

Appendix 1. Search strategy

Searches in MEDLINE, EconLit and Embase last conducted on January 17, 2022.

Search in MEDLINE:

((pric* OR tax* OR fiscal*)) AND (Alcohol drinking(MeSH) OR Alcohol* drink* OR Alcoholic beverages(MeSH) OR Alcohol* beverage* OR Beer(MeSH) OR Beer* OR Wine(MeSH) OR Wine* OR Liquor* OR Spirits OR Alcohol*) AND review*

Search in EconLit:

(TI(alcohol* OR wine* OR beer OR spirit* OR liquor*) OR AB(alcohol* OR wine* OR beer OR spirit* OR liquor*)) AND (TI(tax* OR price* OR fiscal* OR elasticit*) OR AB(tax* OR price* OR fiscal* OR elasticit*)) AND (TI(review*) OR AB(review*))

Search in Embase:

1. pric*.mp.
2. tax*.mp.
3. fiscal*.mp.
4. 1 or 2 or 3
5. Alcohol drinking.mp. or exp drinking behavior /
6. Alcohol drink.mp.
7. exp alcoholic beverage /
8. exp alcohol consumption / or Alcohol beverage.mp.
9. beer.mp. or exp beer /
10. exp wine / or wine.mp.
11. Liquor.mp.
12. Spirits.mp.
13. Alcohol.mp.
14. 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13
15. "review" /
16. 4 and 14 and 15

Search in LILACS, last conducted on January 12, 2022:

tw:(tw:((tw:(pric*)) OR (tw:(tax*)) AND (tw:(liquor*)) OR (tw:(spirits)) OR (tw:(beer*)) OR (tw:(wine)) OR (tw:(alcohol)) OR (mh:(alcohol beverages)) OR (mh:(beer)) OR (mh:(wine)) OR (mh:(alcohol drinking)))) AND (db:("LILACS") AND type_of_study:(("systematic_reviews"))) AND (type_of_study: ("systematic_reviews" OR "overview" OR "policy_brief" OR "sysrev_observational_studies" OR "structured_summary_of_systematic_review"))

Search in Chinese, last conducted July, 2016

We searched, in Chinese, a number of Chinese databases and online resources including the airiti Library, cnki.net, the Hong Kong Macau Periodicals Network, duxiu.com, cnbksy.cn, readopac.ncl.edu.tw and hkjo.lib.hku.hk.

Appendix 2. List of studies included in each ‘umbrella reviews of review’ and ‘review’

— Review of reviews

Anderson P, Chisholm D, Fuhr DC. Effectiveness and cost-effectiveness of policies and programmes to reduce the harm caused by alcohol. *The Lancet* 2009; 373(9682): 2234-46.

Number of studies:

- Reviews: 3 (Cook, 2007; Fogarty, 2006; Gallet, 2007; Wagenaar et al., 2009)
- High-income: 3 (Chaloupka et al., 2002; Farrell et al., 2003; Makela & Osterberg, 2009)
- LMIC: 1 (China) (Pan et al., 2006)

Jackson R, Johnson M, Campbell F, et al. Interventions on Control of Alcohol Price, Promotion and Availability for Prevention of Alcohol Use Disorders in Adults and Young People. Sheffield: School of Health and Related Research, University of Sheffield, 2010.

Number of studies:

- Reviews: 4 (Booth et al., 2008; Fogarty, 2006; Gallet, 2007; Wagenaar et al., 2009)
- High-income: 0
- LMIC: 0

Martineau F, Tyner E, Lorenc T, Petticrew M, Lock K. Population-level interventions to reduce alcohol-related harm: an overview of systematic reviews. *Prev Med* 2013; 57(4): 278-96.

Number of studies:

- Reviews: 3 (Booth et al., 2008; Elder et al., 2010; Jackson et al., 2010)
- High-income: 0
- LMIC: 0

Stockings E, Hall WD, Lynskey M, et al. Prevention, early intervention, harm reduction, and treatment of substance use in young people. *Lancet Psychiatry* 2016; 3(3): 280-96.

Number of studies:

- Reviews: 2 (Elder et al., 2010; Martineau et al., 2013)
- High-income: 0
- LMIC: 0

Burton R, Henn C, Lavoie D, et al. A rapid evidence review of the effectiveness and cost-effectiveness of alcohol control policies: an English perspective. *Lancet* 2017; 389(10078): 1558-80.

Number of studies:

- Reviews: 7 (Anderson et al., 2009; Dhalwani, 2011; Elder et al., 2010; Fogarty, 2010; OECD, 2015; Wagenaar et al., 2009; Xu & Chaloupka, 2011)
- High-income: 2 (Crawford et al., 2012; Stockwell, Zhao, et al., 2012)
- LMIC: 0

Siegfried N, Parry C. Do alcohol control policies work? An umbrella review and quality assessment of systematic reviews of alcohol control interventions (2006 - 2017). *PLoS One* 2019; 14(4): e0214865.

Number of studies:

- Reviews: 7 (Boniface et al., 2017; Elder et al., 2010; Korczak et al., 2011; Li et al., 2015; Nelson, 2015; Nelson & McNall, 2016; Wagenaar et al., 2009)
- High-income: 0
- LMIC: 0

— Reviews

Ornstein SI. Control of alcohol consumption through price increase. *J Stud Alcohol* 1980; 41(9): 807-18.
Ornstein SI, Levy D. Price and income elasticities of demand for alcoholic beverages. *Recent Dev Alcohol* 1983; 1: 303-45.

Number of studies:

- High-income: 23 (Comanor & Wilson, 1974; Commission des Communautés Européennes, 1972; Grabowski, 1976; Hogarty & Elzinga, 1972; Horowitz & Horowitz, 1965; Huitfeldt & Jorner, 1972; Johnson & Oksanen, 1974, 1977; Labys, 1976; Lau, 1975; Lidman, 1976; Malmquist, 1948; Miller & Roberts, 1972; Niskanen, 1960; Norman, 1975; Nyberg, 1967; Prest, 1949; Simon, 1966; Smith, 1976; Stone, 1945, 1951; Wales, 1968; Walsh & Walsh, 1970)
- LMIC: 0

Leung SF, Phelps CE. My kingdom for a drink ...? A review of estimates of the price sensitivity of demand for alcoholic beverages. In: Hilton ME, Bloss G, eds. *Economics and the Prevention of Alcohol-Related Problems NIAAA Research Monograph No 25 NIH Pub No 93-3513. Bethesda, MD: National Institute on Alcohol Abuse and Alcoholism; 1993: 1-31.*

Number of studies:

- High-income: 22 (Adrian & Ferguson, 1987; Atkinson et al., 1990; Clements & Johnson, 1983; Coate & Grossman, 1988; Cook, 1981; Cook & Tauchen, 1982; Duffy, 1983; Godfrey, 1988; Grossman et al., 1987; Heien & Pompelli, 1989; Jones, 1989; Kendell et al., 1983; Kenkel, 1990; Levy & Shefflin, 1983; Nelson, 1990; Ornstein & Hanssens, 1985; Schweitzer et al., 1983; Selvanathan, 1988; Thom, 1984; Tsolakis et al., 1983; Uri, 1986)
- LMIC: 0

Edwards G, Anderson P, Babor TF, et al. *Alcohol policy and the public good. Oxford: Oxford University Press; 1994.*

Number of studies:

- High-income: 43 (Baker & McKay, 1990; Bryding & Rosen, 1969; Clements & Johnson, 1983; Clements & Selvanathan, 1988; Clements & Selvanathan, 1991; Comanor & Wilson, 1974; Duffy, 1983, 1991; Duffy, 1987; Eecen, 1985, 1985; Godfrey, 1988; Hogarty & Elzinga, 1972; Horverak, 1979; Huitfeldt & Jorner, 1972; Johnson & Oksanen, 1974, 1977; Johnson et al., 1992; Jones, 1989; Labys, 1976; Lau, 1975; Lidman, 1976; Malmquist, 1948; McGuinness, 1983; Miller & Roberts, 1972; Niskanen, 1960; Norman, 1975; Nyberg, 1967; Pearce, 1985; Prest, 1949; Quek, 1988; Salo, 1990; Selvanathan, 1988, 1991; Simon, 1966; Smith, 1976; Stone, 1945, 1951; Sundström & Ekström, 1962; Walsh, 1982; Walsh & Walsh, 1970; Wette et al., 1993; Wong, 1988)
- LMIC: 1 (Kenya) (Partanen, 1991)

Fogarty J. The nature of the demand for alcohol: understanding elasticity. *British Food Journal* 2006; 108(4): 316-32.

Number of studies:

- High-income: 43 (Baker & McKay, 1990; Bryding & Rosen, 1969; Clements & Johnson, 1983; Clements, 1987; Clements & Selvanathan, 1991; Comanor & Wilson, 1974; Commission des Communautés Européennes, 1972; Duffy, 1983, 1991; Duffy, 1987; Eecen, 1985; Godfrey, 1988; H.M. Treasury, 1980; Hogarty & Elzinga, 1972; Horverak, 1979; Huitfeldt & Jorner, 1972; Johnson & Oksanen, 1974, 1977; Johnson et al., 1992; Jones, 1989; Labys, 1976; Malmquist, 1948; McGuinness, 1983; Miller & Roberts, 1972; Niskanen, 1960; Niskanen, 1962; Norman, 1975; Pearce, 1985; Prest, 1949; Quek, 1988; Salo, 1990;

Selvanathan, 1988, 1991; Simon, 1966; Smith, 1976; Stone, 1945, 1951; Sundström & Ekström, 1962; Theil & Clements, 1987; Walsh, 1982; Walsh & Walsh, 1970; Wette et al., 1993; Wong, 1988)
– LMIC: 1 (Kenya) (Partanen, 1991)

Gallet CA. The demand for alcohol: a meta-analysis of elasticities. *Australian Journal of Agricultural and Resource Economics* 2007; 51(2): 121-35.

Number of studies:

– High-income: unclear (132 studies that examined price, income or advertising elasticities) (Adrian & Ferguson, 1987; Ahtola et al., 1986; Andrikopoulos et al., 1997; Andrikopoulos & Loizides, 2000; Angulo et al., 2001; Atkinson et al., 1990; Baltagi & Griffin, 1995, 2002; Barsby & Marshall, 1977; Bask & Melkersson, 2004; Bentzen et al., 1999; Bielińska-Kwapisz & Young, 2001; Blake & Nied, 1997; Blaylock & Blisard, 1993; Blaylock & Blisard, 1993; Bourgeois & Barnes, 1979; Buccola & VanderZanden, 1997; Calfee & Scheraga, 1994; Chang et al., 2002; Clements & Johnson, 1983; Clements, 1987; Clements & Selvanathan, 1988; Clements & Selvanathan, 1991; Clements & Selvanathan, 1995; Clements et al., 1997; Comanor & Wilson, 1974; Conrad, 1989; Cook & Tauchen, 1982; Crawford et al., 1999; Crooks, 1989; Decker & Schwartz, 2000; Duffy, 1982, 1982, 1983, 1990, 1991, 1995, 2001, 2003; Duffy, 1987; Edward et al., 2001; Florkowski & McNamara, 1992; Franke & Wilcox, 1987; Freeman, 1999, 2000; Gallet, 1999; Gallet & List, 1998; Gao et al., 1995; Godfrey, 1988; Goel & Morey, 1995; Grabowski, 1976; Grossman et al., 1998; Grossman & Markowitz, 1999; Gruber et al., 2003; Heien & Pompelli, 1989; Hogarty & Elzinga, 1972; Holm, 1995; Huang, 2003; Johnson & Oksanen, 1974, 1977; Johnson et al., 1992; Johnson, 1985; Jones, 1989; Kenkel, 1996; Labys, 1976; Larivière et al., 2000; Larue et al., 1991; Lau, 1975; Lee & Tremblay, 1992; Leppänen et al., 2001; Levy & Sheflin, 1983; Levy & Sheflin, 1985; Lynk, 1984; Malmquist, 1948; Manning et al., 1995; Mast et al., 1999; Mayo, 2000; McCornac & Filante, 1984; McGahan, 1995; McGuinness, 1980, 1983; Miller & Roberts, 1972; Moosa & Baxter, 2002; Nayga Jr & Capps Jr, 1994; Nelson, 1990, 1997, 1999, 2003; Nelson & Moran, 1995; Nelson & Young, 2001; Nerlove & Addison, 1958; Niskanen, 1960; Ornstein & Hanssens, 1985; Owen, 1979; Pacula, 1998; Pagoulatos & Sorensen, 1986; Penm, 1988; Pompelli & Heien, 1991; Prest, 1949; Saffer, 2000; Saffer & Dave, 2002; Salisu & Balasubramanyam, 1997; Sander, 1999; Sass & Saurman, 1993, 2001; Schweitzer et al., 1983; Selvanathan, 1988, 1989, 1991, 1995; Smith, 1976; Spurry, 1999; Stone, 1945; Su & Yen, 2000; Swidler, 1986; Tegene, 1990; Theil & Clements, 1987; Thom, 1984; Tsolakis et al., 1983; Uri, 1986; Wales, 1968; Walsh, 1982; Walsh & Walsh, 1970; Wilkinson, 1987; Yamada et al., 1996; Yen, 1994, 1995; Yen & Jensen, 1996; Yu & Chen, 1998; Zardkoohi & Sheer, 1984)
– LMIC: 1 (Karnataka, India) (Musgrave & Stern, 1988)

Booth A, Brennan A, Meier P, et al. Independent review of the effects of alcohol pricing and promotion: part a – systematic reviews. Sheffield: School of Health and Related Research, University of Sheffield, 2008.

