

<u>Name of research</u>	<u>Link</u>	<u>Year</u>	<u>Smoking type assessed</u>	<u>Sample type</u>	<u>Sample size</u>	<u>Collection methodology (research strategy)</u>	<u>Aim</u>	<u>Findings</u>	<u>Type of study</u>	<u>Type of survey</u>	<u>Region of collection</u>
Gender-specific relationship of circulatory measures with waterpipe smoking: The Irbid WiHi project	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85118831686&doi=10.1016%2fj.ijans.2021.100379&partnerID=40&md5=2e0baec1ca38377e3865e18d870641b5	2021	Waterpipe	Adult patients	511	Physical exam	Compare vital signs between waterpipe smokers and nonsmokers	Adversely altered cardiovascular measures, especially in men.	Cross-sectional	-	
Adolescent Waterpipe Use is Associated with Greater Body Weight: The Irbid-TRY	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85038632688&doi=10.1080%2f10826084.2017.1400065&partnerID=40&md5=c0c3fb2e75cd7dc90b0caca08b3265a7	2018	Both	Adolescents	-	Data from Irbid-TRY study	Find the relationship between obesity and smoking	Waterpipe smoking is associated with increased weight and BMI especially in dual smokers	Cross-sectional	Self-administered	
The effects of tobacco waterpipe smoking on the ocular surface	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85112045024&doi=10.1080%2f08164622.2021.1956862&partnerID=40&md5=9796a71ca4a64137d9fe05f52c986a09	2022	Waterpipe	Adults	64	Interview and eye examination	Determine the effect of waterpipe smoking on the ocular surface	Waterpipe smoking could have a significant effect on tear film parameters and be associated with dry eye disease	Case control	Interview administered	
Gender-Specific Blood Pressure and Heart Rate Differences in Adolescents Smoking Cigarettes, Waterpipes or Both	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85074044136&doi=10.1080%2f10826084.2019.1666146&partnerID=40&md5=ce0600b4ad4c9fd1d0b602ea57ccaf9b	2020	Both	Adolescents	771	Data from Irbid-TRY study, interview and physical examination	To understand the health effects, particularly CV, of WP smoking in adolescents	HR, SBP, and DBP are low in males (not females) who smoke cigarettes, waterpipe or both.	Cross-sectional	-	
Impact of waterpipe smoking on blood pressure and heart rate among adolescents: The Irbid-TRY	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85032695256&doi=10.1080%2f14659891.2017.1394379&partnerID=40&md5=fca12b5ef0513b54880b1eff94a80813	2018	Both	Adolescents	397	Data from Irbid-TRY study, and physical examination	To comprehend the impact of waterpipe use on cardiovascular factors.	HR, DBP, SBP, and RPP are decreased among waterpipe smokers in contrast with cigarettes smoking in which they are increased	Cross-sectional	Self-administered	

The Impact of Coexistence of Smoking and Diabetes on the Coronary Artery Severity and Outcomes following Percutaneous Coronary Intervention: Results from the 1ST Jordanian PCI Registry	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85088278985&doi=10.1155%2f2020%2f7624158&partnerID=40&md5=7b893477d17b639142f467efec66db88	2020	Smoking	Adults	2426		Assess the clinical profile and cardiovascular outcome in DM patients with smoking after undergoing PCI	The incidence of complications related to PCI and events occurring one year after discharge are higher in diabetic-nonsmoker patients. Among Middle Eastern patients, 34.3% of them were diabetic and nonsmokers, with a majority of 73% being admitted with ACS.	Prospective cohort	-	Major cities in Jordan
Withdrawal symptoms among cigarette and waterpipe smokers: A study in natural setting	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85117617079&doi=10.2174%2f1745017902117010114&partnerID=40&md5=4ad694e40336b1a39460ef856013a565	2021	Both	Adults	793	Questionnaire	To collect information on withdrawal symptoms and nicotine craving (smoking urge) during the month of "Ramadan"	That WPS is associated with abstinence-induced smoking urge and withdrawal symptoms that are nearly the same of cigarette smoking	Cross-sectional	Self-administered	-
Waterpipe and cigarette tobacco smoking and depressive symptoms among public school students in central Jordan	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85096468412&doi=10.1108%2fJHR-09-2019-0209&partnerID=40&md5=a2488f84e6954ef0a87d59a79f339d9d	2020	Both	Adolescents	1082	Questionnaire	To detect the association between depressive symptoms and WTP nicotine dependence among youth tobacco smokers in Jordan	Depressive symptoms were found to be highly associated with WTP nicotine dependence. Smokers, dual users showed higher WTP nicotine dependence than WPS only.	Cross-sectional	Self-administered	Irbid
Effects of cigarette smoking and age on pulmonary function tests in 40 years old adults in Jordan	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85053621620&doi=10.13005%2fbpj%2f1433&partnerID=40&md5=7460426eb5c6f4f438057dcf67a96d67	2018	Smoking	Adults	100	Physical examination	To estimate forced expiratory volume in first second (FEV1), forced vital capacity (FVC), and maximum voluntary ventilation (MVV)	The values were conversely related to participant age and smoking duration	Cross-sectional	-	-
A critical analysis of the relationship between depression and smoking using machine learning	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85077094269&partnerID=40&md5=280c3a6e3c2a202bff6e3da5403c2a14	2019	Waterpipe	Students	993	-	To predict the type of depression for youth smokers in relation to the number of narghile (Shisha) heads students usually smoke.	There is a significant relationship between smoking and depression.	Cross-sectional	-	-
Waterpipe Nicotine Dependence and Depressive	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85096348846&doi=10.1155%2f2020%2f7624158&partnerID=40&md5=7b893477d17b639142f467efec66db88	2020	Both	Adolescents	1082	Questionnaire	To assess the association between depressive	There is a significant association between depressive symptoms and WTP (Waterpipe) nicotine	Cross-sectional	Self-administered	Irbid

Symptoms among Adolescent Waterpipe and Dual Users	0.1155%2f2020%2f2364571&partnerID=40&md5=1cf3a46cddd5f9d3bff8846e8f1411ae						symptoms and waterpipe nicotine dependence among adolescents in Jordan.	dependence with a higher dependence among dual users.			
Predicting depression level of youth smokers using machine learning	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85075218721&partnerID=40&md5=4bdc4aaa0e20771faa4b5759989159a1	2019	Smoking	Student smokers	993	-	To exhibit how decision support systems can predict the level of depression in young individuals by taking into account their smoking habits and associated factors	There is a significant relationship between smoking and degree of depression.	Cross-sectional	-	
Respiratory symptoms, knowledge and attitude among male smoker students in Mutah University, Jordan	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85063001257&doi=10.13005%2fbpj%2f1567&partnerID=40&md5=7ce1da01d657381956172c21dd201ee7	2018	Smoking	Male students	204	Questionnaire	To assess the adverse respiratory health effects of smoking.	The prevalence identified was (71%); adverse respiratory health effects were noticed, in addition to pulmonary function tests impairments.	Cross-sectional	Redesigned, recoded self-administered questionnaire	Mutah university
Parental smoking behavior and childhood cancer: A case-control study	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85090485750&doi=10.5993%2fAJHB.44.5.3&partnerID=40&md5=c87df3d2f17d5a613856d42808006539	2020	Smoking	Smokers	600	Demographic data sheet	Relationship between parental smoking behavior and the development of childhood cancer.	Offspring of women who smoke occasionally or daily were considerably more prone to cancer, while fathers who smoke daily were significantly more likely to have a child with cancer compared to nonsmoking fathers.	Case control	-	
Electronic cigarettes' withdrawal severity symptoms among users during intermittent fasting: a cross-sectional study	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85100546570&doi=10.1186%2fs13722-021-00219-9&partnerID=40&md5=79719abe702779683336002baed0a0a6	2021	E-cigars	Adults	523	Self-administered survey	To evaluate the severity of e-cigarettes withdrawal symptoms during intermittent fasting in Ramadan	E-cigarettes withdrawal symptoms were found to be relatively weak.	Cross-sectional	Self-administered survey	Jordan
Active and passive maternal smoking during pregnancy and birth outcomes: A study from a developing country	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85121504651&doi=10.5334%2faogh.3384&partnerID=40&md5=fb3c641104196a220d1de89e28d6ab83	2021	Smoking	Healthy women with full-term singleton pregnancy	180	Interviews	To examine the impact of smoking, both actively and passively, during pregnancy on negative outcomes related to pregnancy.	Neonates from active smoking mothers had significantly lower birth weight compared to neonates from passive and nonsmoking women.	Case control	Semi structured	King Abdullah University Hospital (KAUH) patients
Does shisha smoking affect	https://www.scopus.com/inward/record.uri?eid=2-s2.0-	2009	Waterpipe	Adult university students	143	Physical examination	Investigate the possible cardiovascular	There is significantly higher blood pressure and heart rate values in	Cross-sectional	-	Majority from north university

