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Opioid Use among People with Migraine: Results of the OVERCOME (US) Study

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Supplemental Table 1. Sociodemographic, Clinical, and Migraine-Related Variables Included in the Analysis

Domains	Variable	Response Type	Reference Value
Demographics and lifestyle	Age	Continuous	N/A
	Sex	Binary (Male/Female)	Female
	Race	Categorical (White only, Black only, Others)	Black only
	Ethnicity	Binary (Hispanic/Not Hispanic)	Not Hispanic
	Education (at least college degree)	Binary (Yes/No)	No
	Employment status (Full/Part)	Binary (Yes/No)	No
	Healthcare insurance	Binary (Yes/No)	No
	Urban/Rural	Binary (Urban/Rural)	Rural
	Region	Categorical (Midwest [WI, IL, MI, IN, OH, ND, SD, NE, KS, MN, IA, MO]/Northeast [ME, NH, VT, MA, RI, CT, NY, NJ, PA]/South [KY, TN, MS, AL, FL, GA, SC, NC, VA, WV, DC, MD, DE, TX, OK, AR, LA]/ West [MT, ID, WY, NV, UT, CO, AZ, NM, WA, OR, CA, AK, HI])	Midwest (WI, IL, MI, IN, OH, ND, SD, NE, KS, MN, IA, MO)
	Total household income	Ordinal (1/2/3/4/5+)	1

	Household income	Ordinal (< \$15,000/\$15,000 — \$24,999/\$25,000 — \$34,999/\$35,000 — \$49,999/\$50,000 — \$74,999/\$75,000 — \$99,999 /\$100,000 — \$124,999/\$125,000 — \$149,999/\$150,000 — \$199,999/\$200,000 or over)	\$100,000 — \$124,999
	Children under 18 living in household	Binary (Yes/No)	No
	Marital status	Binary (Yes/No)	No
Health status and comorbidities	Presence of self-reported comorbidity that is a contraindication for triptan use	Binary (Yes/No)	No
	PHQ-4	Ordinal (Range 0-12)	0
	Number of self-reported cardiovascular comorbidities	Ordinal (0/1/2+)	No
	Allergies	Binary (Yes/No)	No
	Asthma	Binary (Yes/No)	No
	Sleep apnea	Binary (Yes/No)	No
	Digestive comorbidity	Binary (Yes/No)	0
	Number of self-reported joint or pain comorbidities	Ordinal (0/1/2+)	0
	Psychiatric comorbidity	Ordinal (0/1/2/ 3)	No

	Marijuana use	Binary (Yes/No)	No
	Tobacco use	Binary (Yes/No)	No
Migraine characteristics	Acute OTC medicine overuse	Binary (Yes/No)	No
	mTOQ	Ordinal (Sum of 1=Very poor/2–6=Poor/7–8=Moderate/9=Maximum treatment efficacy)	Sum of 1=Very poor treatment efficacy
	Hesitating to seek care	Categorical (Yes/No/Don't remember)	Don't remember
	Currently using behavioral techniques for managing migraine	Binary (Yes/No)	No
	ED/Urgent care visit for migraine in the previous 12 months	Binary (Yes/No)	No
	Migraine diagnosis	Binary (Yes/No)	No
	Years with migraine	Continuous	N/A
	Headache pain intensity score	Continuous (Range 0-10)	N/A
	Unilateral pain	Ordinal (All or nearly all of the time/Half the time or more/less than half the time/Never/Rarely)	All or nearly all of the time

	Pain is pounding, pulsating, or throbbing	Ordinal (All or nearly all of the time/Half the time or more/less than half the time/Never/Rarely)	All or nearly all of the time
	Pain has moderate or severe intensity	Ordinal (All or nearly all of the time/Half the time or more/less than half the time/Never/Rarely)	All or nearly all of the time
	Pain is made worse by routine activities such as walking or climbing stairs	Ordinal (All or nearly all of the time/Half the time or more/less than half the time/Never/Rarely)	All or nearly all of the time
	Nausea	Ordinal (All or nearly all of the time/Half the time or more/less than half the time/Never/Rarely)	All or nearly all of the time
	Photophobia	Ordinal (All or nearly all of the time/Half the time or more/less than half the time/Never/Rarely)	All or nearly all of the time
	Phonophobia	Ordinal (All or nearly all of the time/Half the time or more/less than half the time/Never/Rarely)	All or nearly all of the time
	Osmophobia	Ordinal (All or nearly all of the time/Half the time or more/less than half the time/Never/Rarely)	All or nearly all of the time
	Neck pain	Ordinal (All or nearly all of the time/Half the time or more/less than half the time/Never/Rarely)	All or nearly all of the time