Number of studies:

– Reviews: 2 (Gallet, 2007; Wagenaar et al., 2009)
– High-income: 15 (Chaloupka & Wechsler, 1996; Chen et al., 2006; Freeman, 2000; Gius, 2002; Heeb et al., 2003; Huang, 2003; Keng & Huffman, 2007; Kuo, Heeb, et al., 2003; Laixuthai & Chaloupka, 1993; Makela et al., 2008; Mohler-Kuo et al., 2004; Selvanathan & Selvanathan, 2005; Stehr, 2007; Wechsler et al., 2000; Zhang & Casswell, 1999)
– LMIC: 0

Wagenaar AC, Salois MJ, Komro KA. Effects of beverage alcohol price and tax levels on drinking: a meta-analysis of 1003 estimates from 112 studies. *Addiction* 2009; 104(2): 179-90.

Number of studies:

– High-income: unclear (112 but only 105 references could be identified) (Adrian & Ferguson, 1987; Angulo et al., 2001; Asplund et al., 2007; Baltagi & Goel, 1990; Baltagi & Griffin, 1995, 2002; Bask &

Melkersson, 2004; Beard et al., 1997; Bentzen et al., 1999; Bishai et al., 2005; Blake & Nied, 1997; Bourgeois & Barnes, 1979; Brinkley, 1999; Cameron & Williams, 2001; Chaloupka & Laixuthai, 1997; Chaloupka & Wechsler, 1996; Clements & Johnson, 1983; Clements & Selvanathan, 1991; Clements et al., 1997; Coate & Grossman, 1988; Cook, 1982; Cook & Moore, 1993, 1994; Dee, 1999; DiNardo & Lemieux, 2001; Duffy, 1981, 1983; Duffy, 1987; Farrell et al., 2003; Freeman, 2000; French et al., 2006; Gao et al., 1995; Gius, 2005; Godfrey, 1988; Goel & Morey, 1995; Grossman et al., 1998; Grossman et al., 1987; Grossman & Markowitz, 1999; Hamilton & Hamilton, 1997; Harris et al., 2006; Heien & Pompelli, 1989; Henderson et al., 2004; Hoadley et al., 1984; Hogarty & Elzinga, 1972; Holm & Suoniemi, 1992; Johnson & Oksanen, 1974, 1977; Johnson et al., 1992; Jones, 1989; Keng & Huffman, 2007; Kenkel, 1993, 1996; Kubik & Moran, 2002; Kuo, Heeb, et al., 2003; Labys, 1976; Laixuthai & Chaloupka, 1993; Lee & Tremblay, 1992; Leppänen et al., 2001; Levy & Sheflin, 1983; Lyon & Schwab, 1991; Manning et al., 1995; Mast et al., 1999; McCornac & Filante, 1984; McGuinness, 1980; Musgrave & Stern, 1988; Nelson, 1990, 1997, 2003; Nelson & Moran, 1995; Norström, 2005; Ornstein & Hanssens, 1985; Pacula, 1998; Powell et al., 2002; Rabow et al., 1982; Ruhm, 1995; Rush et al., 1986; Saffer, 1989; Salisu & Balasubramanyam, 1997; Selvanathan, 1988, 1991; Skog & Melberg, 2006; Sloan et al., 1995; Smart & Mann, 1998; Smith, 1976; Stout et al., 2000; Sutton & Godfrey, 1995; Thom, 1984; Treno et al., 1993; Trollidal & Ponicki, 2005; Uri, 1986; Wales, 1968; Walsh, 1982; Walsh & Walsh, 1970; Wang et al., 1996; Waters & Sloan, 1995; Wette et al., 1993; Wilkinson, 1987; Williams et al., 2005; Williams et al., 2004; Williams et al., 2003; Yen, 1994; Young & Bielinska-Kwapisz, 2003; Zhang & Casswell, 1999; Zhao & Harris, 2004)

– LMIC: 1 (Karnataka, India) (Musgrave & Stern, 1988)

Elder RW, Lawrence B, Ferguson A, et al. The effectiveness of tax policy interventions for reducing excessive alcohol consumption and related harms. *Am J Prev Med* 2010; 38(2): 217-29.

Number of studies:

– High-income: 46 (Adrian & Ferguson, 1987; Baltagi & Goel, 1990; Blake & Nied, 1997; Chaloupka & Wechsler, 1996; Coate & Grossman, 1988; Cook, 1981, 1982; Cook & Moore, 1994; Decker & Schwartz, 2000; Dee, 1999; Duffy, 1981; Duffy, 1987; Gius, 2002; Goel & Morey, 1995; Grossman et al., 1998; Grossman et al., 1987; Gruenewald et al., 1992; Heeb et al., 2003; Heien & Pompelli, 1989; Hogarty & Elzinga, 1972; Johnson & Oksanen, 1974; Johnson et al., 1992; Jones, 1989; Kenkel, 1993, 1996; Kuo, Heeb, et al., 2003; Labys, 1976; Laixuthai & Chaloupka, 1993; Lee & Tremblay, 1992; Leskinen & Teräsvirta, 1976; Levy & Sheflin, 1983; Manning et al., 1995; Nelson, 1990, 1997; Nelson & Moran, 1995; Pacula, 1998; Selvanathan, 1988; Simon, 1966; Sloan et al., 1994; Stout et al., 2000; Uri, 1986; Wette et al., 1993; Wilkinson, 1987; Yen, 1994; Young & Bielinska-Kwapisz, 2003; Zhang & Casswell, 1999)

– LMIC: 0

Fogarty J. The demand for beer, wine and spirits: a survey of the literature. *Journal of Economic Surveys* 2010; 24(3): 428-78.

Number of studies:

– High-income: 105 (Adrian & Ferguson, 1987; Alley et al., 1992; Andrikopoulos et al., 1997; Andrikopoulos & Loizides, 2000; Angulo et al., 2001; Baker & McKay, 1990; Baltagi & Goel, 1990; Baltagi & Griffin, 1995, 2002; Bentzen et al., 1999; Bentzen et al., 1997; Blake & Nied, 1997; Bryding & Rosen, 1969; Chang et al., 2002; Clements & Johnson, 1983; Clements, 1987; Clements & Selvanathan, 1988; Clements & Selvanathan, 1991; Clements et al., 1997; Comanor & Wilson, 1974; Cook & Tauchen, 1982; Crawford et al., 1999; Crawford & Tanner, 1995; Duffy, 1983, 1995, 2001, 2003; Duffy, 1987; Eakins & Gallagher, 2003; Edward et al., 2001; Eecen, 1985; Elzinga & Hogarty, 1973; Florkowski & McNamara, 1992; Gallet, 1999; Gallet & List, 1998; Gao et al., 1995; Godfrey, 1988; Goel & Morey, 1995; Gruenewald et al., 2006; Hausman et al., 1994; Heien & Pompelli, 1989; Heien & Sims, 2000; Hogarty & Elzinga, 1972; Holm, 1995; Holm & Suoniemi, 1992; Horverak, 1979; Huang, 2003; Huitfeldt & Jorner, 1972; Johnson & Oksanen, 1974, 1977; Johnson et al., 1992; Jones, 1989; Labys, 1976; Larivière et al., 2000; Lau, 1975; Lee & Tremblay, 1992; Levi

& Folwell, 1995; Malmquist, 1948; McCornac & Filante, 1984; McGuinness, 1983; Miller & Roberts, 1972; Moosa & Baxter, 2002; Nelson, 1990, 1997, 1999, 2003; Nelson & Moran, 1995; Niskanen, 1960; Norman, 1975; Norström, 2005; Nyberg, 1967; Ornstein & Hanssens, 1985; Owen, 1979; Pearce, 1985; Penm, 1988; Prest, 1949; Quek, 1988; Sabuhoro et al., 1997; Salisu & Balasubramanyam, 1997; Salo, 1990; Selvanathan & Selvanathan, 2004; Selvanathan, 1988, 1991; Selvanathan, 2017; Selvanathan & Selvanathan, 2005; Simon, 1966; Skog & Melberg, 2006; Smith, 1976; Stone, 1945, 1951; Stone & Rowe, 1958; Sundström & Ekström, 1962; Taplin & Ryan, 1969; Tegene, 1990; Theil & Clements, 1987; Thom, 1984; Trolldal & Ponicki, 2005; Uri, 1986; Walsh, 1982; Walsh & Walsh, 1970; Wang et al., 1996; Wette et al., 1993; Wong, 1988; Yu & Chen, 1998; Zhang & Casswell, 1999)
– LMIC: 1 (Kenya) (Partanen, 1991)

Patra J, Giesbrecht N, Rehm J, Bekmuradov D, Popova A. Are alcohol prices and taxes an evidence-based approach to reducing alcohol-related harm and promoting public health and safety? A literature review. Contemporary Drug Problems 2012; 39(1): 7-48.

Number of studies:

– Reviews: 1 (Elder et al., 2010)
– High-income: 22 (Adams & Effertz, 2010; Andreasson et al., 2006; Chaloupka & Wechsler, 1996; Coate & Grossman, 1988; Farrell et al., 2003; Gmel et al., 2008; Grittner et al., 2009; Gruenewald et al., 2006; Gustafsson, 2010; Heeb et al., 2003; Helakorpi et al., 2010; Hollingworth et al., 2006; Kenkel, 1993; Kuo, Heeb, et al., 2003; Kuo, Wechsler, et al., 2003; Laixuthai & Chaloupka, 1993; M et al., 2004; Makela et al., 2008; Makela & Osterberg, 2009; Meier et al., 2010; Müller et al., 2010; Stockwell et al., 2001)
– LMIC: 0

Sornpaisarn B, Shield K, Cohen J, Schwartz R, Rehm J. Elasticity of alcohol consumption, alcohol-related harms, and drinking initiation in low- and middle-income countries: A systematic review and meta-analysis. The International Journal of Alcohol and Drug Research 2013; 2(1).

Number of studies:

– High-income: 0
– LMIC: 12 (Andrienko & Nemtsov, 2005; Fan et al., 1995; John, 2005; Musgrave & Stern, 1988; Okello, 2001; Osoro et al., 2001; Özgüven, 2004; Pan et al., 2006; Partanen, 1991; Poapongsakorn et al., 2007; Selvanathan & Selvanathan, 2005; Yu & Abler, 2010)

van Walbeek C, Blecher E. The Economics of alcohol use, misuse and policy in South Africa. Cape Town: University of Cap Town, World Health Organization South Africa Office, 2014.

Number of studies:

– High-income: 76 (Adrian & Ferguson, 1987; Alley et al., 1992; Andrikopoulos et al., 1997; Andrikopoulos & Loizides, 2000; Angulo et al., 2001; Baker & McKay, 1990; Baltagi & Goel, 1990; Baltagi & Griffin, 1995, 2002; Bentzen et al., 1999; Blake & Nied, 1997; Clements & Johnson, 1983; Clements, 1987; Clements & Selvanathan, 1988; Clements & Selvanathan, 1991; Clements et al., 1997; Comanor & Wilson, 1974; Cook & Tauchen, 1982; Crawford et al., 1999; Crawford & Tanner, 1995; Duffy, 1983, 2001, 2003; Duffy, 1987; Eakins & Gallagher, 2003; Edward et al., 2001; Gallet, 1999; Gallet & List, 1998; Gao et al., 1995; Godfrey, 1988; Goel & Morey, 1995; Gruenewald et al., 2006; Hausman et al., 1994; Heien & Pompelli, 1989; Hogarty & Elzinga, 1972; Holm, 1995; Holm & Suoniemi, 1992; Huitfeldt & Jorner, 1972; Johnson & Oksanen, 1977; Jones, 1989; Labys, 1976; Larivière et al., 2000; Lee & Tremblay, 1992; Levi & Folwell, 1995; Malmquist, 1948; McGuinness, 1980, 1983; Moosa & Baxter, 2002; Nelson, 1997, 1999, 2003; Nelson & Moran, 1995; Niskanen, 1960; Norman, 1975; Norström, 2005; Ornstein & Hanssens, 1985; Pearce, 1985; Prest, 1949; Ramful & Zhao, 2008; Salisu & Balasubramanyam, 1997; Selvanathan & Selvanathan, 2004; Selvanathan, 1988, 1991; Selvanathan & Selvanathan, 2005; Simon, 1966; Skog & Melberg, 2006; Smith,

1976; Stone, 1945; Tegene, 1990; Thom, 1984; Trollidal & Ponicki, 2005; Uri, 1986; Walsh, 1982; Wang et al., 1996; Wong, 1988; Zhang & Casswell, 1999)

– LMIC: 7 (China; India, Kenya, Russia, South Africa, 19 LMICs) (Andrienko & Nemtsov, 2005; Bureau for Economic Research, 2010; John, 2005; Okello, 2001; Selvanathan & Selvanathan, 2005; South African National Treasury & Tax Policy Chief Directorate, 2002; Tian & Liu, 2011)

Li Q, Babor TF, Zeigler D, et al. Health promotion interventions and policies addressing excessive alcohol use: a systematic review of national and global evidence as a guide to health-care reform in China. *Addiction* 2015; 110 Suppl 1: 68-78.

