstructive sleep apnea severity (OSA) and cardiovascular comorbidity in patients with newly diagnosed OSA. *Adv Respir Med*, 87(2), 103-109. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31038721>

Cohen, A, Colodner, R, Masalha, R, & Haimov, I. (2019). The Relationship Between Tobacco Smoking, Cortisol Secretion, and Sleep Continuity. *Subst Use Misuse*, 1-10. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31081433>

Cohen, O, Strizich, GM, Ramos, AR, Zee, PC, Reid, KJ, Mani, V et al. (2019). Sex Differences in the Association Between Smoking and Sleep Disordered Breathing in the Hispanic Community Health Study/ Study of Latinos. *Chest*. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31103694>

Mamoshina, P, Kochetov, K, Cortese, F, Kovalchuk, A, Aliper, A, Putin, E et al. Blood Biochemistry Analysis to Detect Smoking Status and Quantify Accelerated Aging in Smokers. *Scientific Reports*, 9(1), 142. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30644411>

Lee, JY, Kim, W, & Brook, JS. Triple comorbid trajectories of alcohol, cigarette, and marijuana use from adolescence to adulthood predict insomnia in adulthood. *Addict Behav*, 2018; 90, 437-443. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30590309>

Ben Amar, J, Ben Mansour, A, Zaibi, H, Ben Safta, B, Dhahri, B, & Aouina, H. Impact of smoking on the severity of Obstructive Sleep Apnea Hypopnea Syndrome. *Tunis Med*, 2018. 96(8-09), 477-482. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30430524>

Cohen, A, Ben Abu, N, & Haimov, I. The Interplay Between Tobacco Dependence and Sleep Quality Among Young Adults. *Behav Sleep Med*, 2018. 1-14. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30463440>

Dhillon, N, Riha, R, & Dhillon, B. Narcolepsy, co-morbidities and smoking. *Sleep Med*, 2018. 52, 236. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30401605>

Gibson, M, Munafo, M R, Taylor, AE, & Treur, JL. Evidence for genetic correlations and bidirectional, causal effects between smoking and sleep behaviours. *Nicotine Tob Res*, 2018. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30365022>

Purani, H, Friedrichsen, S, & Allen, AM. Sleep quality in cigarette smokers: Associations with smoking-related outcomes and exercise. *Addict Behav*, 2018. 90, 71-76. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30368021>

tobaccoinaustralia.org.au

Tobacco in Australia

Facts & Issues

Taveira, KVM, Kuntze, MM, Berretta, F, de Souza, BDM, Godolfim, LR, Demathe, T, De Luca Canto, G, Porporatti, AL. Association between obstructive sleep apnea and alcohol, caffeine and tobacco: A meta-analysis. J Oral Rehabil, Jul 2018. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/29971810>

Swan, JH, Brooks, JM, Amini, R, Moore, AR, Turner, KW. Smoking Predicting Physical Activity in an Aging America. J Nutr Health Aging. 2018;22(4):476-482. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/29582886>

Boakye, D, Wyse, CA, Morales-Celis, CA, Biello, SM, Bailey, MES, Dare, S, Ward, J, Gill, JMR, Pell, JP, Mackay, DF. Tobacco exposure and sleep disturbance in 498 208 UK Biobank participants. J Public Health (Oxf). 2017 Aug 30:1-10. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29040744>

Kojima, G, Iliffe, S, Jivraj, S, Liljas, A, Walters, K. Does current smoking predict future frailty? The English longitudinal study of ageing. Age Ageing. 2017 Aug 17:1-6. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/28985256>

Patterson, F, Grandner, MA, Lozano, A, Satti, A, Ma, G. Transitioning from adequate to inadequate sleep duration associated with higher smoking rate and greater nicotine dependence in a population sample. Addict Behav. 2017 Sep 20;77:47-50. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/28950118>

Astuti, Y, Wardhana, A, Watkins, J, Wulaningsih, W, Network, Pilar Research. Cigarette smoking and telomere length: A systematic review of 84 studies and meta-analysis. Environ Res. 2017 Jul 10;158:480-489. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/28704792>