blood pressure and heart rate?	59849123830&doi=10.1007/s10389-008-0220-y&partnerID=40&md5=7c802e812d54ae2bf9648a9040cf7ca						health effects of waterpipe smoking on cardiovascular parameters	waterpipe smokers compared with non-tobacco smokers.			
Central and peripheral cardiovascular changes immediately after waterpipe smoking	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84907368599&doi=10.3109%2f08958378.2014.936572&partnerID=40&md5=824253c46a698de60f97b938fdc8a2ff	2014	Waterpipe	Young healthy smokers	53	Physical exam	To evaluate the immediate effects of WP smoking on central and peripheral CV parameters.	Smoking resulted in HR, diastolic BP, mean arterial BP, rate pressure product increases	-	-	
Pulmonary Function Test: The value among smokers and nonsmokers	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84867261770&partnerID=40&md5=4fce8b33949b7f4d485aa6205143efc2	2012	Cigarettes	Smoking and nonsmoking students, staff and workers at Al-Zarqa Private University	213	Questionnaire and spirometric test	To estimate the values of pulmonary function test among smoking and nonsmoking students, staff and workers at Al-Zarqa Private University.	Pulmonary function test parameters were found to be lower in smokers than nonsmokers.	-	-	
Levels of maximum end-expiratory carbon monoxide and certain cardiovascular parameters following hubble-bubble smoking	https://www.scopus.com/inward/record.uri?eid=2-s2.0-0036700119&partnerID=40&md5=0913681c825907f4129e1bb9c033ac85	2002	Waterpipe	Waterpipe smokers	18	Physical examination	Examination of the acute effects of hubble-bubble smoking on cardiovascular and pulmonary parameters.	Acute short-term active hubble-bubble smoking increase the heart rate, systolic blood pressure, diastolic blood pressure, mean arterial blood pressure and maximum end-expiratory carbon monoxide in healthy hubble-bubble smokers.	Cross-sectional	Self-administered	Zarqa'
Smoking behavior among coronary heart disease patients in Jordan: A model from a developing country*	https://www.scopus.com/inward/record.uri?eid=2-s2.0-77950904457&doi=10.3390%2fijerph7030751&partnerID=40&md5=15cf2d6900f978ff92424fd43785b01d	2010	Cigarettes	Coronary heart disease patients	300	Questionnaire	To compare the frequency of cigarette smoking before and after diagnosis of Coronary Heart Disease (CHD).	After disease occurrence only 29.7% of the patients quit smoking, while 60.7% continued smoking, and 9.6% relapsed.	Cross-sectional	Self-administered	Irbid
Maternal smoking and breastfeeding	https://www.scopus.com/inward/record.uri?eid=2-s2.0-0033123219&partnerID=40&md5=bc3ab48831deb6bbc8de6dcb794865ae	1999	Cigarettes	Mothers	500	Interviews	To explore the effects of maternal smoking on breastfeeding	The prevalence of breastfeeding reduced significantly among smokers compared to non-smokers.	Qualitative	-	Aqaba

Anthropometric measurements of newborns of women who smoke waterpipe during pregnancy: a comparative retrospective design	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84992360832&doi=10.1080%2f08958378.2016.1244227&partnerID=40&md5=a4031ce7e76dce2f4d051a84f6323970	2016	Both	Postpartum mothers	285	Questionnaire	To investigate the anthropometric measurements of singleton newborns of Jordanian women who smoked waterpipe during pregnancy, and compare it to other types of smoking and nonsmokers.	Waterpipe and tobacco smoking during pregnancy can contribute to a reduction in newborn's anthropometric measurements.	Cross-sectional	Interview	Three large hospitals in Jordan: two in Northern Jordan and one in Amman
The association between second hand smoke and low birth weight and preterm delivery	https://www.scopus.com/inward/record.uri?eid=2-s2.0-80051670018&doi=10.1007%2fs10995-010-0599-2&partnerID=40&md5=71fd3b15bd9f482a3c6affc4f9ab6f7e	2011	Cigarettes	Postpartum mothers	8,490	Questionnaire and review of hospital records	To determine the association between maternal exposure to secondhand smokers and pregnancy outcomes.	The rate of preterm delivery among the exposed group was significantly higher than that the non-exposed group.	Cross-sectional	self-administered	Princess Bade'ah hospital, Jarash hospital, Al-Eman hospital, and Al-Ramtha hospital
Does smoking affect blood pressure and heart rate?	https://www.scopus.com/inward/record.uri?eid=2-s2.0-28444466295&doi=10.1016%2fj.ejcnurse.2005.03.004&partnerID=40&md5=af6c8bc4e043e0e08e48533f2a38e230	2005	Cigarettes	Healthy adult males and females from various regions of Jordan	14,310	Questionnaire	To explore the correlation of smoking habit with cardiovascular parameters	Smoker males and females had significantly higher SBP, DBP, ABP values than non-smokers.	Cross-sectional	Interview	Northern, southern, eastern, western and central areas
The acute effects of waterpipe smoking on lung function and exercise capacity in a pilot study of healthy participants*	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84881393147&doi=10.3109%2f08958378.2013.806613&partnerID=40&md5=724f67ae8b1f27ccd5b3aea343e9cb28	2013	Waterpipe	Healthy WTS males	24	Physical examination	To determine the acute effects of waterpipe smoking on lung function and exercise capacity	Acute waterpipe smoking can induce impairment in lung function and exercise capacity	Case-control	-	King Hussein Cancer Center (KHCC) in Amman, Jordan
Does cigarette smoking affect seminal fluid parameters? A Comparative study	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84873294021&doi=10.5001%2fomj.2013.03&partnerID=40&md5=f78cd2a4e17ab1a3b2b4cfc8fc5b1001	2013	Cigarettes	Married males	1438	Seminal fluid analysis	To study the effect of cigarette smoking on seminal fluid parameters.	Cigarette smoking has a harmful effect on some of the seminal fluid parameters which may result in male subfertility	Cross-sectional	-	Prince Rashid Ben Al Hassan Hospital (PRH)
Acute vascular effects of waterpipe smoking: Importance of physical activity	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84928656014&doi=10.1016%2fj.atherosclerosis.2015.02.047&partnerID=40&md5	2015	Waterpipe	Regular WP smokers	53	Questionnaire and physical examination	To investigate the acute changes in vascular function after waterpipe smoking, and if acute changes in vascular function	Waterpipe smoking is associated with immediate changes in vascular function	Cross-sectional	Self-Administered	

and fitness status	https://www.scopus.com/inward/record.uri?eid=2-s2.0-77949689709&doi=10.3390%2fijerph7020616&partnerID=40&md5=b879f754cbb629934eccb3bf4530f6e	2010					are modified by lifestyle behaviors.				
The influence of secondhand smoke exposure on birth outcomes in Jordan	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84859345700&partnerID=40&md5=473cc1c5f17b7cd202bc42ace551d9f1	2012	Cigarettes	Jordanian non-smoking pregnant women being exposed to SHS	300	Questionnaire	To investigate how secondhand smoke (SHS) exposure influences neonatal birth weight in Jordan	As the average number of secondhand smoke exposure increase, the neonatal birth weight decreased	Cross-sectional	Self-reported	Irbid
Effect of Active and Passive smoking during pregnancy on its outcomes	https://www.scopus.com/inward/record.uri?eid=2-s2.0-79954564077&doi=10.21101%2fcejph.a3629&partnerID=40&md5=7a57cb70454135f102783041ca9854b1	2011	Cigarettes	Pregnant women	223	Questionnaire	To investigate the effects of active and passive smoking on pregnancy outcomes.	Active and passive smoking in pregnant women areh risk of having an adverse outcome during pregnancy and labor.	Case-control	-	All regions
Smoking practices in Jordanian people and their impact on semen quality and hormonal levels among adult men	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85013379948&doi=10.1016%2fj.ijerph.2017.02.006&partnerID=40&md5=c9e6909fb08dce933876016b1ad6b061	2011	Cigarettes	Adults	804	Questionnaire, seminal fluid analysis and blood hormonal levels	To study the current smoking status and investigate the impact of cigarette smoking on semen quality and hormonal levels among adults	This study found that low-income Jordanians consume more tobacco materials than those in the middle- and higher income. Smokers had lower sperm concentration and motility values and higher serum testosterone and luteinizing hormone (LH) levels.	Cross-sectional	-	Amman

The effect of habitual waterpipe tobacco smoking on pulmonary function and exercise capacity in young healthy males: A pilot study*	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85013379948&doi=10.1016%2fj.ijerph.2017.02.006&partnerID=40&md5=c9e6909fb08dce933876016b1ad6b061	2017	Waterpipe	Males between the ages 18-26	138	ATS-DLD-78 adult questionnaire, and physical examination	To assess the effects that habitual waterpipe smoking may have on the cardiopulmonary health of young smokers	Habitual waterpipe tobacco smoking in young seemingly healthy individuals is associated with a greater effect of respiratory symptoms and impaired exercise capacity		Interview	Different Jordan universities
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Supplementary table 1: Researches that is directed into the clinical impact of smoking among Jordanians¹⁻³².