Number of studies:

– High-income: 1 (Chung et al., 2013)

– LMIC: 0

Chen D, Abler D, Zhou D, Yu X, Thompson W. A Meta-analysis of Food Demand Elasticities for China. *Applied Economic Perspectives and Policy* 2016; 38(1): 50-72.

Number of studies

– High-income: 0

– LMIC: 12 (China) (Bishop et al., 2007; Chang & Li, 2006; Dong, 2009; Dong & Lu, 2009; Fan et al., 1994; Fan et al., 1995; Mu et al., 2001; Wang et al., 1997; Wu & Wu, 1997; Yu & Abler, 2010; Zhang et al., 2001; Zhou, 2003)

Boniface S, Scannell JW, Marlow S. Evidence for the effectiveness of minimum pricing of alcohol: a systematic review and assessment using the Bradford Hill criteria for causality. *BMJ Open* 2017; 7(5): e013497.

Number of studies:

– Reviews: 2 (Booth et al., 2008; Wagenaar et al., 2009)

– High-income: 15 (Babor et al., 1978; Black et al., 2011; Callinan et al., 2015; Cousins et al., 2016; Crawford et al., 2012; Falkner et al., 2015; Forsyth et al., 2014; Herttua et al., 2015; Ludbrook et al., 2012; Sharma et al., 2014; Sheron et al., 2014; Stockwell, Auld, et al., 2012; Stockwell, Zhao, et al., 2012; Stockwell et al., 2013; Zhao et al., 2013)

– LMIC: 3 ((Russia, Poland) (Bhattacharya et al., 2013; Treisman, 2010; Wald & Moskalewicz, 1984)

Scott S, Muirhead C, Shucksmith J, Tyrrell R, Kaner E. Does Industry-Driven Alcohol Marketing Influence Adolescent Drinking Behaviour? A Systematic Review. *Alcohol Alcohol* 2017; 52(1): 84-94.

Number of studies:

– High-income: 2 (Saffer & Dave, 2006; van Hoof et al., 2008)

– LMIC: 0

Nelson JP. Meta-analysis of alcohol price and income elasticities - with corrections for publication bias. *Health Econ Rev* 2013; 3(1): 17.

Number of studies:

– High-income: 165 (Adrian & Ferguson, 1987; Alley et al., 1992; Andrienko & Nemtsov, 2005; Andrikopoulos et al., 1997; Andrikopoulos & Loizides, 2000; Angulo et al., 2001; Arranz & Gil, 2009; Ashton & Casswell, 1987; Asplund et al., 2007; Baltagi & Geishecker, 2006; Baltagi & Goel, 1990; Baltagi & Griffin, 1995, 2002, 2006; Baltagi & Li, 2006; Barnes, 1984; Barsby & Marshall, 1977; Bask & Melkersson, 2004; Bentzen et al., 1997; Berggren, 1997, 1997; Blake & Nied, 1997; Calfee & Scheraga, 1994; Chaloupka & Wechsler, 1996; Chang et al., 2002; Chetty et al., 2009; Clements et al., 1985; Clements & Johnson, 1983; Clements & Selvanathan, 1988; Clements & Selvanathan, 1991; Clements et al., 1997; Collis et al., 2010;

Comanor & Wilson, 1974; Crawford et al., 1999; Crawford & Tanner, 1995; Crooks, 1989; Dahlström & Åsberg, 2009; Decker & Schwartz, 2000; Duffy, 1982, 1982, 1983, 1990, 1991, 1995, 2001, 2003, 2003; Dyack & Goddard, 2001; Eakins & Gallagher, 2003; Edward et al., 2001; Fanelli & Mazzocchi, 2008; Florkowski & McNamara, 1992; Fung, 2011; Gallet, 1999; Gallet & Eastman, 2007; Gallet & List, 1998; Gao et al., 1995; Godfrey, 1988; Goel & Morey, 1995; Goldschmidt, 1990; Grabowski, 1976; Gruber et al., 2003; Gruenewald et al., 2006; Hagan & Waterson, 1983; Heien & Pompelli, 1989; Heien & Sims, 2000; Hogarty & Elzinga, 1972; Holm, 1995; Holm & Suoniemi, 1992; Hsieh et al., 2001; Huang, 2003; Janda et al., 2010; Jithitikulchai, 2010; John, 2005; Johnson & Oksanen, 1974, 1977; Johnson et al., 1992; Johnson, 1985; Jones, 1989; Keane, 1965; Kochanowski & Heck, 1987; Koksal, 2012; Kong, 2003; Labys, 1976; Larivière et al., 2000; Lau, 1975; Lee & Tremblay, 1992; Lee, 2007; Lee, Chen, Hwang, et al., 2010; Lee, Chen, Liu, et al., 2010; Leong & Wang, 1994; Leppänen et al., 2001; Leskinen & Teräsvirta, 1976; Levi & Folwell, 1995; Levy & Sheflin, 1983; Madden, 1992; Mangeloja & Pehkonen, 2009; Manning et al., 1995; McCarthy, 1977; McCornac & Filante, 1984; McGuinness, 1980, 1983; Menon et al., 2012; Meyerhoefer et al., 2005; Moosa & Baxter, 2002; Nelson, 1990, 1997, 1999, 2003, 2010; Nelson & Moran, 1995; Nelson & Young, 2001; Niskanen, 1960; Norman, 1975; Norström, 2005; Ogwang & Cho, 2009; Ornstein & Hanssens, 1985; Pagoulatos & Sorensen, 1986; Pearce, 1985; Penm, 1988; Pierani & Tiezzi, 2009, 2011; Quek, 1988; Ruhm et al., 2012; Sabuhoro et al., 1997; Saffer & Dave, 2002; Salisu & Balasubramanyam, 1997; Sam & Thompson, 2012; Schweitzer et al., 1983; Seale Jr et al., 2003; Selvanathan & Selvanathan, 2004; Selvanathan, 1988, 1989, 1991, 1995; Selvanathan, 2006; Selvanathan & Selvanathan, 2005; Selvanathan & Selvanathan, 2005, 2007; Shi, 2011; Smith, 1976; Stone & Rowe, 1958; Swidler, 1986; Taube et al., 1990; Taube & MacDonald, 1991; Tegene, 1990; Thom, 1984; Tiezzi & Pierani, 2007; Tiffin et al., 2011; Trolldal & Ponicki, 2005; Uri, 1986; Volland, 2012; Walsh, 1982; Wang et al., 1996; West & Parry, 2009; Wette et al., 1993; Wilkinson, 1987; Wilkinson, 1987; Wohlgenant, 2011; Yen, 1993; Yu & Chen, 1998; Yu & Abler, 2010; Zereyesus, 2010; Zhang & Casswell, 1999; Zhuk, 2011)

– LMIC: 16 (Andrienko & Nemtsov, 2005; Baltagi & Geishecker, 2006; Florkowski & McNamara, 1992; Györfi, 2006; John, 2005; Meyerhoefer et al., 2005; Osoro et al., 2001; Özgüven, 2004; Pan & Fang, 2003; Pan et al., 2006; Partanen, 1991; Shi, 2011; Tian & Liu, 2011; Treisman, 2010; Troncoso-Valverde, 2004; Wang et al., 1997)

Nelson JP. Robust Demand Elasticities for Wine and Distilled Spirits: Meta-Analysis with Corrections for Outliers and Publication Bias. *Journal of Wine Economics* 2013; 8(3): 294-317

Number of studies:

– High-income: 118 (Adrian & Ferguson, 1987; Alley et al., 1992; Andrikopoulos et al., 1997; Andrikopoulos & Loizides, 2000; Angulo et al., 2001; Ashton & Casswell, 1987; Asplund et al., 2007; Baltagi & Goel, 1990; Baltagi & Griffin, 1995, 2002, 2006; Baltagi & Li, 2006; Barnes, 1984; Barsby & Marshall, 1977; Bentzen et al., 1997; Berggren, 1997, 1997; Blake & Nied, 1997; Chang et al., 2002; Clements & Daryal, 2005; Clements & Johnson, 1983; Clements & Selvanathan, 1988; Clements & Selvanathan, 1991; Clements et al., 1997; Collis et al., 2010; Comanor & Wilson, 1974; Crawford et al., 1999; Crawford & Tanner, 1995; Crooks, 1989; Dahlström & Åsberg, 2009; Duffy, 1982, 1982, 1983, 1990, 1991, 1995, 2001, 2003, 2003; Dyack & Goddard, 2001; Eakins & Gallagher, 2003; Edward et al., 2001; Florkowski & McNamara, 1992; Gallet, 1999; Gallet & Eastman, 2007; Gao et al., 1995; Godfrey, 1988; Goel & Morey, 1995; Goldschmidt, 1990; Gruenewald et al., 2006; Hagan & Waterson, 1983; Heien & Pompelli, 1989; Heien & Sims, 2000; Holm, 1995; Holm & Suoniemi, 1992; Huang, 2003; Jithitikulchai, 2010; Johnson & Oksanen, 1974, 1977; Johnson et al., 1992; Johnson, 1985; Jones, 1989; Kochanowski & Heck, 1987; Kong, 2003; Labys, 1976; Larivière et al., 2000; Lau, 1975; Leong & Wang, 1994; Levi & Folwell, 1995; Mangeloja & Pehkonen, 2009; McCornac & Filante, 1984; McGuinness, 1983; Meyerhoefer et al., 2005; Moosa & Baxter, 2002; Nelson, 1990, 1990, 1997, 1999, 2003; Nelson & Moran, 1995; Niskanen, 1960; Norström, 2005; Ogwang & Cho, 2009; Ornstein & Hanssens, 1985; Owen, 1979; Pearce, 1985; Pierani & Tiezzi, 2011; Quek, 1988; Sabuhoro et al., 1997; Salisu & Balasubramanyam, 1997; Sam & Thompson, 2012; Schweitzer et al.,

1983; Seale Jr et al., 2003; Selvanathan & Selvanathan, 2004; Selvanathan, 1988, 1989, 1991, 1995; Selvanathan & Selvanathan, 2005; Selvanathan & Selvanathan, 2005, 2007; Smith, 1976; Swidler, 1986; Tegene, 1990; Thom, 1984; Thompson & Sam, 2008; Tiezzi & Pierani, 2007; Treisman, 2010; Trolldal & Ponicki, 2005; Troncoso-Valverde, 2004; Uri, 1986; Walsh, 1982; Wang et al., 1996; Wette et al., 1993; Wohlgenant, 2011; Yu & Chen, 1998; Zereyesus, 2010; Zhang & Casswell, 1999)
– LMIC: 7 (Florkowski & McNamara, 1992; John, 2005; Özgüven, 2004; Pan & Fang, 2003; Partanen, 1991; Troncoso-Valverde, 2004; Wang et al., 1997)

Nelson JP. Estimating the price elasticity of beer: meta-analysis of data with heterogeneity, dependence, and publication bias. *J Health Econ* 2014; 33: 180-7.

Number of studies:

- High-income: 114 (list of studies not reported)
- LMIC: unclear

Nelson JP. Does Heavy Drinking by Adults Respond to Higher Alcohol Prices and Taxes? A Survey and Assessment. *Economic Analysis and Policy* 2013; 43(3): 265-91.

Number of studies:

- High-income: 18 (An & Sturm, 2011; Auld, 2005; Ayyagari et al., 2013; Byrnes et al., 2013; Dave & Saffer, 2008; Dee, 1999; Farrell et al., 2003; Gius, 2002; Hamilton & Hamilton, 1997; Harris et al., 2006; Heeb et al., 2003; Kenkel, 1996; Manning et al., 1995; McLellan, 2011; Nelson, 2008; Rhoads, 2010; Sloan et al., 1995; Stout et al., 2000)
- LMIC: 1 (China) (Shi, 2011)

Nelson JP. Gender differences in alcohol demand: a systematic review of the role of prices and taxes. *Health Econ* 2014; 23(10): 1260-80.

