



# OPIUM CONSUMPTION

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TO HUMANS

**Table S1.6.2B Exposure assessment quality of studies on cancer of the urinary bladder and opium consumption**

Reference and outcome	Type of study	Type of assessment	Exposure assessment relative to outcome	Could the “unexposed” reference group include exposed?	Definition of opium exposure	Intensity of exposure	Duration of exposure	Cumulative exposure	Temporality of opium use relative to study outcome <sup>a</sup>	Type of opium exposure	Method of exposure	Co-exposures collected in paper <sup>b</sup>
Sheikh et al. (2020)	Golestan Cohort study	Structured & validated questionnaire (GCSQ)	Prospective	Yes. Includes those who used for < 6 months and/or < 1 × per week	Defined (used opium at least once per week for at least 6 months)	Precise nokhod/d d/wk	Lifetime opium use history	Yes Nokhod-years	Past Combined	Raw Prepared Dross (n = 6) Combined Other heroin (n = 4)	Smoke Ingest Both smoke and ingest	Smoking tobacco cumulative pack years Hookah use ever/never Chewing tobacco (Nass) cumulative nass years Alcohol ever/never Food quality household fuel
Sadeghi et al. (1979)	Case control	Patient records	Retrospective	Yes. Includes opium users who are not addict	Undefined opium addict	No info	Undefined	No	No info	Undefined	Both smoke and ingest	Smoking tobacco data not available for majority of cases was estimated from another study
Asgari et al. (2004)	Case control	Patient records	Undefined /unclear	Yes. Comparison group was non “opium consumers” from medical records	Undefined, opium consumer	No info	Undefined	No	No info	Undefined	Undefined	Smoking tobacco
Hosseini et al. (2010)	Case control	Structured interview/questionnaire Diagnostic Interview Schedule from DSM-IV	Retrospective	Yes, unexposed group were not dependent or abusers by DSM-IV	Defined DSM-IV-TR diagnosed opioid dependence and abuse. Also urinary testing for opiates	No info (were physically dependent on opioids)	Duration of dependence	No	Combined	Raw Other: codeine, heroin	Smoke Ingest Both smoke & ingest Inject Other: snoring (likely to be sniffing the smoke from heating refined opium)	Smoking tobacco pack years and ever/never/former Those with occupational exposure risks (unspecified) were excluded Food (selected) Other environmental exposures, tea and coffee
Shakhssalim et al. (2010)	Case control	Structured interview/questionnaire	Retrospective	Unclear for some analyses (i.e. current exposure; referent group may include those with history of opium consumption)	Defined Former or current opium user at the time of the study, but some ambiguity about numbers of current versus former opium users	No info	Undefined	No	Combined	Undefined	Undefined	Smoking tobacco Occupational exposures in specific jobs Hot tea (cups not temperature) Food (variety) Other hair dye
Akbari et al. (2015)	Case control	Structured & validated questionnaire (GSCQ)	Retrospective	Yes. Includes those who used for < 6 months and/or < 1 × per week	Defined ever used opium	Precise (nokhod/d d/wk)	Lifetime opium use history as duration in years	Yes Nokhod-years	Combined	Combined few dross and heroin users	Both smoke and ingest	
Aliramaji et al. (2015)	Case control	Patient records and phone calls	Undefined /unclear	Yes. Includes those who used opium ≤ 1 year	Defined, Opium user > 1 year)	No info	Lifetime opium use history	No	Combined	Undefined	Undefined	
Ghadimi et al. (2015)	Case control	Structured interview/questionnaire	Retrospective	Yes. Comparison group had no “drug abuse”	Undefined “drug abuse”	No info	Undefined	No	No info	Undefined	Smoke	
Lotfi et al. (2016)	Case control	Structured interview/questionnaire	Retrospective	No. unexposed were those without a history of opium use	Undefined opium history	No info	Undefined	No	No info	Undefined but type of opium mentioned in results	Undefined	

<sup>a</sup> Indicates proximity of assessed exposures to the time of cancer occurrence: response options are “recent,” “past,” “combined,” “no info”.

d, day; wk, week.

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