*Pilot study used

<u>Name of research</u>	<u>Link</u>	<u>Year</u>	<u>Smoking type assessed</u>	<u>Sample type</u>	<u>Sample size</u>	<u>Collection methodology (research strategy)</u>	<u>Aim</u>	<u>Findings</u>	<u>Type of study</u>	<u>Type of survey</u>	<u>Region of collection</u>
Jordanian nurses' perception and interventions related to promoting smoking cessation	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85052538292&doi=10.1111%2fjocn.13929&partnerID=40&md5=1b88badd27b3a37b0745fc867ada0af6	2018	Smoking	Adult nurses	22	Focus groups	Perceptions and interventions	Patients education regarding smoking cessation is important, not implemented properly, there is a need to enforce policies for cessation	Qualitative study	Interview	3 regions of Jordan
"We cannot stop smoking": Female university students' experiences and perceptions	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85111251394&doi=10.1016%2fj.apnr.2021.151477&partnerID=40&md5=c696c237ea2b39f0ba6117fa222eae7d	2021	Cigarettes	university female students	12	Single interview	Develop interventions to prevent smoking initiation, to enforce smoke free campuses	Participants are aware of the hazards of smoking but unable to cease due to ineffective coping with stress, being addicted and attached, and stubbornness	Qualitative study	Semi-structured interview	-
Smoking Behavior among Jordanians: Physical, Psychological, Social, and Economic Reasons*	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85043471616&doi=10.1016%2fj.vhri.2017.09.003&partnerID=40&md5=0f1fc6d2d058eff0f09b8c9cd316c2e7	2018	Cigarettes	Adults	765	Interview	Determine factors that may explain the lack of response to increase taxes on cigarettes	Social factors are the ones that affect males and physical factors are the ones that affect females.	Cross-sectional	Interview administered	Amman
Evaluating health warning messages specific to waterpipe smoking among university students in Jordan	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85061356142&doi=10.1097%2fjxx.0000000000107&partnerID=40&md5=a5c15b1f15f05cbb700d5360be43c1b8	2019	Waterpipe	University students	397	Online and interview questionere	To add to the existing knowledge that would be used to develop WPS specific guidelines to control WPS	Both text-only and pictorial HWLs were effective in motivating WP smokers' to quit, providing evidence to their effectiveness, whereas messages concerning the harmful effects of WPS on infants and children had the highest scores in both text-only and pictorial HWLs	Cross-sectional	Self-administered	-
Waterpipe tobacco smoking: nicotine dependence and smoking control strategies among youth	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85082460795&doi=10.1080%2f14659891.2020.1738572&partnerID=40&md5=4290e40be376c43dcca9d508326a0c39	2020	Waterpipe	Adolescents	100	Questionnaire	To explore actions and strategies used by youth to stop waterpipe smokers.	Youth level of nicotine dependence is negatively related to their use of strategies to control waterpipe smoking.	-	Interview	Zarga
Educational Needs of Oncology Practitioners in a Regional Cancer Center in the Middle	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84960192142&doi=10.1007%2fs13187-016-1013-6&partnerID=40&md5	2017	Smoking	Only full-time medical staff that interacted directly with patients	99 KHCC physicians and 141 KHCC nursing	Questionnaire	To assess attitudes and level of knowledge with regard to tobacco use and cessation in the context of cancer care.	Identifying topics that need to be highlighted during training and educational efforts in the region and also reinforce the need to avail such efforts in order to improve smoking cessation-related knowledge and perceptions	-	Interview	Khcc

East— Improving the Content of Smoking Cessation Training Programs*	=dccb29a9d675fcd114a672932a9a4977										
Smoking cessation counselling practices among health care providers dealing with cancer patients	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85085138536&doi=10.1111%2fjep.13408&partnerID=40&md5=88fe2b955ca04f6140d2ffb79e3d985e	2021	Smoking	health care providers	300	questionnaire	To asses smoking cessation counselling practices (SCC) among health care providers dealing with cancer patients.	It is essential to provide training, referral facilities, and supportive policies to encourage SCC practices.	Cross-sectional	Self-administered	Jordan
Knowledge, attitude, and behaviors of health professionals towards smoking cessation in primary healthcare settings(couldn't find full text)	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85057190949&doi=10.1093%2ftbm%2fbx045&partnerID=40&md5=b6ce49c43bb76dcd3b1b993bbc14841a	2018	Smoking	health professionals	456	questionnaire	To assess the behaviors of multiple health professionals in primary healthcare settings in Jordan towards smoking cessation counseling and to determine the barriers to effective smoking cessation behaviors	Smoking cessation counseling was not routinely implemented by Jordanian health professionals. Barriers to effective delivery of smoking cessation counseling need to be integrated within relevant strategies	-	-	-
The impact of health awareness campaigns to quit smoking (A case study in amman city)	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85075081364&doi=10.5958%2f0976-5506.2019.02491.4&partnerID=40&md5=6bf53a69282830cc0f1b96ecd38d1b72	2019	Smoking	smokers	369	questionnaire	To investigate the effect of health awareness campaigns in influencing people behavior to stop smoking	There is strong relation between antismoking factors and smokers' response to health awareness campaigns.	Case study	Telephone survey	Amman
Smoking cessation care can translate to lower hazard of death in the short-run in cancer patients - A retrospective cohort study to demonstrate the value of smoking cessation services within the treatment phase of cancer	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85068517436&doi=10.1186%2fs12885-019-5778-y&partnerID=40&md5=e2c0021f8c41512dfbca51a0024c7d39	2019	Smoking	adult Jordanian cancer patients	3403	-	Demonstrate the value of smoking cessation services within the treatment phase of cancer(There is a deprioritization of smoking cessation interventions during cancer care	Retrospective cohort	-	Jordan
Using cost- effectiveness	https://www.scopus.com/inward/record.uri?	2020	Smoking	Male adults	527118	-	Assessing the potential clinical and economic impact of two FDA-	0.26 and 0.12 additional life years gained per smoker using varenicline or nicotine	Prospective cohort	-	-

analysis to support policy change: varenicline and nicotine replacement therapy for smoking cessation in Jordan	eid=2-s2.0-85093979171&doi=10.1186%2fs40545-020-00270-y&partnerID=40&md5=9792c8a8339b7ecf61ea854365a7e6b4						approved SCPs from a Jordanian public payer perspective, and accordingly quantifying the cost-effectiveness values for these SCPs if used in Jordan	replacement therapy to quit, he incremental costs per life year gained were JD1204 (\$1696 USD) and JD1342 (\$1890 USD) for varenicline and NRTs, respectively			
Obstetricians, gynecologists and the anti-smoking campaign: A national survey	https://www.scopus.com/inward/record.uri?eid=2-s2.0-16244388258&doi=10.1016%2fj.ejogrb.2004.07.027&partnerID=40&md5=fa66abefcbb5694bd883df1dda77e69d	2005	Smoking	licensed obstetricians and gynecologists	462	questionnaire	To assess the role Jordanian obstetricians and gynecologists play as tobacco cessation counsellors through examining their smoking status.	Most associated smoking with low birth weight and sudden infant death syndrome. Fewer associated smoking with infertility, ectopic pregnancy, placenta praevia, abruptio placentae and cancer of the uterine cervix. Friends, stress, parents' attitude, genetic predisposition, income and education were implicated factors for smoking. Current smokers were more likely to permit smoking in their practices. Non-smokers were most inclined to record their patients' tobacco habits. Only 54.3% provided cessation counselling. Lack of time and inadequate training were perceived barriers.	-	-	
Smoking cessation treatment and outcomes in medium to heavy cigarette smokers being treated for cancer in Jordan	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84892450960&doi=10.7314%2fAPJCP.2013.14.11.6875&partnerID=40&md5=b4c942818862f1b5a5c54cab9040bfa9	2013	cigarettes	cancer patients (medium-to-heavy smokers) visiting an out-patient smoking cessation clinic (SCC)	-	Clinic records	Smoking cessation treatment and outcomes in medium to heavy cigarette smokers being treated for cancer in Jordan	-	-	-	Amman
A surveillance summary of smoking and review of tobacco control in Jordan	https://www.scopus.com/inward/record.uri?eid=2-s2.0-78651392198&doi=10.1186%2f1744-8603-5-18&partnerID=40&md5=fd28fd6b727caf0f54203f66163a78cb	2009	cigarettes	Jordanian population	7,566	questionnaire	Review of tobacco control in Jordan	While the current infrastructure for tobacco control is a beginning, opportunities remain to improve anti-smoking policies and programmes particularly in areas of enforcement		Self-administered	Jordan
Rethinking anti-tobacco health education in an Eastern Mediterranean country with growing tobacco use	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84960362239&doi=10.7314%2fAPJCP.2016.17.2.527&partnerID=40&md5=914047102915df2d82f6e65040f14f83	2016	cigarettes	Jordanian population	1,169	survey	To evaluate public awareness regarding tobacco; to gauge exposure to anti-tobacco public messages; and to draw attention to the lay public's informational needs	There is need for more salient, evocative and multi-faceted anti-tobacco messages in Jordan	Cross-sectional	Self-administered	Amman