Number of studies:

- High-income: 16 (Auld, 2005; Chaloupka & Wechsler, 1996; Cook & Moore, 2001; Decker & Schwartz, 2000; Dee, 1999; French & Maclean, 2006; Hamilton & Hamilton, 1997; Keng & Huffman, 2007; Kenkel, 1993, 1996; Picone et al., 2004; Pierani & Tiezzi, 2011; Sutton & Godfrey, 1995; West & Parry, 2009; Williams et al., 2005; Zhang, 2010)
- LMIC: 5 (Andrienko & Nemtsov, 2005; Baltagi & Geishecker, 2006; Belanciu, 2006; Shi, 2011; Tian & Liu, 2011)

Nelson JP. Binge drinking and alcohol prices: a systematic review of age-related results from econometric studies, natural experiments and field studies. *Health Econ Rev* 2015; 5: 6.

Number of studies:

- High-income: 65 (Asgeirsdottir et al., 2012; Ayyagari et al., 2013; Bhatt, 2011; Bray, 2000, 2005; Byrnes et al., 2013; Carpenter et al., 2007; Chaloupka & Laixuthai, 1997; Chaloupka & Wechsler, 1996; Chatterji, 2001; Chung et al., 2013; Clapp et al., 2003; Cook, 2007; Cook & Moore, 1994, 2001; Cowan, 2011; Cowell, 2006; Davalos et al., 2012; Dee, 1999, 1999, 1999; Dee & Evans, 2003; French & Maclean, 2006; Gius, 2002, 2003; Gmel et al., 2008; Grossman, 2005; Grossman et al., 1987; Gustafsson, 2010; Heeb et al., 2003; Helakorpi et al., 2010; Jamison & Myers, 2008; Keng, 1998; Keng & Huffman, 2007; Kenkel, 1993, 1996; Laixuthai & Chaloupka, 1993; Ludbrook et al., 2012; Manning et al., 1995; Markowitz, 2001; McLellan, 2011; Medina, 2011; Nair et al., 2001; Nelson, 2008; O'Mara et al., 2009; Popovici & French, 2013; Powell et al., 2002; Renna, 2007; Rhoads, 2010; Saffer & Dave, 2006; Sloan et al., 1995; Stockwell et al., 1993; Stout et al., 2000; Sutton & Godfrey, 1995; Terza, 2002; Thombs et al., 2008; Thombs et al., 2009; Wagoner et al., 2012; Wechsler et al., 2000; Weitzman et al., 2003; Williams et al., 2005; Wolaver et al., 2007; Wolaver, 2007; Xuan et al., 2013; Zhang, 2010)

– LMIC: 0

Nelson JP, McNall AD. What happens to drinking when alcohol policy changes? A review of five natural experiments for alcohol taxes, prices, and availability. Eur J Health Econ 2017; 18(4): 417-34.

Number of studies:

– High-income: 29 (Allamani et al., 2014; Allamani et al., 2013; Andersen et al., 2014; Chung et al., 2013; Gmel et al., 2008; Grittner et al., 2011; Grittner et al., 2009; Gustafsson, 2010; Hallgren et al., 2012; Heeb et al., 2003; Helakorpi et al., 2010; Kim et al., 2013; Kuo, Heeb, et al., 2003; Lintonen et al., 2013; Makela et al., 2008; Makela & Osterberg, 2009; Mohler-Kuo et al., 2004; Mustonen et al., 2007; Norstrom & Svensson, 2014; Ramstedt, 2010; Raninen et al., 2013; Raninen et al., 2014; Ripatti & Makela, 2008; Room et al., 2013; Rossow et al., 2014; Stafström, 2007; Stafstrom & Ostergren, 2014; Svensson, 2012; Svensson & Landberg, 2013)

– LMIC: 0

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- Zereyesus, Yacob Abrehe. 2010. Essays in applied demand and production analysis, Department of Agriculture Economics, College of Agriculture, Kansas State University, Manhattan, KS.
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- Zhuk, Oksana. 2011. Advertising effects of beer consumption among young adults with a consideration of the welfare effects of advertising in the presence of search costs and negative externalities, Department of Economics, University of Texas at Dallas, Dallas, TX.

Appendix 3. List of studies included in reviews from low- and middle-income countries.

- Andrienko, Yuri, and Aleksandr Nemtsov. 2005. Estimation of individual demand for alcohol. EERC Working Paper Series No 05/10. Moscow: Economics Education and Research Consortium.
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- Bishop, John A, Haiyong Liu, and Qi Meng. 2007. Are Chinese smokers sensitive to price? *China Economic Review* 18 (2):113-121.
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- Mu, Y, H Liyuan, and M Songtian. 2001. Demand System Analysis of Consumption Demand of Urban and Rural Residents in China—An AIDS Model [in Chinese]. *Economic Issues* 8:25-28.
- Musgrave, Simon, and Nicholas Stern. 1988. Alcohol: Demand and taxation under monopoly and oligopoly in South India in the 1970s. *Journal of Development Economics* 28 (1):1-41.
- Okello, Andrew Kazora. 2001. An analysis of excise taxation in Kenya. African Economic Policy. Discussion Paper Number 73. Nairobi, Kenya: Ministry of Finance.
- Osoro, Nehemiah, Philip Mpango, and Hamisi Mwinyimvua. 2001. An Analysis of Excise Taxation in Tanzania. African Economic Policy Discussion Paper Number 72. Dar es Salaam, Tanzania: University of Dar es Salaam.
- Özgülven, Cemhan. 2004. Analysis of demand and pricing policies in Turkey beer market. Master of Science, Department of Industrial Engineering. Istanbul, Turkey: Graduate School of Natural and Applied Sciences, Middle East Technical University.
- Pan, Suwen, and Cheng Fang. 2003. Liquor and Beverage Consumption in China: A Censored Demand System Approach. In *AAEA 2003 Annual meeting*. Montreal, Canada: American Agricultural Economics Association (AAEA).

- Pan, Suwen, Cheng Fang, and Jaime Malaga. 2006. Alcoholic beverage consumption in China: a censored demand system approach. *Applied Economics Letters* 13 (15):975-979.
- Partanen, Juha. 1991. *Sociability and intoxication: Alcohol and drinking in Kenya, Africa, and the modern world*. Helsinki: Finnish Foundation for Alcohol Studies.
- Poapongsakorn, N, S Leelahanon, D Laovakul, E Tasarika, S Methasutharuks, T Jittreekhun, and P Rungruangarn. 2007. Assessment of the Impact of Liquor Tax on Prices and Consumption of Liquor [in Thai]. Bangkok: Center for Alcohol Studies.
- Selvanathan, Saroja , and Eliyathamby Antony Selvanathan. 2005. *The demand for alcohol, tobacco and marijuana: international evidence*. Aldershot, Hants, England: Ashgate.
- Shi, Yuyan. 2011. Three Essays on Economics of Health Behavior in China. Ph.D. dissertation, Pardee RAND Graduate School. Santa Monica, CA: RAND Corporation.
- South African National Treasury, and Tax Policy Chief Directorate. 2002. The Taxation of Alcoholic Beverages in South Africa. Final Report. Pretoria: Government of South Africa.
- Tian, Guoqiang, and Feng Liu. 2011. Is the demand for alcoholic beverages in developing countries sensitive to price? Evidence from China. *Int J Environ Res Public Health* 8 (6):2124-31.
- Treisman, Daniel. 2010. Death and prices. *Economics of Transition and Institutional Change* 18 (2):281-331.
- Troncoso-Valverde, Cristián. 2004. Preference shifts, structural breaks and the domestic demand for Chilean wine. *Revista de Economía e Sociología Rural* 42:487-506.
- Wald, Ignacy, and Jacek Moskalewicz. 1984. Alcohol Policy in a Crisis Situation. *British Journal of Addiction* 79 (3):331-335.
- Wang, Qingbin, Catherine Chan Halbrendt, and Helen H Jensen. 1997. China's beer consumption and barley imports. *Agribusiness* 13 (1):73-84.
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Appendix 4. Characteristics of included 'umbrella reviews of reviews'

Anderson P, Chisholm D, Fuhr DC. Effectiveness and cost-effectiveness of policies and programmes to reduce the harm caused by alcohol. The Lancet 2009; 373(9682): 2234-46.

Type of review / publication	- narrative review - Journal: Lancet
Was an 'a priori' design provided?	No.
Was there duplicate study selection and data extraction?	No.
Was a comprehensive literature search performed?	Unclear; search strategy not described. - databases: Cochrane library, MEDLINE, Web of Science, and Web of Knowledge - year / month of last search: not reported; - # of studies included: 3 reviews (Fogarty, 2006; Gallet, 2007; Wagenaar, Salois et al., 2009, 1 book (Cook, 2007), and 4 individual studies. - LMIC: 1 (Pan, Malaga, 2006 - China)
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Unclear
Was a list of studies (included and excluded) provided?	No
Were the characteristics of the included studies provided?	No
Was the scientific quality of the included studies assessed and documented?	None. The quality of included studies was not assessed. The strength of the evidence was based on the type of study design of included studies: 1=more than one systematic review; 2=one systematic review; 3=two or more randomised controlled trials; 4=one randomised controlled trial; 5=observational evidence; 6=not assessed.
Was the scientific quality of the included studies used appropriately in formulating conclusions?	n/a
Were the methods used to combine the findings of studies appropriate?	n/a
Was the likelihood of publication bias assessed?	n/a
Funding, conflicts of interest reported?	- Review: yes; no specific funding or conflicts of interest reported; - Included studies: no.

Results	<p>Specific results not presented. Alcohol taxes were found “effective” at reducing alcohol use. Evidence statement:</p> <ul style="list-style-type: none"> - a meta-analysis noted a median price elasticity for all beverage types of -0.52 in the short term and -0.82 in the long term, elasticities being lower for beer than for wine or spirits (Gallet, 2007); - a meta-analysis noted mean price elasticities of -0.46 for beer, -0.69 for wine, and -0.80 for spirits (Fogarty, 2006).
Study's conclusion	<p>Drinkers respond to changes in the price of alcohol as they do to changes in the price of other consumer products. Setting minimum prices can reduce acute and chronic harms.</p>
Limitations/risk of bias	<p>Non-systematic and poorly described search strategy; unclear how included studies were selected; no quality assessment; only very broad results presented which limit usefulness of the review; limited generalizability to LMIC; ; some evidence statements not supported by evidence cited.</p>

Jackson R, Johnson M, Campbell F, et al. Interventions on Control of Alcohol Price, Promotion and Availability for Prevention of Alcohol Use Disorders in Adults and Young People. Sheffield: School of Health and Related Research, University of Sheffield, 2010.

Type of review/ publication	- review of reviews; narrative review. - report
Was an 'a priori' design provided?	No
Was there duplicate study selection and data extraction?	Unclear
Was a comprehensive literature search performed?	Unclear; search not clearly described. - databases: unclear - year /month of last search: unclear - # of studies included: unclear (at least 4 reviews seem to have been examined: Fogarty 2006; Gallet, 2007; Booth, Brennan, et al., 2008; Wagenaar, Salois, Komro, 2009) - LMIC: 0
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Unclear
Was a list of studies (included and excluded) provided?	No, only a list of included studies is provided.
Were the characteristics of the included studies provided?	To some extent; research objective, setting and study population, interventions and comparators, and main findings are briefly described.
Was the scientific quality of the included studies assessed and documented?	A quality checklist for reviews was developed. A subjective cut-off score of 9 criteria fulfilled (out of a total of 14) was deemed of higher quality. Assessment not provided; only 3 broad quality scores provided.
Was the scientific quality of the included studies used appropriately in formulating conclusions?	Unclear
Were the methods used to combine the findings of studies appropriate?	n/a
Was the likelihood of publication bias assessed?	n/a
Funding, conflicts of interest reported?	- Review: yes; Centre for Public Health Excellence, National Institute for Health and Clinical Excellence; - Included studies: no.

Results	<p>Only broad results presented:</p> <ul style="list-style-type: none"> - a clear relationship between price / tax increases and reductions in the demand for alcohol; - some evidence that young people, binge drinkers and harmful drinkers tended to show a preference for cheaper drinks; - limited evidence that minimum pricing may be effective in reducing alcohol consumption; - one meta-regression analysis suggested that the higher the relative market share of a beverage, the more inelastic the consumer demand.
Study's conclusion	Clear relationship between price / tax increases and reductions in the demand for alcohol.
Limitations / risk of bias	Unclear search strategy; limited quality assessment; overly broad conclusions; limited generalizability to LMIC.

Martineau F, Tyner E, Lorenc T, Petticrew M, Lock K. Population-level interventions to reduce alcohol-related harm: an overview of systematic reviews. *Prev Med* 2013; 57(4): 278-96.