	Sinus pain	Ordinal (All or nearly all of the time/Half the time or more/less than half the time/Never/Rarely)	All or nearly all of the time
	Vomiting with headache	Ordinal (All or nearly all of the time/Half the time or more/less than half the time/Never/Rarely)	All or nearly all of the time
	Dizziness	Ordinal (All or nearly all of the time/Half the time or more/less than half the time/Never/Rarely)	All or nearly all of the time
	MIDAS	Ordinal (MIDAS score=0–5 [Little or No Disability], 6–10 [Mild], 11–20 [Moderate], 21+ [Severe])	MIDAS score=0–5 (Little or No Disability)
	MIBS-4	Ordinal (MIBS-4 Score=0 [None], 1–2 [Mild], 3–4 [Moderate], 5+ [Severe])	MIBS-4 Score: 0 (None)
	MSSS Score	Continuous (Range: 0–21)	N/A
	MSQ-RFR Score	Continuous (Range 0–100)	N/A
	Allodynia Symptom Checklist	Ordinal (None [0–2]/Mild [3–5]/Moderate [6–8]/Severe [9+])	Mild (3-5)
	Frequency of headaches	Ordinal (MHD=0–3/4–7/8–14/15+)	0-3
	Cohort Number	Categorical (1/2/3)	N/A

	Migraine symptoms interference with sleep	Ordinal (All of the time/Most of the time/A good bit of the time/A little bit of the time/Some of the time/None of the time)	A good bit of the time
	HCP that provided prescription for opioid	Ordinal (Primary Care/Specialist/ Emergency Department/Urgent Care /Other)	N/A
	Stigma	Categorical (MiRS-MB/SG(Very) Often/Rarely or Sometimes/Never)	Rarely
	Currently using OTC medication for migraine	Binary (Yes/No)	No
	Currently using recommended acute treatment for migraine	Binary (Yes/No)	No
	Currently using recommended preventive treatment for migraine	Binary (Yes/No)	No
	Currently using Triptans for migraine	Binary (Yes/No)	No
	Currently using Barbiturates for migraine	Binary (Yes/No)	No

Abbreviations: AK, Alaska; AL, Alabama; AR, Arkansas; AZ, Arizona; CA, California; CO, Colorado; CT, Connecticut; DC, District of Columbia (former name of Washington); DE, Delaware; ED, emergency department; FL, Florida; GA, Georgia; HCP, health care professional; HI, Hawaii; IA, Iowa; ID, Idaho; IL, Illinois; IN, Indiana; KS, Kansas; KY, Kentucky; LA, Louisiana; LASSO, least absolute shrinkage and selection operator; MA,

Massachusetts; MB, minimizing burden (MiRS category); MD, Maryland; MHD, monthly headache days; ME, Maine; MI, Michigan; MIBS, Migraine Interictal Burden Scale; MIDAS, Migraine Disability Assessment Questionnaire; MiRS, Migraine-related stigma; MN, Minnesota; MO, Missouri; MSQ-RFR, Migraine-Specific Quality of Life v2.1 Role Function Restrictive; mTOQ, migraine Treatment Optimization Questionnaire; MS, Mississippi; MSSS, Migraine Symptoms Severity Scale; MT, Montana; NC, North Carolina; ND, North Dakota; NE, Nebraska; NH, New Hampshire; NJ, New Jersey; NM, New Mexico; NV, Nevada; NY, New York; OH, Ohio; OK, Oklahoma; OR, Oregon; OTC, over-the-counter; PA, Pennsylvania; PHQ-4, Patient Health Questionnaire; RI, Rhode Island; SC, South Carolina; SD, South Dakota; SG, secondary gain (MiRS category); TN, Tennessee; TX, Texas; UT, Utah; VA, Virginia; VT, Vermont; WA, Washington; WI, Wisconsin; WV, West Virginia; WY, Wyoming.