Smoking habits among university students in Jordan: Prevalence and associated factors	https://www.scopus.com/inward/record.uri?eid=2-s2.0-53649096819&partnerID=40&md5=41631c4416d5e5bcea4a085566ce9a27	2008	cigarettes	university students	712	Questionnaire	estimate university students prevalence of smoking	Policy-makers need to initiate antismoking programmes in Jordanian universities	Cross-sectional	Self-administered	North Jordan
Smoking habits and attitudes towards smoking among university students in Jordan	https://www.scopus.com/inward/record.uri?eid=2-s2.0-0036832671&doi=10.1016%2fS0020-7489%2802%2900016-0&partnerID=40&md5=281f27db8cc9e1072868401e0097fbd9	2002	cigarettes	university students	650	Questionnaire	to estimate the prevalence of smoking and to describe the habits, attitudes, and practices related to smoking among students of Jordan University of Science and Technology (JUST)	Prevalence of smoking was 28.6% (50.2% among males and 6.5% among females)		Self-administered	Irbid
Predictors of intention to quit smoking among Jordanian University students	https://www.scopus.com/inward/record.uri?eid=2-s2.0-33244497559&doi=10.1007%2fbf03405204&partnerID=40&md5=6b895a2467ca0ea364ce4517263fea48	2006	cigarettes	Jordanian University students	800	survey	To identify predictors that influence tobacco smoking cessation among Jordanian college students	Three factors were identified as major contributors toward quitting smoking: a) a high stage of readiness, b) previous experience with barriers to smoking cessation, and c) past experience with quitting.	Cross-sectional	Self-administered	Jordan
Smoking-cessation practice guidelines: Awareness and implementation among medical teams*	https://www.scopus.com/inward/record.uri?eid=2-s2.0-77950249542&doi=10.1211%2fjpp%2f18.02.0004&partnerID=40&md5=4b745e836f767b02d271145be74a4b61	2010	cigarettes	healthcare providers	422	questionnaire	To evaluate the awareness and implementation of the Smoking Cessation Clinical Practice guidelines	The majority of HCPs reported good smoking-cessation practices. However, their awareness about the SCCP guidelines was inadequate.	Cross-sectional	Self-administered	Jordan
The economics of tobacco use in Jordan	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84891678701&doi=10.1093%2fntr%2fntt058&partnerID=40&md5=961e762b57aab5f416dea74a59ce6efc	2014	cigarettes	general population	4090	questionnaire	To estimate the price elasticity of cigarette demand in Jordan	The price elasticity estimates suggest that significant increases in tobacco taxes are likely to be effective in reducing smoking in Jordan, particularly smoking among men.	-	-	-
Cigarette demand is responsive to higher prices: Findings from a survey of university students in Jordan	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84954271123&doi=10.1136%2ftobaccocontrol-2015-052316&partnerID=40&md5=94aa595051aaf38decde87d1a58ae17e	2016	cigarettes	Adults	1540	questionnaire	To estimate the price elasticity of cigarette demand for university students aged 18-24 years in Jordan.	Higher taxes may be particularly effective in reducing smoking among University students in Jordan	-		10 universities

Supplementary table 2: Researches that is directed into smoking cessation among Jordanians³³⁻⁵⁶.

*Pilot study used

Name of research	Link	Year	Smoking type assessed	Sample type	Sample size	Collection methodology (research strategy)	Aim	Findings	Type of study	Type of survey	Region of collection
E-cigarettes use among university students in Jordan: Perception and related knowledge*	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85122031579&doi=10.1371%2fjournal.pone.0262090&partnerID=40&md5=1976fdf4244895134ee4df6c9312928b	2021	E-cigarettes	Adult university students	1259	Online questionnaire	Study the perceptions, and knowledge of e-cigarettes among university students in Jordan	The main reason for smoking e-cigarettes is to help cigarettes smoking cessation.	Cross-sectional	Self-administered	All 3 regions of Jordan
Perception of adults toward electronic cigarettes: A cross-sectional study from Jordan*	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85100024175&doi=10.1017%2fS1463423621000062&partnerID=40&md5=4366516dd01ec80632b7a6058827dce	2021	E-cigarettes	Adults	984	Online questionnaire	To the prevalence of E-cig smoking among Jordanian adults, and to assess the perception and beliefs towards it.	33.1% is the prevalence of e-cig smoking with moderate perception toward safety.	Cross-sectional	Self-administered	All 3 regions of Jordan
E-cigarettes culture among university students in Jordan: A cross-sectional study	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85116397790&partnerID=40&md5=95e651610af2f3d51e4eed6c42b4372a	2021	E-cigarettes	University students	1259	Online questionnaire	The perceptions, and knowledge of e-cigarettes among university students in Jordan	E-cigarette smoking used to help cigarettes smoking cessation is the main reason for smoking e-cigarettes	Cross-sectional	Self-administered	
Knowledge, attitude and smoking patterns among pregnant women: A Jordanian perspective	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85105772221&doi=10.5334%2fAOGH.3279&partnerID=40&md5=a6585fb48a175d5f6962d26b70f8c7c8	2021	3 types	Pregnant women	268	Interview questionnaire	To investigate the smoking patterns and attitudes of Jordanian pregnant women and their knowledge about maternal and fetal risk factors with tobacco use during pregnancy.	High prevalence of smoking among pregnant women, and alternative forms of tobacco consumption are high, with a limited knowledge of the health hazards of all forms of smoking during pregnancy	Cross-sectional	Interview administered	Irbid
Attitudes and Knowledge of the Harmful Effects of Waterpipe Tobacco Smoking among university students: A study from Jordan*	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85104261445&doi=10.1007%2fs11356-021-13888-5&partnerID=40&md5=219b8f742bd6e65e87dce6fd14f72da9	2021	Waterpipe	University students	966	Online questionnaire	To examine the attitude, knowledge, and factors affecting the knowledge of university students toward the harmful effects of WTS	They have indicated wrong perceptions about WTS, as being less harmful and non-addictive when compared to cigarette smoking	Cross-sectional	self-administered	3 regions of Jordan
Use and beliefs about e-cigarette among college students in Jordan	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85090532806&partnerID=40&md5=78a74bd822d4deb3c2f55f42123445e7	2020	E-cigarettes	University students	320	Questionnaire	E-cigarettes use and beliefs between college students in Jordan	The awareness was high, and college students' beliefs about E-cig could affect their decision for trying them	Cross-sectional	Self-administered	Hashemate university
The effect of health education on second-hand smoke knowledge and exposure among pregnant women in Jordan: A quasi-experimental study	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85138125130&doi=10.1016%2fj.heliyon.2022.e10647&partnerID=40&md5=6085b6c2213ae34776a35f2a45ec3844	2022	Secondhand smoking	Pregnant women	136	Questionnaire	To examine the effectiveness of a health education program in decreasing SHS exposure and increasing pregnant women's knowledge of its harmful effects.	The importance of a program to educate pregnant women about the negative impact of SHS	Quasi-experimental	-	Government teaching hospital in Northern Jordan

Risk perception of waterpipe smoking among undergraduate medical and nursing students in Jordan*	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85095949939&doi=10.1080%2f14659891.2020.1841843&partnerID=40&md5=31763ad79dcdd212b421fcd270ba6c2	2021	Waterpipe	medical and nursing students	505	Questionnaire	To assess the risk perceptions and behaviors of waterpipe smoking among undergraduate medical and nursing students in Jordan.	Students perceived waterpipe smoking as less harmful to health and not as addictive as cigarette smoking.	Cross-sectional	Self-administered	Jordan University of Science and Technology
Knowledge, attitudes, beliefs and patterns of waterpipe use among Jordanian adults who exclusively smoke waterpipes*	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85039909816&doi=10.1177%2f1474515117719592&partnerID=40&md5=b2de36947e025b0304780b7163b73de3	2018	Waterpipe	adults	247	Questionnaire	To assess levels of knowledge, attitudes, beliefs and patterns of WPS among Jordanian waterpipe-only smokers.	Waterpipe smoking participants started WPS at an early age, and social smoking is the most factors that drives WPS in them.	Cross-sectional	Interview and self-administered	Cafés in Jordan
Health Literacy and Smoking Habits Among a Sample of Jordanian University Students	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85138134466&doi=10.1007%2fs10900-022-01139-8&partnerID=40&md5=3f922ae6eefad27af28c06ef023cc91	2022	Both	University students	327	Questionnaire	To examine the association between university students' health knowledge and smoking habits.	Health knowledge is negatively associated with smoking in a sample of Jordanian university students.	Cross-sectional	Self-administered	Jordan
Knowledge, attitude, practice and perceived barriers towards smoking cessation services among community pharmacists	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85130758630&doi=10.18549%2fPharmPract.2022.1.2637&partnerID=40&md5=f9dfa1b442ef7f0d107afef509a7f12	2022	Smoking	Pharmacist	95	Questionnaire	Assessing the community pharmacists' knowledge, attitudes, and practice towards smoking cessation and identifying their perceived barriers for smoking cessation counselling	Tobacco use cessation services among the community pharmacists was sub-optimal. There is a good positive attitude and a low practice levels were observed. The lack of educational materials, low patients' demand, knowledge deficits, low training and the lack of cessation programs have been identified as barriers hindering the provision of smoking cessation services.	Cross-sectional	Self-administered	Irbid
Electronic Cigarettes Prevalence and Awareness Among Jordanian Individuals (couldnt find full text)	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85089291275&doi=10.1007%2fs10900-020-00904-x&partnerID=40&md5=f6c36beb1fe5b54d56b1a5b7de11c92e	2021	E-cigarettes	Jordanian population	1536	Questionnaire	Investigate the prevalence of E-Cigarette awareness, perceived harmfulness, prevalence, and relations with smoking-cessation outcomes among different age groups and different sex in Jordanian individuals.	E-cigarettes smoking is considered a new modality of smoking with inadequate data regarding its long term impact regarding its addictive behavior and toxic effect.	Cross-sectional	-	-
Dataset on perception among male secondary school students on underage smoking in Jordan	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85078681333&doi=10.1016%2fj.dib.2020.105119&partnerID=40&md5=6dbf2704ade75cc83cb9cf9784952221	2020	Smoking	School students (age14-17)	1166	Questionnaire	Perception among male secondary school students on underage smoking in Jordan	-	-	A youth questionnaire on underage smoking	Jerash
Knowledge and Beliefs of Jordanian Community Toward E-cigarettes: A National Survey	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85089137815&doi=10.1007%2fs10900-020-00896-8&partnerID=40&md5=151c0a30a36ef5cff6c7499cbbdb26ac	2021	E-cigarettes	Adult population aged ≥ 18 years	1820	Face-to-face survey	Knowledge and Beliefs of Jordanian Community Toward E-cigarettes	Quitting conventional smoking and enjoying the flavor were the most common reasons to start vaping. Friends were the major source of information about e-cigarettes. There was evidence that adults aged 45–59 years were less likely to be dual smokers. Poor knowledge about the content and types of e-cigarettes was reported. Electronic cigarettes	Cross-sectional	-	-