Type of review / publication	- review of reviews - journal: Preventive medicine
Was an 'a priori' design provided?	Yes
Was there duplicate study selection and data extraction?	Yes
Was a comprehensive literature search performed?	Yes - databases: MEDLINE, Embase, Cochrane, Social Policy and Practice, DARE, Campbell and NICE; - Year / month of last search: October 2012; - # of studies included: 3 (Booth et al., 2008; Elder et al., 2010; Jackson et al., 2010) - LMIC: 0
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Unclear
Was a list of studies (included and excluded) provided?	No, only a list of included studies is provided.
Were the characteristics of the included studies provided?	Yes; broad characteristics of included reviews are provided (review aim, type of review, year of search, primary / secondary outcome measures, # of individual studies, main findings).
Was the scientific quality of the included studies assessed and documented?	The quality of the reporting was assessed using the AMSTAR tool; assessment not provided; only broad quality scores (high, mid, low) provided.
Was the scientific quality of the included studies used appropriately in formulating conclusions?	Unclear
Were the methods used to combine the findings of studies appropriate?	n/a
Was the likelihood of publication bias assessed?	n/a
Funding, conflicts of interest reported?	- Review: yes. National Institute for Health Research (NIHR)'s School for Public Health Research (SPHR); - Included studies: no.
Results	Overview of 3 reviews suggested that there was clear and consistent evidence that increasing alcohol price or taxation reduced overall consumption; one review indicated that a 10% increase in alcohol prices would lead to a 3-10% reduction in total consumption (Elder et al., 2010).
Study's conclusion	Clear and consistent evidence that increasing alcohol price or taxation reduces overall consumption.

Limitations/risk of bias	Small number of reviews included; overly broad conclusions; limited quality assessment; limited generalizability to LMIC.
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Stockings E, Hall WD, Lynskey M, et al. Prevention, early intervention, harm reduction, and treatment of substance use in young people. Lancet Psychiatry 2016; 3(3): 280-96.

Type of review / publication	- review of reviews - journal: Lancet Psychiatry
Was an 'a priori' design provided?	No
Was there duplicate study selection and data extraction?	Unclear
Was a comprehensive literature search performed?	Yes. - databases: Project Cork bibliographies, Medline, Embase, PsycINFO, Cochrane. - Year / month of last search: April 2015; - # of studies included: 2 (Martineau et al., 2013, Elder et al. 2010) - LMIC: 0
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Unclear.
Was a list of studies (included and excluded) provided?	No
Were the characteristics of the included studies provided?	No
Was the scientific quality of the included studies assessed and documented?	No
Was the scientific quality of the included studies used appropriately in formulating conclusions?	n/a
Were the methods used to combine the findings of studies appropriate?	n/a
Was the likelihood of publication bias assessed?	n/a
Funding, conflicts of interest reported?	- Review: yes. Authors / research centres were supported by a number of funding agencies including the Australian National Health and Medical Research Council (NHMRC), the National Drug and Alcohol Research Centre, University of New South Wales (UNSW), the Graeme Wood Foundation, University of Queensland, the National Institute for Health Research (NIHR) Biomedical Research Centre for Mental Health, the Maudsley National Health Service Foundation Trust. - Included studies: no.

Results	<p>Only broad results presented:</p> <ul style="list-style-type: none"> - increasing alcohol taxation or alcohol price reduced overall alcohol consumption, with a 10% increase in alcohol prices producing a 3-10% reduction in consumption (Elder et al., 2010); - scarce evidence regarding the effect of increased taxation on problematic alcohol use; - young people no more or less responsive to price/tax.
Study's conclusion	<p>Structural policy interventions (namely taxation, and controls on the minimum legal age and availability) seem to be most effective at reducing alcohol consumption.</p>
Limitations/risk of bias	<p>Small number of reviews included; overly broad conclusions; no quality assessment; limited generalizability to LMIC.</p>

Burton R, Henn C, Lavoie D, et al. A rapid evidence review of the effectiveness and cost-effectiveness of alcohol control policies: an English perspective. Lancet 2017; 389(10078): 1558-80.

Type of review / publication	- review of reviews - journal: Lancet
Was an 'a priori' design provided?	No
Was there duplicate study selection and data extraction?	No
Was a comprehensive literature search performed?	No - databases: MEDLINE; Pubmed. - Year / month of last search: 2016, month not reported. - # of studies included: 7 reviews (Anderson et al., 2009; Dhalwani, 2011; Elder et al., 2010; Fogarty, 2010; OECD, 2015, Wagenaar et al., 2009, Xu, Chaloupka, 2011), 2 individual studies; - LMIC: 0
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Unclear
Was a list of studies (included and excluded) provided?	No
Were the characteristics of the included studies provided?	No; a data extraction was template was used (reference, aims, design/setting, population, intervention/exposure, country, outcomes, results, conclusions, strengths, limitations, inequalities, costs, recommendations) but no data were presented.
Was the scientific quality of the included studies assessed and documented?	Quality of evidence was assessed using the Grading of Recommendations, Assessment, Development, and Evaluation (GRADE) criteria. Unclear if the quality of individual studies were assessed beyond their design (e.g., systematic review, RCT, ...).
Was the scientific quality of the included studies used appropriately in formulating conclusions?	Yes
Were the methods used to combine the findings of studies appropriate?	n/a
Was the likelihood of publication bias assessed?	n/a
Funding, conflicts of interest reported?	- Review: yes; Public Health England - Included studies: no.

Results	<p>Only broad results presented:</p> <ul style="list-style-type: none"> - Taxation - increased tax was associated with a proportionate reduction in alcohol consumption; - all alcohol drinkers can be targeted at beverage types; - Minimum pricing - applies only to alcohol which is cheap relative to its strength; moderate drinkers and the on-trade are minimally affected.
Study's conclusion	<p>Increasing tax is a highly effective and cost-effective approach to health improvement. Minimum prices effectively reduces health and other harms, is targeted at the heaviest drinkers who experience the greatest harm, and is cost-effective.</p>
Limitations/risk of bias	<p>Search strategy poorly described and not comprehensive; broad conclusions; unclear quality assessment of individual studies; limited generalizability to LMIC.</p>

Siegfried N, Parry C. Do alcohol control policies work? An umbrella review and quality assessment of systematic reviews of alcohol control interventions (2006 - 2017). PLoS One 2019; 14(4): e0214865.

Type of review / publication	- review of reviews - journal: PLoS One
Was an 'a priori' design provided?	Yes
Was there duplicate study selection and data extraction?	Yes
Was a comprehensive literature search performed?	Yes - databases: PubMed, Embase, and The Cochrane Library - Year/ month of last search: July 2017 - # of studies included: 7 reviews (Wagenaar, Salois, Komro, 2009; Elder, Lawrence, et al., 2010; Korczak, Steinhauser, Dietl, 2011; Li, Babor, et al., 2015; Nelson, 2015; Boniface, Scannell, et al, 2017; Nelson, McNall, 2017) - LMIC: 0
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Yes
Was a list of studies (included and excluded) provided?	No; only a list of included studies is provided.
Were the characteristics of the included studies provided?	Yes; number and type of included studies; publication limits; language limits; ROBIS (Risk of Bias Assessment Tool for Systematic Reviews) domains.
Was the scientific quality of the included studies assessed and documented?	Four ROBIS (Risk of Bias Assessment Tool for Systematic Reviews) domains were used (1) study eligibility criteria; 2) identification and selection of studies; 3) data collection and study appraisal; and 4) synthesis and findings. Only broad scores are presented (high, low or uncertain) without any details.
Was the scientific quality of the included studies used appropriately in formulating conclusions?	Yes
Were the methods used to combine the findings of studies appropriate?	n/a
Was the likelihood of publication bias assessed?	n/a
Funding, conflicts of interest reported?	- Review: yes; Alcohol, Tobacco and Other Drug Research Unit of the South African Medical Research Council (SAMRC). - Included studies: no

Results	<p>Only broad results presented.</p> <ul style="list-style-type: none"> - The evidence for “increased pricing and taxation” was assessed as “possibly beneficial,” with a recommendation for “revision with adequate quality assessment, meta-analysis and regression where possible to account for the potential confounders, and integration of the overall quality into the interpretation of the results.” Unclear what was meant by “beneficial.” - The evidence for “price only (minimum unit pricing)” was assessed, based on a single review as “possibly beneficial” with recommendations that further implementation of minimum unit pricing occur within a monitoring environment.”
Study's conclusion	No clear conclusion reported.
Limitations/risk of bias	Small number of reviews included; included studies limited to those reported between 2006 and 2017; limited reporting of quality assessment of individual studies; overly broad presentations of results; no clear conclusion reported; limited generalizability to LMIC.

Appendix 5. Characteristics of included reviews

Ornstein SI. Control of alcohol consumption through price increase. J Stud Alcohol 1980; 41(9): 807-18.

Type of review/ publication	- narrative review - journal: J Stud Alcohol
Was an 'a priori' design provided?	No
Was there duplicate study selection and data extraction?	No
Was a comprehensive literature search performed?	Unclear; search not reported; - databases: not reported; - Year/month of last search: not reported; - # of studies included: 23 - LMIC: 0
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Yes
Was a list of studies (included and excluded) provided?	No
Were the characteristics of the included studies provided?	Yes; data (place and time); estimation method; price and income elasticities.
Was the scientific quality of the included studies assessed and documented?	To some extent; the quality of individual studies was generally discussed throughout; some studies dismissed because of quality concerns. No formal quality assessment approach/tool used; useful critical review of econometric techniques used in individual studies, with suggestion to interpret results cautiously.
Was the scientific quality of the included studies used appropriately in formulating conclusions?	Yes
Were the methods used to combine the findings of studies appropriate?	n/a
Was the likelihood of publication bias assessed?	n/a
Funding, conflicts of interest reported?	- Review: yes; California Department of Alcohol and Drug Abuse; UCLA. - Included studies: no.
Results	Total own-price elasticities: - beer: -0.3 to -0.9, all statistically significant; - wine: wide variation between countries, generally inelastic; - spirits: most studies generally weak; best estimate, unitary elastic; Cross-price elasticities: - no consistency in findings across studies.

Study's conclusion	<ol style="list-style-type: none"> 1) an increase in the price of beer, ceteris paribus will likely lead to a substantially less than proportional decline in beer consumption; 2) an increase in the price of distilled spirits ceteris paribus will likely lead to a proportional or somewhat greater than proportional decline in distilled spirits; 3) in the case of wine, the results are too unreliable to offer any conclusions; 4) no consistency in findings across studies with respect to cross-price elasticities.
Limitations/risk of bias	Search strategy not described; criteria for quality assessment could be more explicit; limited generalizability to LMIC.

Ornstein SI, Levy D. Price and income elasticities of demand for alcoholic beverages. *Recent Dev Alcohol* 1983; 1: 303-45.

Type of review / publication	- narrative review - book section
Was an 'a priori' design provided?	No
Was there duplicate study selection and data extraction?	No
Was a comprehensive literature search performed?	Unclear; search not reported. - databases: not reported - Year / month of last search: not reported; - # of studies included: 23 - LMIC: 0
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Yes.
Was a list of studies (included and excluded) provided?	No
Were the characteristics of the included studies provided?	Yes; data (place and time); estimation method; price and income elasticities.
Was the scientific quality of the included studies assessed and documented?	To some extent; the quality of individual studies was generally discussed throughout; some studies dismissed because of quality concerns. No formal quality assessment approach / tool used; useful critical review of econometric techniques used in individual studies, with suggestion to interpret results cautiously.
Was the scientific quality of the included studies used appropriately in formulating conclusions?	Yes
Were the methods used to combine the findings of studies appropriate?	n/a
Was the likelihood of publication bias assessed?	n/a
Funding, conflicts of interest reported?	- Review: yes; California Department of Alcohol and Drug Abuse; UCLA; - Included studies: no.
Results	See Ornstein, 1980
Study's conclusion	See Ornstein, 1980
Limitations / risk of bias	See Ornstein, 1980

Leung SF, Phelps CE. My kingdom for a drink ...? A review of estimates of the price sensitivity of demand for alcoholic beverages. In: Hilton ME, Bloss G, eds. Economics and the Prevention of Alcohol-Related Problems NIAAA Research Monograph No 25 NIH Pub No 93-3513. Bethesda, MD: National Institute on Alcohol Abuse and Alcoholism; 1993: 1-31.

Type of review / publication	- narrative review - report
Was an 'a priori' design provided?	No
Was there duplicate study selection and data extraction?	No
Was a comprehensive literature search performed?	Unclear; search not reported; - databases: not reported; - Year/month of last search: not reported; - # of studies included: 21; - LMIC: 0
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Yes
Was a list of studies (included and excluded) provided?	No; list of excluded studies not provided.
Were the characteristics of the included studies provided?	Yes; data (place and time); estimation method; price and income elasticities.
Was the scientific quality of the included studies assessed and documented?	To some extent; the quality of individual studies was generally discussed throughout. No formal quality assessment approach/tool used; useful critical review of data, study design, and econometric techniques used in individual studies.
Was the scientific quality of the included studies used appropriately in formulating conclusions?	Yes
Were the methods used to combine the findings of studies appropriate?	n/a
Was the likelihood of publication bias assessed?	n/a
Funding, conflicts of interest reported?	- Review: yes; US National Institute on Alcohol Abuse and Alcoholism. - Included studies: no.