Walter Barbosa, G, Neder, JA, Utida, K, O'Donnell, DE, de Tarso Muller, P. Impaired exercise ventilatory efficiency in smokers with low transfer factor but normal spirometry. Eur Respir J. 2017 Mar 8;49(3). Available from: <http://www.ncbi.nlm.nih.gov/pubmed/28275177>

Chen, LJ, Steptoe, A, Chen, YH, Ku, PW, Lin, CH. Physical activity, smoking, and the incidence of clinically diagnosed insomnia. Sleep Med. 2017 Feb;30:189-194. Available from:

<http://www.ncbi.nlm.nih.gov/pubmed/28215247>

Bourne, MH, Jr, Scanlon, PD, Schroeder, DR, Olson, EJ. The sawtooth sign is predictive of obstructive sleep apnea. Sleep Breath, 2016. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27900657>

tobaccoinaustralia.org.au

Tobacco in Australia

Facts & Issues

Deflandre, E, Kempeneers, D, Degey, S, Poirrier, R, Legros, P, Brichant, JF, Joris, J. Risk factors for nocturnal hypoxemia in severe OSA patients. *Minerva Anesthesiol*, 2016. Available from:

<http://www.ncbi.nlm.nih.gov/pubmed/27922255>

Leppanen, T, Kulkas, A, Duce, B, Mervaala, E, Toyras, J. Severity of individual obstruction events is gender dependent in sleep apnea. *Sleep Breath*, 2016. Available from:

<http://www.ncbi.nlm.nih.gov/pubmed/27966055>

Perinova, P, Feketeova, E, Kemlink, D, Kovalska, P, Chlebusova, K, Nepozitek, J, Ibarburu, V, Kralikova, E, Nevsimalova, S, Sonka, K. Smoking prevalence and its clinical correlations in patients with narcolepsy-cataplexy. *Prague Med Rep*. 2016;117(2-3):81-89. Available from:

<http://www.ncbi.nlm.nih.gov/pubmed/27668524>

Bertazzo-Silveira, E, Kruger, CM, Porto De Toledo, I, Porporatti, AL, Dick, B, Flores-Mir, C, De Luca Canto, G. Association between sleep bruxism and alcohol, caffeine, tobacco, and drug abuse: A systematic review. *J Am Dent Assoc*. 2016 Aug 10. pii: S0002-8177(16)30541-4. Available from:

<http://www.ncbi.nlm.nih.gov/pubmed/27522154>

Gao, X, Zhang, Y, Breitling, LP, Brenner, H. Relationship of tobacco smoking and smoking-related DNA methylation with epigenetic age acceleration. *Oncotarget*, 2016. Available from:

<http://www.ncbi.nlm.nih.gov/pubmed/27276709>

Deleanu, OC, Pocora, D, Mihalcuta, S, Ulmeanu, R, Zaharie, AM, Mihaltan, FD. Influence of smoking on sleep and obstructive sleep apnea syndrome. *Pneumologia*. 2016 Jan-Mar;65(1):28-35. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27209838>

Krachman, SL, Tiwari, R, Vega, ME, Yu, D, Soler, X, Jaffe, F, Kim, V, Swift, I, D'Alonzo, GE, Criner, GJ, Investigators, C. OPDGene. Effect of emphysema severity on the apnea-hypopnea index in smokers with obstructive sleep apnea. *Ann Am Thorac Soc*, 2016. Available from:

<http://www.ncbi.nlm.nih.gov/pubmed/27078132>

Patterson, F, Malone, SK, Lozano, A, Grandner, MA, Hanlon, AL. Smoking, screen-based sedentary behavior, and diet associated with habitual sleep duration and chronotype: data from the UK Biobank. *Ann Behav Med*, 2016. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27056396>

Lee, JY, Brook, JS, Finch, SJ, Brook, DW. Trajectories of cigarette smoking beginning in adolescence predict insomnia in the mid thirties. *Subst Use Misuse*, 2016. 1-9. Available from:

<http://www.ncbi.nlm.nih.gov/pubmed/27008539>

tobaccoinaustralia.org.au

Tobacco in Australia

Facts & Issues

Andenaes, R, Schwartz, CE. Anxiety mediates the effect of smoking on insomnia in people with asthma: evidence from the HUNT3 study. *J Multidiscip Healthc*, 2016 Jan 21;9:21-8. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26855582>

Fillo, J et al. Emotion dysregulation explains relations between sleep disturbance and smoking quit-related cognition and behaviour. *Addict Behav*, 2016 Jun;57:6-12. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26827153>

Boehm, MA, Lei, QM, Lloyd, RM, Prichard, JR. Depression, Anxiety And Tobacco Use Overlapping Impediments To Sleep In A National Sample Of College Students. *J Am Coll Health*, 2016. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27347758>

Beach, SR et al. Methyloomic aging as a window onto the influence of lifestyle: tobacco and alcohol use alter the rate of biological aging. *J Am Geriatr Soc*, 2015 Dec;63(12):2519-2525. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26566992>

Mehari, A, Weir, NA, Gillum, RF. Gender and the association of smoking with sleep quantity and quality in American adults. *Women Health*, 2014. 54(1), 1-14. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/24261545>

3.22.6 Other impairments

Grossmann, T, Steffan, B, Kirsch, A, Grill, M, Gerstenberger, C, & Gugatschka, M. (2020). Exploring the Pathophysiology of Reinke's Edema: The Cellular Impact of Cigarette Smoke and Vibration. *Laryngoscope*. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32569447>

Koury, K, Weiner, D, Gwam, C, Loughran, G, Murphy, J, Vulpis, C, & Wisbeck, J. (2020). Smoking Is Not an Independent Risk Factor for Increased Opioid Consumption in Patients Being Treated for Ankle Fractures. *J Foot Ankle Surg*, 59(3), 495-497. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32354507>

Tjahajawati, S, Rafisa, A, Murniati, N, & Zubaedah, C. (2020). Correlation between Taste Threshold Sensitivity and MMP-9, Salivary Secretion, Blood Pressure, and Blood Glucose Levels in Smoking and Nonsmoking Women. *Int J Dent*, 2020, 4178674. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32256594>

Tobacco in Australia

Facts & Issues

Khaldari, F, Khanjani, N, Bahrapour, A, Ghotbi Ravandi, MR, & Arabi Mianroodi, AA. (2020). The Relation between Hearing Loss and Smoking among Workers Exposed to Noise, Using Linear Mixed Models. *Iran J Otorhinolaryngol*, 32(108), 11-20. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/32083026>

Li, X, Rong, X, Wang, Z, & Lin, A. (2020). Association between Smoking and Noise-Induced Hearing Loss: A Meta-Analysis of Observational Studies. *Int J Environ Res Public Health*, 17(4). Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/32069960>

Fidai, MS, Tramer, JS, Meldau, J, Khalil, LS, Patel, RB, Moutzouros, V, & Makhni, EC. (2019). Mental Health and Tobacco Use Are Correlated With Physical Function Outcomes in Patients With Knee Pain and Injury. *Arthroscopy*, 35(12), 3295-3301. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/31785761>

Rosa, MB, Fernandes, MDS, Bonjardim, LR, Gaviao, MBD, Calixto, LA, & Castelo, PM. (2019). Evaluation of oral mechanical and gustatory sensitivities and salivary cotinine levels in adult smokers. *Acta Odontol Scand*, 1-9. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/31775545>

Demir, E, Celiker, M, Afacan, NN, Aydogan, E, Balaban, GA, Erdivanli, OC, & Dursun, E. (2019). Effects of Smoking on the Auditory System: Is There a Gender Difference? *Ear Nose Throat J*,

145561319872166. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31547698>

Kale, YS, Vibhute, N, Belgaumi, U, Kadashetti, V, Bommanavar, S, & Kamate, W. (2019). Effect of using tobacco on taste perception. *J Family Med Prim Care*, 8(8), 2699-2702. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/31548959>