									were considered helpful in smoking cessation by 69.1% of participants.			
Youth attitudes towards water pipe smoking in Amman - Jordan	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84876266860&doi=10.12816%2f0001067&partnerID=40&md5=a8824b09eeebda3ef08a1d12499874ed	2013	Waterpipe	School children	513	Survey	To investigate attitudes, beliefs, and perceptions related to waterpipe smoking among school children in Amman, Jordan	265 of the students surveyed (52.2%) had tried waterpipe smoking before. About a quarter of the participants had tried a waterpipe when they were ≤10 years of age	Cross-sectional	Self-administered		Amman
Knowledge, attitudes, and behavior in avoiding secondhand smoke exposure among non-smoking employed women with higher education in Jordan	https://www.scopus.com/inward/record.uri?eid=2-s2.0-82555193592&doi=10.3390%2fijerph8114207&partnerID=40&md5=307b3c4f2a463649520e35007d6a6f4a	2011	cigarettes	Employed women	209	Employed Jordanian women	To assess the knowledge, attitudes, and avoidance behavior towards secondhand smoking exposure among employed Jordanian women with higher education	There is a large difference between secondhand smoking exposure, knowledge, attitudes and avoidance behavior among highly educated Jordanian women that is likely influenced by culture and traditional gender roles	Cross-sectional	Self-administered		Irbid and Zarga'
Smoking prevalence, knowledge and attitudes among primary healthcare professionals: A study from Jordan; [Prévalence, connaissances du tabagisme et comportements associés parmi les professionnels de soins de santé primaires: Étude jordanienne]	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85011601768&doi=10.26719%2f2016.22.12.872&partnerID=40&md5=247d7604159f36d877da703bf48a5d4d	2016	Cigarettes	Healthcare professionals	417	Questionnaire	To study smoking prevalence, knowledge and attitudes among primary healthcare professionals: A study from Jordan	Compared to hospitals and the general population, smoking was less prevalent among primary healthcare professionals and more prevalent in men. More than 90% of participants believed that smoking was dangerous and associated with cardiovascular and respiratory diseases. Only 15.3% of participants felt well prepared when counselling patients about smoking and 92.8% believed that they needed training.	Cross-sectional	Self-administered		Northern Jordan
Smoking behavior and views of Jordanian dentists: A pilot survey*	https://www.scopus.com/inward/record.uri?eid=2-s2.0-0038193775&doi=10.1067%2fmoe.2003.28&partnerID=40&md5=e10577f77a23b94c4d3201c926d4560b	2003	Cigarettes	Jordanian dentists	849	Questionnaire	Examine tobacco use among Jordanian dentists and their views on smoking	Despite the high proportion of general dentists who were current smokers, many have positive views on the tobacco issue.	-	-		All regions

Supplementary table 3: Researches that is directed into the perception and knowledge of smoking among Jordanians⁵⁷⁻⁷⁵.

*Pilot study used

Name of research	Link	Year	Smoking type assessed	Sample type	Sample size	Collection methodology (research strategy)	Aim	Findings	Type of study	Type of survey	Region of collection
Smoking habits and attitudes towards smoking among university students in Jordan	https://www.scopus.com/inward/record.uri?eid=2-s2.0-0036832671&doi=10.1016%2fs0020-7489%2802%2900016-0&partnerID=40&md5=281f2	2002	Cigarettes	University students	650	Questionnaire	To estimate the prevalence of smoking and to describe the habits, attitudes, and practices related to smoking among	Prevalence of smoking was 28.6% (50.2% among males and 6.5% among females)		Self-administered	Irbid

	7db8cc9e1072868401e0097fbd9						students of Jordan University of Science and Technology (JUST)				
Trends of maternal waterpipe, cigarettes, and dual tobacco smoking in Jordan. A decade of lost opportunities	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85109599673&doi=10.1371%2fjournal.pone.0253655&partnerID=40&md5=a9acbb15b8c85db6d6bb60278ad2a2ca	2021	Waterpipe	Pregnant women	-	-	Estimate the prevalence of current maternal tobacco use by tobacco product (cigarette, waterpipe, and dual use) over a period of ten years.	Over the last decade, the prevalence estimates of current cigarette-only smoking slightly decreased. The prevalence estimates of current waterpipe-only use exceeded those for cigarette-only after 2007. Current dual use showed a continuous rise especially after 2009. Gradual increase in cigarette smoking (4.1% in 2007, and 5.7% in 2017) and in waterpipe use (2.5% to 6.4%).	Cross-sectional	Interviews administered by well-trained female workers.	Jordan
Cigarette smoking among health care workers at King Hussein Medical Center	https://www.scopus.com/inward/record.uri?eid=2-s2.0-48349116984&doi=10.1002%2fjhm.319&partnerID=40&md5=9c9989e72c39131b02345394f5018dcb	2008	Cigarettes	Health care workers at King Hussein Medical Center	600	Self-reported questionnaire	Prevalence of smoking among health care workers (HCWs) at King Hussein Medical Center	The overall prevalence of smoking was 65%. 56% of smokers smoked daily, with a mean consumption of 10 cigarettes per day. Smoking was more common among men (82%) than women (47%).	Cross-sectional	Self-administered	KHMC-Amman
Time trends of cigarette and waterpipe smoking among a cohort of school children in Irbid, Jordan, 2008-11	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84885016304&doi=10.1093%2feurpub%2fckt140&partnerID=40&md5=af9298f5d26b58d97b696b8c910b2aac	2013	Both	School children	1781	Survey	Detection of trends of cigarette and waterpipe smoking among a cohort of school children	Prevalence of current smoking (cigarettes or waterpipe) for boys was 22.9% and 8.7% for girls	Cohort	-	Irbid
Epidemiology, attitudes and perceptions toward cigarettes and hookah smoking amongst adults in Jordan*	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84946483432&doi=10.1007%2fs12199-015-0483-1&partnerID=40&md5=bc347b302090fd733bd3f5c6b0adb7fb	2015	Both	Adult population	869	Interviews	To assess cigarette and hookah smoking prevalence among adult population in Jordan and to determine predictors of smoking status	The overall prevalence of cigarette smoking in was 59.1 % among males and 23.3 % among females, while the overall prevalence of hookah smoking was 18.9 % among males and 23.1 % among females. Relaxation and imitation were the most commonly stated reasons for smoking	Cross-sectional	Interviews	3 regions of Jordan
Narghile (water pipe) smoking among university students in Jordan: Prevalence, pattern and beliefs	https://www.scopus.com/inward/record.uri?eid=2-s2.0-77952495119&doi=10.1186%2f1477-7517-7-10&partnerID=40&md5=73e5f09b8f5ca9bf904104deaf266276	2010	Waterpipe	University students	1454	Questionnaire	To investigate the prevalence and pattern of narghile use among students in three public Jordanian universities and to assess their beliefs about narghile's adverse health consequences.	36.8% of the surveyed sample indicated they were smokers comprising 61.9% of the male students and 10.7% of the female students	Cross-sectional	Self-administered	3 regions of Jordan