Results	<p>Total own-price elasticities*:</p> <ul style="list-style-type: none"> - beer: -0.3 - wine: -1 - spirits: -1.5 <p>* based on studies that employed aggregate data; studies that employed individual-level data tended to find higher total own-price elasticities</p> <p>Cross-price elasticities:</p> <ul style="list-style-type: none"> - no consistency in findings across studies; <p>Too few studies reported participation and consumption elasticities or elasticities between groups to make any conclusive statements.</p>
Study's conclusion	<p>Wide degree of disagreement about the price responsiveness of demand for alcoholic beverages; improvements in econometric estimation techniques needed; need for better quality data.</p>
Limitations/risk of bias	<p>Search strategy not described; criteria for quality assessment could be more explicit; limited generalizability to LMIC.</p>

Edwards G, Anderson P, Babor TF, et al. Alcohol policy and the public good. Oxford: Oxford University Press; 1994.

Type of review / publication	- narrative review - WHO report
Was an 'a priori' design provided?	No
Was there duplicate study selection and data extraction?	No
Was a comprehensive literature search performed?	No; search does not appear to be systematic; - databases: not reported; - Year / month of last search: unclear; - # of studies included: 46 - LMIC: 1 (Partanen, 1991 - Kenya)
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Unclear
Was a list of studies (included and excluded) provided?	No; list of excluded studies not provided.
Were the characteristics of the included studies provided?	No; only the year and country were reported.
Was the scientific quality of the included studies assessed and documented?	No
Was the scientific quality of the included studies used appropriately in formulating conclusions?	Unclear
Were the methods used to combine the findings of studies appropriate?	n/a
Was the likelihood of publication bias assessed?	n/a
Funding, conflicts of interest reported?	- Review: yes; Addiction Research Foundation (Toronto, ON, Canada); Department of Health (London, UK); Finnish Foundation for Alcohol Studies (Helsinki, Finland); National Institute for Drug and Alcohol Research (Oslo, Norway); Society for the Study of Addiction (London, UK); WHO (Europe); - Included studies: no.

Results	<p>Only broad results presented: No average results provided; a description of the main results were discussed by countries and range of elasticities were provided:</p> <ul style="list-style-type: none"> - English-speaking countries had a demand for beer that was less price elastic than the one for wines and spirits; - Heavy and dependent drinkers were at least as responsive to price as moderate drinkers; - Cross-price elasticities between beverage type were generally small.
Study's conclusion	<p>Long term effects of price change may be more important than short term effects. Magnitude of elasticity depends on culture, legal situation, and economy. Larger swings in price affect consumption more. Heavy drinkers more responsive to price changes. Taxes should be used to increase the price of alcohol.</p>
Limitations/risk of bias	<p>No quality assessment of included studies; no account for differing types of price elasticities (e.g., short-run, long-run, participation, consumption); no search strategy or proper discussion of results; results of the review do not support some of the proposed policy recommendations; limited generalizability to LMIC.</p>

Fogarty J. The nature of the demand for alcohol: understanding elasticity. British Food Journal 2006; 108(4): 316-32.

Type of review / publication	- narrative review; meta-regression - journal: British Food Journal
Was an 'a priori' design provided?	No
Was there duplicate study selection and data extraction?	No
Was a comprehensive literature search performed?	No; studies selected from Edward, Anderson et al., 1994. - databases: not reported; - Year / month of last search: unclear; - # of studies included: 44 - LMIC: 1 (Partanen, 1991 - Kenya)
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Unclear
Was a list of studies (included and excluded) provided?	No; list of excluded studies not provided.
Were the characteristics of the included studies provided?	No
Was the scientific quality of the included studies assessed and documented?	No
Was the scientific quality of the included studies used appropriately in formulating conclusions?	n/a; no quality assessment conducted.
Were the methods used to combine the findings of studies appropriate?	n/a
Was the likelihood of publication bias assessed?	n/a
Funding, conflicts of interest reported?	- Review: no. - Included studies: no.
Results	Mean (95%CI); median total own-price elasticities: - beer: -0.38 (-0.46, -0.30); -0.28 - wine: -0.77 (-0.89, -0.65); -0.59 - spirits: -0.70 (-0.84, -0.56), -0.59 Mean, and median own-price elasticities appear to be calculated without any distinction between price- and tax-elasticities, between short- and long-run price elasticities and include multiple estimates from same studies.

Study's conclusion	<p>No overall conclusive statement regarding the impact of prices or taxes on alcohol use:</p> <ul style="list-style-type: none"> - consumer responses to changes in the price of alcoholic beverages do not vary between countries; - higher levels of consumption were associated with more inelastic demand.
Limitations/risk of bias	<p>Non-systematic search strategy; study characteristics not presented; no quality assessment of included studies; no account for differing types of price elasticities (e.g., short-run, long-run, participation, consumption); limited generalizability to LMIC.</p>

Gallet CA. The demand for alcohol: a meta-analysis of elasticities. Australian Journal of Agricultural and Resource Economics 2007; 51(2): 121-35.

Type of review / publication	- narrative review; meta-regression - journal: Australian Journal of Agricultural and Resource Economics
Was an 'a priori' design provided?	No
Was there duplicate study selection and data extraction?	No
Was a comprehensive literature search performed?	Unclear.; search not clearly described; - databases: EconLit - Year / month of last search: unclear; - # of studies included: unclear (132 studies that examined price, income or advertising elasticities) - LMIC: 1 (Musgrave, Stern 1988 -Karnataka, India)
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Yes
Was a list of studies (included and excluded) provided?	No; list of excluded studies not provided.
Were the characteristics of the included studies provided?	No
Was the scientific quality of the included studies assessed and documented?	No quality assessment approach / tool used. Information collected on several common traits of studies, which covered a broad range of attributes, including the type of elasticity estimate, the beverage to which the elasticity applied, serial correlation, heteroscedasticity, the specification of demand, the nature of the data, estimation techniques used, year of publication and quality of the publication outlet. A criticism for some of these study traits were discussed
Was the scientific quality of the included studies used appropriately in formulating conclusions?	n/a; no formal quality assessment conducted.
Were the methods used to combine the findings of studies appropriate?	n/a
Was the likelihood of publication bias assessed?	n/a
Funding, conflicts of interest reported?	- Review: no; - Included studies: no.

Results	<p>Total median own-price elasticities</p> <ul style="list-style-type: none"> - all, short-run: -0.52 - all, long-run: -0.82 - beer: -0.36 - wine: -0.70 - spirits: -0.68 - alcohol (composite of beer, wine, spirits): -0.50 <p>No specific distinction made by type of own-price elasticities, and between subgroups; unable to disentangle policy-relevant effects. Tax elasticities appear to be treated as own-price elasticities.</p>
Study's conclusion	<p>No overall conclusive statement regarding the impact of prices or taxes on alcohol use.</p> <ul style="list-style-type: none"> - elasticity estimates are sensitive to a variety of factors; - beer more price inelastic relative to wine and spirits; - teens are least responsive to price.
Limitations/risk of bias	<p>Poorly described search strategy; study characteristics not clearly presented; no formal quality assessment of included studies; limited generalizability to LMIC.</p>

Booth A, Brennan A, Meier P, et al. Independent review of the effects of alcohol pricing and promotion: part a – systematic reviews. Sheffield: School of Health and Related Research, University of Sheffield, 2008.

Type of review/ publication	- narrative review - report
Was an 'a priori' design provided?	No
Was there duplicate study selection and data extraction?	Unclear (although likely).
Was a comprehensive literature search performed?	Unclear; search not clearly described; - databases: Medline, Cochrane, DARE, HTA, NHS, PsycINFO, Cinahl, HMIC, SCI, SSCI, ASSIA, Social Service Abstracts, EPPI-Centre, EconLit, ERIC, British Education index, Association for Consumer Research, Chartered Institute of Marketing, EBSCO, Emerald Marketing Journals, WARC, DrugScope, and Project Cork; - Year/month of last search: January 2008; - # of studies included: 2 reviews (Wagenaar, Salois, Komro, 2009 and Gallet, 2007) + 15 additional individual studies. - LMIC: 0 (from additional 15 studies)
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Yes
Was a list of studies (included and excluded) provided?	No; list of excluded studies not provided.
Were the characteristics of the included studies provided?	Yes; broad characteristics of included reviews were provided (authors/country, study design, sample and interventions, methods, consumption outcomes, limitations and conclusions).
Was the scientific quality of the included studies assessed and documented?	Quality assessment was discussed but no information was provided as to how it was operationalized. Limitations for each study were provided.
Was the scientific quality of the included studies used appropriately in formulating conclusions?	Unclear
Were the methods used to combine the findings of studies appropriate?	n/a
Was the likelihood of publication bias assessed?	n/a
Funding, conflicts of interest reported?	- Review: Policy Research Programme, Department of Health, UK; - Included studies: no.

Results	<p>Only broad results presented.</p> <ul style="list-style-type: none"> - own-price elasticity estimates highly variable, but consistently negative; - stronger effect for cheaper drinks; - scattered evidence suggest that price policies have a similar or stronger effect for at-risk groups (young, young adult binge drinkers and heavy drinkers).
Study's conclusion	<p>There is strong and consistent evidence to suggest that price increases (including through taxation) have a significant effect in reducing demand for alcohol.</p>
Limitations/risk of bias	<p>Only broad presentation of results (focus on direction of effect); unclear how quality assessment was operationalized; limited generalizability to LMIC.</p>

Wagenaar AC, Salois MJ, Komro KA. Effects of beverage alcohol price and tax levels on drinking: a meta-analysis of 1003 estimates from 112 studies. *Addiction* 2009; 104(2): 179-90.

Type of review / publication	- meta-analysis; - journal: <i>Addiction</i>
Was an 'a priori' design provided?	No
Was there duplicate study selection and data extraction?	No
Was a comprehensive literature search performed?	Yes. Search clearly described and comprehensive. - databases: AgEcon Search, Blackwell–Synergy, EBSCO Host (which encompasses EconLit), Academic Search Premier, Business Source Premier, PsychInfo, JSTOR, MEDLINE, Springer,, ScienceDirect, ISI Web of Knowledge, Wiley; - Year /month of last search: not reported; - # of studies included: unclear (112 but only 105 references could be identified) - LMIC: 1 (Musgrave, Stern 1988 -Karnataka, India)
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Yes
Was a list of studies (included and excluded) provided?	No; list of excluded studies not provided.
Were the characteristics of the included studies provided?	No
Was the scientific quality of the included studies assessed and documented?	No quality assessment approach / tool used. As a quality inclusion criterion, authors excluded from analysis empirical studies that did not provide sufficient data for calculating some form of numerical estimate of effect and estimate of its standard error. Sensitivity and robustness analyses to evaluate consistency of estimates across study characteristics was conducted.
Was the scientific quality of the included studies used appropriately in formulating conclusions?	No
Were the methods used to combine the findings of studies appropriate?	Yes
Was the likelihood of publication bias assessed?	No; not formally.
Funding, conflicts of interest reported?	- Review: Robert Wood Johnson Foundation. - Included studies: no.

Results	<p>Pooled standardized effect sizes (95%CI)</p> <ul style="list-style-type: none"> - aggregate-level: - alcohol -0.44 (-0.54, -0.34) - beer: -0.17 (-0.22, -0.12) - wine: -0.30 (-0.36, -0.23) - spirits: -0.29 (-0.34, -0.23) - individual-level - alcohol -0.03 (-0.05, -0.02) - beer: -0.12 (-0.22, -0.02) - wine: -0.14 (-0.26, -0.01) - spirits: -0.10 (-0.17, -0.02) - heavy drinking: -0.01 (-0.03, 0.00) <p>Total simple mean own-price elasticities:</p> <ul style="list-style-type: none"> - alcohol -0.51 - beer: -0.46 - wine: -0.69 - spirits: -0.80 - heavy drinking: -0.28 <p>Standardized effect sizes at aggregate-level were calculated from total own-price elasticities and combined short- and long run estimates. Unclear if standardized effect sizes at individual-level refer to participation or consumption own-price elasticities, or both; tax elasticities treated as own-price elasticities.</p>
Study's conclusion	<p>Statistically overwhelming evidence of effects of alcohol prices on drinking; results across studies suggest that the magnitude of price effects varies across groups, situations and times.</p>
Limitations/risk of bias	<p>No quality assessment of included studies; no account for differing types of price elasticities (e.g., short-run, long-run, participation, consumption); pooled elasticity estimates not reported; limited generalizability to LMIC.</p>

Elder RW, Lawrence B, Ferguson A, et al. The effectiveness of tax policy interventions for reducing excessive alcohol consumption and related harms. Am J Prev Med 2010; 38(2): 217-29.