Zvolensky, MJ, Bakhshaie, J, Shepherd, JM, Mayorga, NA, Giraldo-Santiago, N, Peraza, N et al. Pain intensity and tobacco smoking among Latinx Spanish-speaking adult smokers. *Addict Behav*, 93, 115-

121. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30708336>

LaRowe, LR, Farris, SG, Zvolensky, MJ, & Ditte, JW. Associations Between Past-Month Pain and Distress Intolerance Among Daily Cigarette Smokers. *J Stud Alcohol Drugs*, 2018. 79(5), 781-789.

Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30422792>

Smit, T, Garey, L, Langdon, K J, Ditte, JW, Rogers, AH, Orr, MF, & Zvolensky, MJ. Differential effect of sex on pain severity and smoking behavior and processes. *Addict Behav*, 2018. 90, 229-235. Available

from: <https://www.ncbi.nlm.nih.gov/pubmed/30447515>

tobaccoinaustralia.org.au

Tobacco in Australia

Facts & Issues

Cheruel, F, Jarlier, M, Sancho-Garnier, H. Effect of cigarette smoke on gustatory sensitivity, evaluation of the deficit and of the recovery time-course after smoking cessation. *Tob Induc Dis*. 2017 Feb 28;15:15. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/28261024>

Montbriand, JJ, Weinrib, AZ, Azam, MA, Ladak, SSJ, Shah, BR, Jiang, J, McRae, K, Tamir, D, Lyn, S, Katznelson, R, Clarke, HA, Katz, J. Smoking, pain intensity, and opioid consumption one to three months after major surgery: A retrospective study in a hospital-based Transitional Pain Service. *Nicotine Tob Res*, 2017. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/28472423>

Pavlidis, P, Gouveris, H, Kekes, G. Electrogustometry Thresholds, Tongue Tip Vascularization, Density, and Form of the Fungiform Papillae Following Smoking Cessation. *Chem Senses*. 2017 Jun 1;42(5):419-423. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/28379369>

Rittich, AB, Ellrich, J, Said Yekta-Michael, S. Assessment of lingual nerve functions after smoking cessation. *Acta Odontol Scand*. 2017 Jul;75(5):338-344. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/28372503>

Behrend, CJ, Schonbach, EM, Vaccaro, AR, Coyne, E, Prasarn, ML, Rehtine, GR. Maximum pain on visual analog scales in spinal disorders. *Spine J*. 2016 Dec 6. pii: S1529-9430(16)31111-1. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27939747>

3.22.7 Smoking and absence from work due to illness

Grossmann, T., Steffan, B., Kirsch, A., Grill, M., Gerstenberger, C., & Gugatschka, M. (2020). Exploring the Pathophysiology of Reinke's Edema: The Cellular Impact of Cigarette Smoke and Vibration. *Laryngoscope*.

News reports:

Oxford University Press. Study finds smokers at greater risk of hearing loss. *Medical Xpress* 18. Mar 15, 2018. Available from: <https://medicalxpress.com/news/2018-03-smokers-greater-loss.html>

No authors listed. Cost of smoking to social care. Action on Smoking and Health UK, 2017. Jan 30, 2017. Available from: <http://ash.org.uk/localtoolkit/cost-of-social-care/>

tobaccoinaustralia.org.au

Tobacco in Australia

Facts & Issues

Wallace, Amy. Study: Smoking linked to frailty in older adults. UPI, 2017. Aug 17, 2017. Available from: https://www.upi.com/Health_News/2017/08/17/Study-Smoking-linked-to-frailty-in-older-adults/1301502978541/?utm_source=sec&utm_campaign=sl&utm_medium=1

3.22.6 Other impairments

No authors listed. Smoking Kills Your Taste Buds. PR Newswire, 2018. July 16, 2018. Available from: <https://www.prnewswire.com/news-releases/smoking-kills-your-taste-buds-300681555.html>

3.22.7 Smoking and absence from work due to illness