Prevalence, patterns and correlates of cigarette smoking in male adolescents in Northern Jordan, and the influence of waterpipe use and asthma diagnosis: A descriptive cross-sectional study	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84908060779&doi=10.3390%2fijerph110909008&partnerID=40&md5=447dc0a9d153637754f57509894aeba3	2014	Both	Male adolescents	815	Survey	To investigate the prevalence, patterns and predictors of tobacco smoking among early adolescent males in the North of Jordan and whether asthma diagnosis affects smoking patterns	The overall prevalence of ever having smoked a cigarette was 35.6%, with 86.2% of this group smoking currently. Almost half of the sample reported WP use	Cross-Sectional	Self-administered	Irbid
Infant exposure to environmental tobacco smoke: Jordan University hospital-based study	https://www.scopus.com/inward/record.uri?eid=2-s2.0-67649851002&doi=10.26719%2f2009.15.1.39&partnerID=40&md5=dbb2292e0a96e3ff3c062002c2e49c20	2009	cigarettes	Infant	220	Questionnaire and clinical assessment	To study infants exposure to environmental tobacco smoke during infancy period	A total of 60.0% of infants were reported to be exposed to passive smoking at home.	Cross-sectional	Self-administered by patients mothers	Amman
Exposure of pregnant women to waterpipe and cigarette smoke*	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84871552446&doi=10.1093%2fntr%2fnts119&partnerID=40&md5=021f06ff94a4ae600349f59161411e2c	2013	Cigarettes	Pregnant women	500	Survey	To determine the prevalence and patterns of cigarette, waterpipe, and passive smoking among pregnant women in Jordan.	7.9% of women were current cigarette smokers and 8.7% were current waterpipe smokers. About 82.4% of all women reported that they are exposed to cigarette smoke and 32.8% reported that they are exposed to waterpipe smoke.	Cross-sectional	Self-administered	North and Middle of Jordan
Patterns of water-pipe and cigarette smoking initiation in schoolchildren: Irbid longitudinal smoking study*	Patterns of water-pipe and cigarette smoking initiation in schoolchildren: Irbid longitudinal smoking study	2012	Both	School students	1781	Questionnaire	To find the prevalence and comparing cigarette and water-pipe smoking among young adolescents in a Middle Eastern setting	Prevalence of ever and current cigarette smoking was considerably higher in boys than girls both at baseline and follow up with the same findings were observed for water-pipe smoking although the differences between boys and girls were smaller. Ever smoking any kind (cigarette and/or water pipe) was reported by 31.4% of students at baseline and increased 2 years later, while current smoking any kind was reported by 15.2% of students at baseline and increased 2 years later	Cohort	Group-administered	City of Irbid, Jordan
Tobacco smoking status and perception of health among a sample of Jordanian students	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84904353639&doi=10.3390%2fijerph110707022&partnerID=40&md5=118fae2aff44e0287fb516f272f9d8e	2014	Both	11-18 year old school students	1050	Parent phone calls	To estimate the prevalence of tobacco use and to assess the relationship between use and health-related perceptions	Rates of waterpipe-only and cigarette-only smoking were 7% and 3%, respectively, and were similar for boys and girls. In contrast, the rate of dual use was much higher than for single product use and was double in girls compared to boys (34% vs. 17%). Dual-smokers were	Cross-sectional	Group-administered phone calls	Zarga

								significantly more likely to think that it is safe to smoke as long as the person plans to quit within two years in comparison to non-smokers, and had lower self-rated health status than other groups.			
Smoking patterns among Jordanian health professionals: A study about the impediments to tobacco control in Jordan	https://www.scopus.com/inward/record.uri?eid=2-s2.0-80054862390&doi=10.1016%2fj.ejcnurse.2010.08.001&partnerID=40&md5=41a0166af0f58e335599277cb4a24af	2011	Cigarettes	Arab nurses and physicians	918	Survey	This study aims to assess smoking patterns among Arab nurses and physicians.	38.8% are current smokers. Male nurses 83.8% and male physicians prevalence were high 94.6% compared to female nurses 16.2% and female physicians 5.4%	Cross-sectional	Interview	Three major regions of Jordan (north, central Amman and south)
Cigarette smoking among Jordanian adults	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84862307028&doi=10.1080%2f15332640.2012.674888&partnerID=40&md5=ca46f31585172e072b4c27e0978f7c30	2012	Cigarettes	Jordanian adults	600	Survey	To determine the rate of cigarette smoking and correlates of its use among a sample of Jordanian adults	About half of the population 45% had smoked a cigarette in the past month, 40% in the past week, and 36% in past 24 hours	Cross-sectional	Self-administered	Physician clinic, two academic institutions, three shopping centers, and a marketing company.
Pattern of cigarette and waterpipe smoking in the adult population of Jordan; [Caractéristiques de la consommation de cigarettes et du narguilé dans la population adulte de Jordanie]	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84907810577&doi=10.26719%2f2014.20.9.529&partnerID=40&md5=5ce57b239e4c7d962745aa9ab4e84064	2014	Cigarettes, waterpipes, cigars and pipes	general population	3196	Questionnaire	Determine the prevalence of smoking among Jordanians in relation to demographics with a focus on 4 types of tobacco products	Overall 32.3% of the respondents reported being current smokers (54.9% of males and 8.3% of females) and 2.9% were ex-smokers. Cigarette smoking was the most frequent type of tobacco smoking. Waterpipe smoking was the second most common habit and was significantly associated with lower age in both genders.	Cross-sectional	Interviews	Major cities (each city with a population of more than 100 000 was considered a stratum, i.e. 6 cities)
Prevalence, social acceptance, and awareness of waterpipe smoking among dental university students: A cross sectional survey conducted in Jordan	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84964314245&doi=10.1186%2f1756-0500-7-832&partnerID=40&md5=12179eb39715e218930646e0d419b0db	2014	Waterpipe	Dental university students	574	Questionnaire	Prevalence, social acceptance, and awareness of waterpipe smoking among dental university students	Among female dental students, waterpipe smoking was more prevalent than cigarette smoking. In addition, there is room for improvement in dentistry students' knowledge of the dangers of waterpipes..	Cross-sectional	Self-Administered	-
Design, baseline results of irbid longitudinal,	https://www.scopus.com/inward/record.uri?eid=2-s2.0-82255169425&doi=10.5993%2f	2011	Both	Youth and adolescents	1781	Questionnaire	To compare patterns of water pipe and cigarette smoking.	Water-pipe smoking is more prevalent than cigarette smoking at this early age.	Quantitative	-	Irbid

school-based smoking study	2fajhb.35.6.10&partnerID=40&md5=6504e1e3ec615e63a2bf48764bec205a										
Patterns of cigarette smoking in Jordan: a study of greater Amman area	https://www.scopus.com/inward/record.uri?eid=2-s2.0-0025975939&doi=10.5144%2f0256-4947.1991.144&partnerID=40&md5=b6c871ea9f3300845defb7ed95422e5a	1991	Cigarettes	Jordanian population	3489	Questionnaire	To study current smoking patterns in a Jordan population and determine the various influences	It is apparent that a rigorous campaign is needed in Jordan to reduce the high prevalence of smoking.	Qualitative	-	Amman
Jordanian nurses' and physicians' learning needs for promoting smoking cessation	https://www.scopus.com/inward/record.uri?eid=2-s2.0-55249101766&doi=10.1111%2fj.1751-7117.2008.07745.x&partnerID=40&md5=9c348d7bfac72b12f97752456fbcd0db	2008	Smoking	Adult physicians and nurses	251	Questionnaire	To assess the prevalence of smoking among Jordanian nurses and physicians	This study showed that cigarette smoking among male Jordanian health professionals is highly significant as compared with their female counterparts. More women than men, however, smoke argileh	Cross-sectional	Self-administered	5 hospitals
Cigarette smoking behavior among Jordanian adolescents	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85029944225&partnerID=40&md5=b05ea9185be794525a470beb22ad0bc8	2016	Smoking	Adults	600	Survey	to determine the rate of cigarette smoking among adults in Jordan and the correlates of its use	High rates of cigarette smoking, with approximately half of the population (45%) using a cigarette in the past month, 41% in the past week, and 36% in the past 24 hours	Cross-sectional	Self-administered	Amman

Supplementary table 4: Researches that is directed into the prevalence of smoking among Jordanians ⁷⁶⁻⁹³.

*Pilot study used

Name of research	Link	Year	Smoking type assessed	Sample type	Sample size	Collection methodology (research strategy)	Aim	Findings	Type of study	Type of survey	Region of collection
Dual tobacco smoking is the new trend among adolescents: Update from the Irbid-TRY	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85028769646&doi=10.1080%2f14659891.2017.1348559&partnerID=40&md5=4ad0a52f6dfeb3f66a520ea611a8e65c	2018	Both	Adolescents	2407	Data from Irbid-TRY study, interview and physical examination	Evaluation of the relationship of some socio-economic factors with smoking pattern	Older boys with higher family income have rapid progression in rapid smoking particularly dual smoking	Cross-sectional	-	-
Perceptions, symptoms, and practices of electronic cigarette users: Descriptive analysis and validation of Arabic short form	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85100025399&doi=10.1371%2fjournal.pone.0245443&partner	2021	E-cigarettes	Adults	400	Online questionnaire	To investigate the demographic characteristics, usage patterns, and E-related health perceptions	Dual use of tobacco cigarettes and e-cigarettes in Jordan has a high prevalence in Jordan.	Cross-sectional	Self-administered	-