Type of review / publication	- narrative review - journal: Am J Prev Med
Was an 'a priori' design provided?	Unclear
Was there duplicate study selection and data extraction?	Unclear
Was a comprehensive literature search performed?	Yes. - databases: MEDLINE, EMBASE, PsycINFO, ETOH, Web of Science, Sociological Abstracts, and EconLit; - Year / month of last search: July 2005; - # of studies included: 46 - LMIC: 0
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Yes
Was a list of studies (included and excluded) provided?	No; list of excluded studies not provided.
Were the characteristics of the included studies provided?	No
Was the scientific quality of the included studies assessed and documented?	Quality of study execution was assessed using a 9-point scale, reflecting the total number of limitations to internal or external validity (study population and intervention descriptions, sampling, exposure and outcome measurement, data analysis, interpretation of results, and other biases). Studies with 0 or 1 limitation were categorized as having good execution, those with 2 to 4 limitations as fair execution, and those with 5 or more were categorized as having limited execution.
Was the scientific quality of the included studies used appropriately in formulating conclusions?	Yes. 19 studies with "limited execution" were excluded from further analysis.
Were the methods used to combine the findings of studies appropriate?	n/a
Was the likelihood of publication bias assessed?	n/a
Funding, conflicts of interest reported?	- Review: Oak Ridge Institute for Scientific Education (ORISE). - Included studies: no.

Results	<p>Total own-price elasticities, median (interquartile interval):</p> <ul style="list-style-type: none"> - beer: -0.50 (-0.91, -0.36) - wine: -0.64 (-1.03, -0.38) - spirits: -0.79 (-0.90, -0.24) - ethanol: -0.77 (-2.00, -0.50) <p>- prices/taxes were associated with a lower prevalence of excessive alcohol consumption</p> <p>Median estimates presented without any distinction between price- and tax-elasticities, and between short- and long-run price elasticities.</p>
Study's conclusion	<ul style="list-style-type: none"> - Consistent evidence that higher alcohol prices and alcohol taxes were associated with reductions in excessive alcohol consumption; - Some evidence that price effects may be more pronounced among groups with a higher prevalence of excessive alcohol consumption (e.g., young men); - The majority of estimates of price elasticity fell within the range of approximately -0.30 to -1.00; - Reasonable to expect that alcohol price elasticities may vary across population groups by age and disposable income but assessment of such group differences was not possible.
Limitations/risk of bias	<p>No account for differing types of price elasticities (e.g., short-run, long-run); limited generalizability to LMIC.</p>

Fogarty J. The demand for beer, wine and spirits: a survey of the literature. Journal of Economic Surveys 2010; 24(3): 428-78.

Type of review / publication	- meta-analysis; meta-regression - journal: Journal of Economic Surveys
Was an 'a priori' design provided?	No
Was there duplicate study selection and data extraction?	No
Was a comprehensive literature search performed?	No; search not described. - databases: not reported; - Year / month of last search: not reported; - # of studies included: 106 - LMIC: 1 (Partanen, 1991 - Kenya)
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Unclear
Was a list of studies (included and excluded) provided?	No; list of excluded studies not provided.
Were the characteristics of the included studies provided?	Yes. Broad characteristics of included studies were provided (authors / year of publication / country, time period, study design, type of demand model).
Was the scientific quality of the included studies assessed and documented?	No quality assessment approach / tool used. As a quality inclusion criterion, authors excluded from analysis empirical studies that did not provide sufficient data for calculating some form of numerical estimate of effect and estimate of its standard error. Sensitivity and robustness analyses to evaluate consistency of estimates across study characteristics was conducted.
Was the scientific quality of the included studies used appropriately in formulating conclusions?	n / a; no quality assessment conducted.
Were the methods used to combine the findings of studies appropriate?	Yes; meta-analysis conducted using fixed- and random-effect models.
Was the likelihood of publication bias assessed?	Yes
Funding, conflicts of interest reported?	- Review: no; - Included studies: no.

Results	<p>Pooled total own-price elasticities</p> <ul style="list-style-type: none"> - fixed effects: - beer: -0.26 - wine: -0.83 - spirits: -0.38 - random effects: - beer: -0.36 - wine: -0.57 - spirits: -0.5 <p>Significance levels not reported; all estimates were statistically significantly different than 0.</p> <p>Pooled estimates calculated without any distinction between price- and tax-elasticities, and between short- and long-run price elasticities.</p>
Study's conclusion	<p>No specific conclusion regarding the overall magnitude and statistical significance of own-price elasticity estimates. A gradual drift towards more elastic own-price elasticity estimates was noted.</p>
Limitations/risk of bias	<p>Non-systematic search strategy; no quality assessment of included studies; no account for differing types of price elasticities (e.g., short-run, long-run); limited generalizability to LMIC.</p>

Patra J, Giesbrecht N, Rehm J, Bekmuradov D, Popova A. Are alcohol prices and taxes an evidence-based approach to reducing alcohol-related harm and promoting public health and safety? A literature review. *Contemporary Drug Problems* 2012; 39(1): 7-48.

Type of review/ publication	- narrative review - journal: <i>Contemporary Drug Problems</i>
Was an 'a priori' design provided?	Unclear
Was there duplicate study selection and data extraction?	Yes
Was a comprehensive literature search performed?	Yes. - databases: MEDLINE, EMBASE, CINHALL, and PsycInfo. - Year/month of last search: June 2011; - # of studies included: 26 (excluded studies that only focused on overall consumption as an outcome variable); - LMIC: 0
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	No
Was a list of studies (included and excluded) provided?	No; list of excluded studies not provided.
Were the characteristics of the included studies provided?	Yes; broad characteristics of included studies were provided (design of study, main indicators, intervention, findings and policy implications).
Was the scientific quality of the included studies assessed and documented?	The quality of individual articles was assessed based on 4 domains: comparability of subjects, exposure, outcome measurement, and funding/sponsorship. For some studies, some limitations were reported (albeit extremely briefly) along study characteristics.
Was the scientific quality of the included studies used appropriately in formulating conclusions?	Unclear
Were the methods used to combine the findings of studies appropriate?	n/a
Was the likelihood of publication bias assessed?	n/a
Funding, conflicts of interest reported?	- Review: yes; Nova Scotia Department of Health Promotion and Protection, Centre for Addiction and Mental Health; Ontario Ministry of Health and Long Term Care. - Included studies: yes, but not reported.
Results	Only broad results were provided. Changes in price or taxes of alcohol were found to have had an impact on drinking patterns, including high risk drinking.
Study's conclusion	The literature summarized in this article points to the importance of alcohol taxes and prices as a tool for promoting public health and safety.

Limitations/risk of bias	Limited quality assessment of included studies; overly broad presentation of results (focus on direction of effect); limited generalizability to LMIC.
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Sornpaisarn B, Shield K, Cohen J, Schwartz R, Rehm J. Elasticity of alcohol consumption, alcohol-related harms, and drinking initiation in low- and middle-income countries: A systematic review and meta-analysis. The International Journal of Alcohol and Drug Research 2013; 2(1).

Type of review/ publication	- meta-analysis - journal: International Journal of Alcohol and Drug Research
Was an 'a priori' design provided?	Unclear
Was there duplicate study selection and data extraction?	Yes
Was a comprehensive literature search performed?	Yes; - databases: MEDLINE, EMBASE, PsycINFO, and EconLit; - Year/month of last search: June 2011; - # of studies included: 12; - LMIC: 12 (Musgrave, Stern, 1988 - Karnataka, India; Partanen, 1991 - Kenya; Fan, Waiiles, Cramer, 1995 - China; Okello, 2001 - Kenya; Osoro et al., 2001 - Tanzania; Özgüven, 2004 - Turkey; Selvanathan, Selvanathan, 2005 - 19 LMIC; John, 2005 - India; Andrienko, Nemtsov, 2005 - Russia; Pan, Fang, Malaga, 2006 - China; Poapongsakorn, Leelahanon, et al., 2007 - Thailand; Yu & Abler, 2010 - China)
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Yes
Was a list of studies (included and excluded) provided?	No; list of excluded studies not provided.
Were the characteristics of the included studies provided?	Yes. Broad characteristics of included studies were provided (author/year/source; country of study; study design/year and source of data; population; intervention; other independent variables; comparison; outcome; type of publication).
Was the scientific quality of the included studies assessed and documented?	Minimum quality criteria for inclusion were used: (1) a longitudinal study had to have enough time points to provide a meaningful result; and (2) the results were not confounded by any other large changes in alcohol control policies that were not taken into account. - minimal and broad data limitation for each study were highlighted; - authors stated that "problems with statistical analysis" were assessed; however, no such assessment was presented.
Was the scientific quality of the included studies used appropriately in formulating conclusions?	Unclear
Were the methods used to combine the findings of studies appropriate?	Yes; meta-analysis conducted using random-effect models.
Was the likelihood of publication bias assessed?	Yes; funnel plots, Begg's rank correlation test; Egger's test.
Funding, conflicts of interest reported?	- Review: yes. Thai Health Promotion Foundation; Department of Mental Health, Ministry of Public Health, Thailand; US NIAAA. - Included studies: no.

Results	<p>Pooled total own-price elasticities (95%CI):</p> <ul style="list-style-type: none"> - total alcohol: -0.64 (-0.80,-0.48) - beer: -0.50 (-0.78,-0.22) - other alcoholic beverages: -0.79 (-1.09,-0.49) - all studies: -0.66 (-0.82,-0.51) <p>Pooled estimates calculated without any distinction between price and tax elasticities, between short- and long-run price elasticities and between types of own-price elasticities (participation, or consumption elasticities).</p>
Study's conclusion	Inverse relationship between alcohol consumption and price and / or taxation, similar to what has been observed in high-income countries.
Limitations/ risk of bias	Relatively small number of studies included; relatively vague quality assessment criteria; non-english or Thai studies or reports excluded.

van Walbeek C, Blecher E. The Economics of alcohol use, misuse and policy in South Africa. Cape Town: University of Cap Town, World Health Organization South Africa Office, 2014.

Type of review / publication	- narrative review - Report
Was an 'a priori' design provided?	No
Was there duplicate study selection and data extraction?	No
Was a comprehensive literature search performed?	Unclear.; search not described - databases: not reported; - Year / month of last search: not reported; - # of studies included: High-income: 83 - LMIC: 7 (Tian, Liu, 2011 - China; Selvanathan & Selvanathan, 2005 - 19 LMICs; John, 2005 - India; Okello, 2001 - Kenya; Andrienko, Nemtsov, 2006 - Russia; National Treasury, 2002 - South Africa; Bureau of Economic Research, 2010 - South Africa)
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Yes
Was a list of studies (included and excluded) provided?	No; list of excluded studies not provided.
Were the characteristics of the included studies provided?	Yes; very broad characteristics of included studies were provided (author / date; country; time period and data; type of price effects (e.g., short-run, long-run)).
Was the scientific quality of the included studies assessed and documented?	No
Was the scientific quality of the included studies used appropriately in formulating conclusions?	n/a
Were the methods used to combine the findings of studies appropriate?	n/a
Was the likelihood of publication bias assessed?	n/a
Funding, conflicts of interest reported?	- Review: yes; World Health Organization South Africa Office. - Included studies: no.
Results	Only broad results presented: - a 10% increase in the price of alcohol reduced alcohol consumption by about 4 to 8% in most low- and middle-income countries.

Study's conclusion	The conclusion drawn by this literature is unambiguous, namely that an increase in alcohol prices reduces alcohol consumption. The price elasticity of demand varies from one country to another, but is nearly always in the inelastic range.
Limitations/risk of bias	Non-systematic search strategy; no quality assessment; only very broad results presented which limit usefulness of review; despite focus on LMIC small number of studies included which limits generalizability to LMIC.

Li Q, Babor TF, Zeigler D, et al. Health promotion interventions and policies addressing excessive alcohol use: a systematic review of national and global evidence as a guide to health-care reform in China. *Addiction* 2015; 110 Suppl 1: 68-78.

Type of review/ publication	- narrative review - Journal: <i>Addiction</i>
Was an 'a priori' design provided?	No.
Was there duplicate study selection and data extraction?	Unclear.
Was a comprehensive literature search performed?	Yes. - databases: PubMed; EBSCO and three major Chinese databases (the National Knowledge Infrastructure Database, the Chongqing VIP Information Scientific and Technical Journal Database and National Central Library from Taiwan); - Year/month of last search: not reported; - # of studies included: 1 (Chung et al., 2013 - Hong Kong) - LMIC: 0
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Unclear.
Was a list of studies (included and excluded) provided?	No. List of excluded studies not provided.
Were the characteristics of the included studies provided?	Yes. Broad characteristics of included studies were provided (author/date; target group; design; intervention components; outcomes; study quality; main findings).