vaping consequences questionnaire	ID=40&md5=7f328307ebf4f3cd90a77d655d5d5412						among EC users in Jordan				
Informing tobacco control policy in Jordan: Assessing the effectiveness of pictorial warning labels on cigarette packs	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85026650588&doi=10.1186%2f12889-017-4642-8&partnerID=40&md5=5f3ec490b6fdf85bc2d43f9d12bf6247	2017	Cigarettes	University adults	920	Interview questionnaire	To assess the effectiveness of the new set of PWLs after having them circulate on the market for 2.5 years	The results indicate an overall effectiveness of the PWL set. One third of those who report frequently seeing PWLs reported the PWLs had influenced them to the extent they considered quitting.	Cross-sectional	Interview administered	
Prevalence of nicotine dependence among university students in Jordan: A cross-sectional study*	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85069536687&doi=10.2427%2f13075&partnerID=40&md5=c0588097a45e336fc3ed47dde2aab01	2019	Smoking	University students	892	Questionnaire	To identify the prevalence of nicotine dependence and assess the factors associated with dependence among university students in Jordan.	Several socio-demographic characteristics had an impact on nicotine dependence.	Cross-sectional	Self-administered	Universities in Jordan(2 public+3 private)
Trauma exposure, mental health and tobacco use among vulnerable Syrian refugee youth in Jordan*	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85089712331&doi=10.1093%2fpubmed%2ffd128&partnerID=40&md5=185271e38aa04a59ab4756c1f690e279	2020	Both	Syrian refugee youth	418	Questionnaire	Examine patterns of smoking by tobacco product (cigarette versus waterpipe) and gender, and assess the associations of PTSD and depression symptoms, trauma exposure and perceived social support with current smoking status in boys and girls.	One in 7 boys and one in 14 girls were current smokers, with boys reporting greater tobacco use than girls. Among boys, current smokers reported significantly higher family member loss and lower perceived family social support than nonsmokers; among girls, current smokers also reported significantly higher family member loss as well as greater PTSD symptoms and lower perceived significant other/special person social support.	Cross-sectional	Self-administered	
Electronic Smoking Behavior Among Adult Males in Jordan	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85098594713&doi=10.1007%2f10900-020-00953-2&partnerID=40&md5=d7ed745aefa0b678aedb5120382c5158	2021	E-cigarettes	Adult males	1536	Questionnaire	To observe the E-cigarettes smoking pattern among Jordanian adults and the effect on health, and its impacts on a smoking pattern among traditional cigarette smoker	Social media and other internet websites are the primary sources of knowledge regarding E-cigarettes.	Cross-sectional	Self-administered	Jordan

Second-hand smoke exposure among coronary heart disease patients	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85079179277&doi=10.2147%2fJMDH.S238984&partnerID=40&md5=206178a2a9e6335aba824688a7033807	2020	Secondhand smoking	Coronary heart disease patients	400	-	Assess second-hand smoke (SHS) exposure among coronary heart disease (CHD) patients, assess demographic factors that predict second hand smoking and to investigate correlation between second hand smoking and coronary heart disease complications	Exposure to SHS was positively associated with CHD complications and the number of admissions, while it was negatively associated with the age at diagnosis with CHD	Cross-sectional	Structured face to face interview	Amman, Irbid, north part of Jordan
Water pipe tobacco smoking among university students in Jordan	https://www.scopus.com/inward/record.uri?eid=2-s2.0-77955245310&doi=10.1093%2fntr%2fntq055&partnerID=40&md5=79a2feb0276d467b96c08b08f3e102db	2010	Waterpipe	University students	548	Questionnaire	To assess the prevalence of waterpipe tobacco smoking among university students in Jordan and to determine associations between sociodemographic variables and waterpipe tobacco smoking in this population.	There is high prevalence of waterpipe smoking in Jordan. Although use is associated with male gender and upper middle income levels, use is widespread across other sociodemographic variables	Cross-sectional	Interviewer administered	Universities in Jordan
Waterpipe a gateway to cigarette smoking initiation among adolescents in Irbid, Jordan: A longitudinal study*	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84925621698&doi=10.5588%2fijtld.14.0869&partnerID=40&md5=4b61135c1e1f18a7dad7a97145a6ce7c	2015	Waterpipe	School-based sample of adolescents	1454	Questionnaire	To compare the risk of cigarette smoking initiation among waterpipe-only smokers and never smokers in a school-based sample of adolescents from Irbid, Jordan.	Risk of initiation of cigarette smoking among waterpipe smokers was significantly higher in comparison with never smokers. The association between waterpipe and cigarette smoking initiation was dose-dependent. The risk of initiating cigarette smoking increased with increase in the frequency of waterpipe smoking	Cohort	Pilot-tested questionnaire	Irbid
Smoking and health: Opinions and awareness among general dentists in Jordan*	https://www.scopus.com/inward/record.uri?eid=2-s2.0-0035751797&doi=10.1002%2fj.1875-595X.2001.tb00861.x&partnerID=40&md	2001	Cigarettes	General dentists	849	Employed Jordanian women	To examine dentists' awareness on major health risks associated with smoking and their opinions on factors that	The majority of respondents related lung cancer to smoking, however, associations with other cancers were the least reported.	Cross-sectional	Self-administered	3 regions of Jordan

	5=4039658ad5828fb0e11f70944a0b48f8						influence tobacco use	Most dentists associated tobacco use with staining of teeth, whereas fewer dentists reported that smokers have increased risks of oral cancer and potentially malignant oral lesions			
Waterpipe smoking among middle and high school Jordanian students: Patterns and predictors	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84890464956&doi=10.3390%2fijerph10127068&partnerID=40&md5=e75f0e6c68cfa1c0ad74d0dcb15b8f92	2013	Waterpipe	school students	993	Questionnaire	To assess the patterns and the predictors of waterpipe smoking among school aged students in one of Jordan's Central Governorates	About 8% of all participants smoked waterpipes during social gatherings, while 44% of the participants had friends who also smoked waterpipes. Mean age of first waterpipe smoking was 13 years.	Cross-sectional	Self-administered	The Zarqa Governorate located in the central part of Jordan
Association of Religious Commitment and Tobacco Use Among Muslim Adolescents	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84942499933&doi=10.1007%2fs10943-014-9921-4&partnerID=40&md5=3da0da126f05f7563ca98cb8dbffa923	2015	Cigarettes	Governmental school students	950	Questionnaire	To examine the relationship between religious observance and tobacco use among a sample of Jordanian youth	Compared with those who did not pray at all, adolescents who were fully committed to daily prayers were 0.24 and 0.27 times less likely to smoke cigarettes or water pipe, respectively. On the other hand, attendance of religious events was not significantly associated with either cigarette or water pipe use.	Cross-sectional	-	-
The social factors implicated in cigarette smoking in a Jordanian community	https://www.scopus.com/inward/record.uri?eid=2-s2.0-33947099945&doi=10.3923%2fpjbs.2007.741.744&partnerID=40&md5=d8b322759ddb6bc44352da2ffc1e3c0b	2007	Cigarettes	general population	851	Questionnaire	To discover the environmental factors and social influences that motivate Jordanian students to smoke.	The major reasons to start smoking were to try something new and spending free time with friends more than with family. There was a positive correlation between nonsmokers and high level of education.	Qualitative	Self-administered	Participants drawn from Al-Isra University Student and nearby scholars
Waterpipe use and cognitive susceptibility to cigarette smoking among never-cigarette smoking Jordanian	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84939424665&doi=10.1093%2fntr%2fntu	2015	Both	(13–15 years) school students	1,476	Questionnaire	The study investigated whether waterpipe smoking was associated with	The first study to report that WP use may increase youth's susceptibility	Cross-sectional	Self-administered	-

youth: Analysis of the 2009 Global Youth Tobacco Survey	140&partnerID=40&md5=a343b96162f16fb7d0499c2f0fc763a4							increased susceptibility to cigarette smoking.	to initiate cigarette smoking.			
Predictors of cigarette smoking progression among a school-based sample of adolescents in Irbid, Jordan: A longitudinal study (2008-2011)	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84963815481&doi=10.1093%2fntv%2fntv100&partnerID=40&md5=2b0861e9d995c83c9ad5f7778838970	2016		Adolescents in Irbid, Jordan	1781	Questionnaire	To identify gender-specific individual and social predictors of cigarette smoking progression among a school-based sample of adolescents	Boys and girls progressed similarly in cigarette smoking once they initiated the habit. Progression among boys were peer-related while girls were only family-related.	Cohort	-		Irbid
Predictors of waterpipe smoking progression among youth in Irbid, Jordan: A longitudinal study (2008-2011)	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84937637161&doi=10.1016%2fj.drugalcdep.2015.05.008&partnerID=40&md5=b9d68a95b69d17ced7e4defae4951878	2015		Youth in Irbid, Jordan	1781	Questionnaire	This study identifies the gender-specific predictors of waterpipe smoking progression among adolescents in Irbid, Jordan	About a third of waterpipe smokers progressed in their habit during the 3 year follow up. Factors predicting progression of use differed by gender.	Cohort	-		Irbid

Supplementary table 5: Researches that is directed into the factors that affect smoking among Jordanians⁹⁴⁻¹⁰⁹.

*Pilot study used

Name of research	Link	Year	Smoking type assessed	Sample type	Sample size	Collection methodology (research strategy)	The scope of research	Aim	Findings	Type of study	Type of survey	Region of collection
Influencing Readiness and Intentions to Offer Tobacco Dependence Treatment Through Training: King Hussein Cancer Center and Global Bridges Promoting an Underutilised Specialty in the Eastern Mediterranean Region	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84980349489&doi=10.1017%2fjsc.2016.17&partnerID=40&md5=fba9f9313a718676e139519ec0809787	2017	Smoking	Healthcare workers	433	-	Healthcare workers	Present the process of developing a structured TDT training program for the EMR, and the evidence of value of our training program as a result of evaluating the immediate outcomes achieved post-training	TDT training achieves positive change in precursors of provider practice and patient health outcomes; namely knowledge, confidence, competence, and intentions	Cross-sectional	-	
A machine learning approach for predicting nicotine dependence	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85063726553&doi=10.14569%2fJA-CSA.2019.010032	2019	Waterpipe	Jordanian women	108	Questionnaire	Others	To develop a classifier that predicts the level of nicotine dependence for WP tobacco female smokers using a set of novel features relevant to	Their approach achieves a recall of 82% when applied on a dataset of female WP smokers in Jordan.	Cohort	Interview	Urban setting

	3&partnerID=40&md5=4f78300758423b97bd30b0e802590f77							<u>smokers including age, residency, and educational level.</u>				
Unhealthy eating habits among adolescent waterpipe smokers in Jordan: The Irbid-TRY study	https://www.scopus.com/inward/reCORD.uri?eid=2-s2.0-85049856648&doi=10.18332%2ftid%2f89976&partnerID=40&md5=0ea8b96e447edbbb4eb120faf8792eca	2018	Both	Boys and girls in grades 7–10	1720	Questionnaire	Others	To compare eating habits among adolescent cigarette-only, waterpipe-only, dual smokers versus non-smokers.	Overall, both waterpipe and dual smoking are associated with several unhealthy eating habits in adolescents.	cross-sectional	Self-administered	Northern Jordan
Association of smoking with direct medical expenditures of chronic diseases in north of Jordan: A retrospective cohort study*	https://www.scopus.com/inward/reCORD.uri?eid=2-s2.0-85073119599&doi=10.1136%2fbmjopen-2019-031143&partnerID=40&md5=f5a14f34e16d31be241213bf500cefc7	2019	smoking	Patients having at least one chronic disease	845	Hospital database	Others	To estimate the association of smoking with the direct medical expenditures for chronic disease management in north of Jordan.	Smokers and previously smokers presented with higher statistically significant inpatient-related and outpatient-related services costs and higher transformed mean total costs compared to non-smokers	Retrospective cohort	Patient interview.	KAUH, located in Ar-Ramtha, Irbid, Jordan.
Smoking Status Association with Intention to Vaccination against Coronavirus Disease-2019	https://www.scopus.com/inward/reCORD.uri?eid=2-s2.0-85140823113&doi=10.2174%2f18744346-V16-E2208050&partnerID=40&md5=90a4ebf9836e98d94ae0a8f95f1600f5	2022	Smoking	Jordanian adults	226	Cross-sectional data	Others	Examine the association between smoking status and the intention to get the COVID-19 vaccine.	Smokers appear to have a higher intention to get the COVID-19 vaccine	Cross-sectional	Online survey	Jordan
Effect of smoking on the response to nonsurgical periodontal therapy	https://www.scopus.com/inward/reCORD.uri?eid=2-s2.0-76649090280&doi=10.26719%2f2010.16.2.162&partnerID=40&md5=44c18f43343ba646c0cf3fe5438fbbbd	2010	Smoking	Adults	74	Physical examination	Oral health	The effect of smoking on the clinical response to non-surgical and surgical periodontal therapy	Smokers responded less favorably than non-smokers to periodontal therapy which included 3-month maintenance follow-up	Prospective cohort	-	-
Oral cancer in young Jordanians: Potential association with frequency of narghile smoking	https://www.scopus.com/inward/reCORD.uri?eid=2-s2.0-84908162515&doi=10.1016%2fj.oooo.2014.08.002&partnerID=40&md5=085190f284522211351bf09f30bbc722	2014	Both	Patients with oral cancer registered in the Jordanian National Cancer Registry	-	Interviews	Oral health	Study the association between oral cancer and smoking	Narghile smoking was independently associated with the development of oral cancer at a younger age	Cross-sectional	telephone-interview	Jordan
Validation of the Waterpipe Tolerance Questionnaire	https://www.scopus.com/inward/reCORD.uri?eid=2-s2.0-84996621884&doi	2015	Waterpipe	Adolescents	333	Questionnaire	Others	To assess the validity and reliability of an Arabic version of the modified waterpipe Tolerance Questionnaire WTQ	WTQ is a reliable instrument that can be used among adolescent waterpipe users to assess the level of nicotine dependence. The majority of	Cross-sectional	Self-administered	Zarqa'

Among Jordanian School-Going Adolescent Waterpipe Users	=10.5539%2fgjhs.v8n2p198&partnerID=40&md5=62c7231fb62a8c92c8ebaa618de29197							among school-going adolescent waterpipe users	adolescents who used waterpipe had either a moderate or high level of nicotine dependence.			
Association between cigarette smoking and periodontal health	https://www.scopus.com/inward/record.uri?eid=2-s2.0-0031197008&partnerID=40&md5=3fcbbae5f40fa6dea15ba3655b7ab21	1997	Cigarettes	Northern Jordanian adults	998	Physical examination	Oral health	To assess and compare the oral hygiene and periodontal status of smokers and nonsmokers	Oral hygiene was poor in both smokers and nonsmokers; however, smokers have significantly higher plaque and calculus scores compared to nonsmokers. No significant difference was found between the two groups with regard to gingival bleeding on probing or shallow or deep pocketing.	Cross-sectional	Interview	Northern Jordanian adults
The effects of cigarette smoking on the periodontal condition of young Jordanian adults	https://www.scopus.com/inward/record.uri?eid=2-s2.0-0038654212&doi=10.1034%2fj.1600-051X.2003.00279.x&partnerID=40&md5=b85966489a3a8619f72bdde6d33971a1	2003	Cigarettes	Young adults	100	Clinical examination	Oral health	To investigate the effects of cigarette smoking on the periodontal condition of young Jordanian adults.	Smokers had higher levels of plaque, more sites which bled in response to probing and a greater mean probing depth than never smokers	Case control	-	The School of Dentistry in Irbid for routine dental treatment
Smoking and caries experience in subjects with various form of periodontal diseases from a teaching hospital clinic.	https://www.scopus.com/inward/record.uri?eid=2-s2.0-66449090407&doi=10.1111%2fj.1601-5037.2008.00349.x&partnerID=40&md5=9c5a81d5a2a8f2046967bfecb8cf368a	2009	Cigarettes	Patients who were specifically referred to the Dental Teaching Clinic in Irbid, Jordan for periodontal treatment	560	Clinical examination	Oral health	To assess the relationships between aggressive periodontitis, caries and smoking	There is higher plaque and gingival index among smokers in all groups. Significant difference in the clinical attachment level between smoker and non-smoker in CP and AgP groups. There is significant increase in caries risk among smokers in all groups. Smokers and non-smokers of AgP group had significantly lower mean DMFT scores than those of CG or CP groups	Cross-sectional	Self-administered	Dental Teaching Clinic in Irbid, Jordan
Association between intensity of smoking and periodontal pockets among young university students.	https://www.scopus.com/inward/record.uri?eid=2-s2.0-58149380162&partnerID=40&md5=50e6c2e40e1f1f02cd52d4fb7ee1e61d	2008	Cigarettes	Jordanian university students aged between 18-28 years	357	Interview and clinical examination	Oral health	To examine the association between intensity and duration of cigarette smoking with the presence of periodontal pockets at a young adult age in relation to oral hygiene practices.	Among young smokers, this study has confirmed existence of significant association between smoking and presence of periodontal pockets, especially with increased intensity and longer duration of smoking.	Comparative study	Interviewed	Jordanian university students
The effect of waterpipe smoking on periodontal health	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85012236963&doi=10.3290%2fj.ohpd.a32671&partnerID=40&md5=33f96279c0bb3f61de5cd1959e51c440	2015	Waterpipe	General population	190	Intra-oral examination	Oral health	To determine the effect of waterpipe smoking on periodontal health.	Similar to cigarettes smoking, waterpipe smoking is associated with periodontal disease. Probing pocket depth and bleeding on pocket were significantly higher in smokers than nonsmokers	Cross-sectional	-	Irbid
Smoking prevalence and its effect on dental health attitudes and	https://www.scopus.com/inward/record.uri?eid=2-s2.0-33646448131&doi=10.1159%2f0000	2006	Smoking	Dental students in Jordan	314	Questionnaire	Oral health	To determine smoking prevalence and its effect on dental health attitudes and behavior among dental students in Jordan.	Smoking prevalence among male dental students in Jordan was high, 7 times greater than for females. Male smokers and nonsmokers had different attitudes and oral health behaviors.	Cross-sectional	-	All regions

behavior among dental students	92181&partnerID=40&md5=8630affd1bb95b79a6fd2bd75b9987d9											
The influence of different factors on the oral health status of smoking and nonsmoking adults	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84893406693&doi=10.5005%2fjip-journals-10024-1392&partnerID=40&md5=69583f213c6f051e02908f32b4ac13cb	2013	Both	University students.	669	questionnaire	Oral health	To determine the influence of smoking on self-reported oral health status among university students.	Smoking is significantly related to esthetics, calculus, tooth stains, halitosis, gingival bleeding, and gender	Cross-sectional	-	Universities

Supplement table 6: Researches that is directed into Healthcare workers, oral health and others in relation to smoking among Jordanians ¹¹⁰⁻¹²⁴.

*Pilot study used

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