Was the scientific quality of the included studies assessed and documented?	<p>Yes; study quality was evaluated on a scale of 1–5 according to the Maryland Scale of Scientific Methods:</p> <p>Level 1: Either (a) a cross-sectional comparison of treated groups with untreated groups, or (b) a before-and-after comparison of treated group, without an untreated comparison group. No use of control variables in statistical analysis to adjust for differences between treated and untreated groups or periods.</p> <p>Level 2: Use of adequate control variables and either (a) a cross-sectional comparison of treated groups with untreated groups, or (b) a before-and-after comparison of treated group, without an untreated comparison group. In (a), control variables or matching techniques used to account for cross-sectional differences between treated and controls groups. In (b), control variables are used to account for before-and- after changes in macro level factors.</p> <p>Level 3: Comparison of outcomes in treated group after an intervention, with outcomes in the treated group before the intervention, and a comparison group used to provide a counterfactual (e.g. difference in difference). Justification given to choice of comparator group that is argued to be similar to the treatment group. Evidence presented on comparability of treatment and control groups. Techniques such as regression and (propensity score) matching may be used to adjust for difference between treated and untreated groups, but there are likely to be important unobserved differences remaining.</p> <p>Level 4: Quasi-randomness in treatment is exploited, so that it can be credibly held that treatment and control groups differ only in their exposure to the random allocation of treatment. This often entails the use of an instrument or discontinuity in treatment, the suitability of which should be adequately demonstrated and defended.</p> <p>Level 5: Reserved for research designs that involve explicit randomisation into treatment and control groups, with Randomised Control Trials (RCTs) providing the definitive example.</p> <p>Equity Checklist for Systematic Reviews to assess equity and gender sensitivity of actions was also used.</p>
Was the scientific quality of the included studies used appropriately in formulating conclusions?	Unclear
Were the methods used to combine the findings of studies appropriate?	n/a
Was the likelihood of publication bias assessed?	n/a
Funding, conflicts of interest reported?	<ul style="list-style-type: none"> - Review: yes; Thompson Foundation, Birmingham, Alabama.; NIAAA and NICHD; - Included studies: no.
Results	One study concluded that an alcohol tax reduction in 2007 and 2008 in Hong Kong was associated with increased alcohol use (as well as decreased binge drinking)
Study's conclusion	Social interventions of an intersectoral nature (e.g. tax policies) and their impact on alcohol-related public health have been shown to be effective in Taiwan and Hong Kong, but have not been evaluated in mainland China.
Limitations/risk of bias	Only one study included that examined the impact of prices/taxes on tobacco use; study's conclusion not based on included studies; limited generalizability to LMIC.

Chen D, Abler D, Zhou D, Yu X, Thompson W. A Meta-analysis of Food Demand Elasticities for China. Applied Economic Perspectives and Policy 2016; 38(1): 50-72.

Type of review / publication	- meta-analysis - Journal: Applied Economic Perspectives and Policy
Was an 'a priori' design provided?	No
Was there duplicate study selection and data extraction?	Unclear
Was a comprehensive literature search performed?	Yes. - databases: AgEcon Search, EconLit, USDA / Economic Research Service (ERS); Web of Science, China National Knowledge Infrastructure (CNKI); - Year / month of last search: 2012 (month not reported); - # of studies included: 11 - LMIC: 11 (Fan, Cramer, Wailes, 1994 - China, rural; Fan, Wailes, Cramer, 1995 - China, rural; Wang, Halbrendt, Jensen, 1997 - China, urban; Wu, Wu, 1997, - China, urban / rural; Yu, Abler, 2010 - China, rural; In Chinese: Mu, Liyuan, Songtian, 2001 - China; Zhang, Pan, Li, 2001- China, Henan province; Chang, Li, 2006 - China, Jiang-Su region; Zhou 2006, - China, rural; Dong, 2009 - China, western region; Dong, Lu, 2009 - China, western region).
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Unclear
Was a list of studies (included and excluded) provided?	No; list of excluded studies not provided.
Were the characteristics of the included studies provided?	Yes; very broad characteristics of included studies were provided (citation / reference; sample size, number of product categories, publication status, language)
Was the scientific quality of the included studies assessed and documented?	No
Was the scientific quality of the included studies used appropriately in formulating conclusions?	n/a
Were the methods used to combine the findings of studies appropriate?	Yes.; results from a meta-regression were used to derive estimates of total own-price, and cross-price elasticities.
Was the likelihood of publication bias assessed?	No; publication status is examined but not publication bias.
Funding, conflicts of interest reported?	- Review: no; - Included studies: no.

Results	<p>Total own-price elasticity:</p> <ul style="list-style-type: none"> - alcohol, mean: -0.77 - alcohol, predicted: -0.65 <p>Predicted cross-price elasticities</p> <ul style="list-style-type: none"> - tobacco: 0.12 - rice: 0.13 - wheat: 0.26 - vegetables: 0.03 <p>Statistical significance not reported.</p>
Study's conclusion	Higher taxes on alcohol could significantly reduce consumption.
Limitations/risk of bias	No quality assessment of studies; unclear if all studies included measured alcohol similarly; statistical significance of pooled results not reported.

Boniface S, Scannell JW, Marlow S. Evidence for the effectiveness of minimum pricing of alcohol: a systematic review and assessment using the Bradford Hill criteria for causality. BMJ Open 2017; 7(5): e013497.

Type of review/ publication	- narrative review - Journal: BMJ Open
Was an 'a priori' design provided?	No
Was there duplicate study selection and data extraction?	Yes
Was a comprehensive literature search performed?	Yes. - databases: PsycINFO, Embase, and Ovid Medline; - Year/month of last search: February 2017; - # of studies included: 35; (reviews, 2 [Booth, 2018, Wagenaar et al., 2009], natural experiments and time series analyses, 14; modelling studies, 7; cross-sectional studies, 9; intervention studies, 2); - LMIC: 3, (Bhattacharya, Gathmann, Miller, 2013 - Russia; Treisman, 2010 - Russia; Wald, Moskalewicz, 1984 - Poland).
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Yes
Was a list of studies (included and excluded) provided?	Yes
Were the characteristics of the included studies provided?	Yes. Broad characteristics of included studies were provided (author/year, country, study design, population or participants, pricing intervention studied, peer reviewed, outcomes studied, conflict of interest, Bradford Hill criteria met).
Was the scientific quality of the included studies assessed and documented?	The Effective Public Health Practice Project (EPHPP) Quality Assessment Tool was used to assess the quality of individual quantitative studies. Quality assessment of individual studies not provided; only broad scores presented (weak, moderate, strong).
Was the scientific quality of the included studies used appropriately in formulating conclusions?	Yes
Were the methods used to combine the findings of studies appropriate?	n/a
Was the likelihood of publication bias assessed?	n/a
Funding, conflicts of interest reported?	- Review: Yes. Open access for this article was funded by King's College London Open Scholarship Fund; two authors work at King's College London, which as an institution is listed as a member of the Alcohol Health Alliance; one author has received funding indirectly from UKCTAS, which as an institution is also listed as a member of the Alcohol Health Alliance. None of the authors have any relationship with the Alcohol Health Alliance. - Included studies: Yes.

Results	<p>There was very little evidence that minimum alcohol prices were not associated with consumption or subsequent harms. Results were presented with respect to the Bradford Hill criteria for causality:</p> <ul style="list-style-type: none"> - Strength of the association: reasonably good support; - Consistency: very strong support; - Specificity: very strong support; - Temporality: very strong support; - Dose–response/biological gradient: strong support, although the relationship is difficult to quantify; - Plausibility: strong support; - Coherence: strong support; - Experiment: tentative support; - Analogy: very strong support.
Study's conclusion	<p>Review lend strong support for policies such as minimum unit price in reducing alcohol consumption and alcohol-related harm, with all nine of the Bradford Hill criteria met, and little by way of counter findings.</p>
Limitations/risk of bias	<p>Limited discussion of effect sizes; complete quality assessment not reported; limited generalizability to LMIC.</p>

Scott S, Muirhead C, Shucksmith J, Tyrrell R, Kaner E. Does Industry-Driven Alcohol Marketing Influence Adolescent Drinking Behaviour? A Systematic Review. Alcohol Alcohol 2017; 52(1): 84-94.

Type of review / publication	- narrative review - journal: Alcohol and Alcoholism
Was an 'a priori' design provided?	No
Was there duplicate study selection and data extraction?	Yes
Was a comprehensive literature search performed?	Yes; - databases: MEDLINE, EMBASE, SCOPUS, PsychINFO, CINAHL and ProQuest databases (including CSA Illumina). - Year / month of last search: July 2015; - # of studies included: 2; drinking initiation, 0; drinking continuation, 1; drinking frequency, 0; drinking intensity, 1;
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Yes
Was a list of studies (included and excluded) provided?	No; list of excluded studies not provided.
Were the characteristics of the included studies provided?	Yes; characteristics and a summary results of included studies were provided (study / setting, sample characteristics [age, gender, socioeconomic status, ethnic background], study design; exposure measures, behavioural outcome measures, follow up [rate / duration]), reported analyses).
Was the scientific quality of the included studies assessed and documented?	The Effective Public Health Practice Project (EPHPP) Quality Assessment Tool was used to assess the quality of individual studies. Quality assessment of individual studies not provided; only broad scores presented (weak, moderate, strong).
Was the scientific quality of the included studies used appropriately in formulating conclusions?	Yes
Were the methods used to combine the findings of studies appropriate?	n/a
Was the likelihood of publication bias assessed?	n/a
Funding, conflicts of interest reported?	- Review: yes; Economic and Social Research Council (ESRC); National Institute for Health Research (NIHR)'s School for Public Health Research (SPHR); - Included studies: no.

Results	<ul style="list-style-type: none"> - Drinking continuation: one study found that alcohol discounts had a significant effect on alcohol consumption among young people aged 14–17 in the Netherlands. - Drinking intensity: one study, using two datasets, found that binge drinking among US adolescents (mean age: 15 years) decreased as price increased (data set 1: price elasticity: -0.18 (95%CI $-0.30, -0.06$); data set 2: price elasticity: -0.73 (95%CI $-1.51, 0.05$). <p>The reported price elasticities for drinking intensity were past two-week binge participation elasticities.</p>
Study's conclusion	<p>Only two studies identified by this review focused on alcohol price and drinking behaviour in those under the age of 18. Whilst both studies reported only positive associations, both of these studies were categorized as methodologically 'weak', and price and affordability remains a significantly understudied influence upon young people's drinking behaviour.</p>
Limitations/risk of bias	<p>Very small number of studies included limits the usefulness of the review; complete quality assessment not reported.</p>

Appendix 6. Characteristics of included reviews funded by the International Center for Alcohol Policies (ICAP) and authored or co-authored by Jon Nelson

a. Aggregate-level data

Nelson JP. Meta-analysis of alcohol price and income elasticities - with corrections for publication bias. Health Econ Rev 2013; 3(1): 17. [24]

Type of review / publication	- meta-analysis - Journal: Health Econ Rev
Was an 'a priori' design provided?	No
Was there duplicate study selection and data extraction?	No
Was a comprehensive literature search performed?	Yes. Search clearly described and comprehensive. - databases: AgEcon Search, EconLit, JSTOR, RePEc, SSRN, EBSCO Host, ProQuest, ScienceDirect Journals, Wiley Online Library; - Year /month of last search: August-October 2012; - # of studies included: 182 - LMIC: 16 (Partanen, 1991 - Kenya; Florkowski, McNamara, 1992 - Poland; Wang, Halbrendt, Jensen, 1997 - China; Troncoso-Valverde, 2004 - Chile; Özgüven, 2004 - Turkey; John, 2005 - India; Meyerhoefer, Ranney, Sahn, 2005 - Romania; Andrienko, Nemtsov, 2005 - Russia; Baltagi, Geishecker, 2006 - Russia; Györfi, 2006 - Hungary; Pan, Fang, Malaga, 2006 - China; Osoro et al., 2006 - Tanzania; Treisman, 2010 - Russia; Yu, Abler, 2010 - China; Shi, 2011 - China; Tian, Liu, 2011 - China; Pang Fang, 2003 was included although it is an earlier version of Pan, Fang, Malaga, 2006)
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Yes
Was a list of studies (included and excluded) provided?	Yes
Were the characteristics of the included studies provided?	No
Was the scientific quality of the included studies assessed and documented?	Some studies excluded because of poor reporting (e.g., missing standard erros), or poor methods "linear model or poor data"; quality of included studies not generally assessed (no formal quality assessment approach/tool used); unclear which study was excluded and why.
Was the scientific quality of the included studies used appropriately in formulating conclusions?	Unclear
Were the methods used to combine the findings of studies appropriate?	Yes. Meta-analysis conducted using fixed- and random-effect models; results presented for trimmed samples (10%); heterogeneity not formally assessed.

Was the likelihood of publication bias assessed?	Yes, funnel plots, Egger tests.
Funding, conflicts of interest reported?	<ul style="list-style-type: none"> - Review: International Center for Alcohol Policies (ICAP), Washington, DC. - Included studies: No. <p>Strong links between ICAP and alcohol industry and author's close ties to alcohol industry could be more clearly reported.</p>
Results	<p>Pooled total own-price elasticities, trimmed samples (95%CI)</p> <ul style="list-style-type: none"> - fixed effects: - beer: -0.26 (-0.46, -0.06) - wine: -0.34 (-0.54, -0.14) - spirits: -0.49 (-0.69, -0.29) - alcohol: -0.46 (-0.66, -0.26) - random effects - beer: -0.35 (-0.39, -0.31) - wine: -0.58 (-0.64, -0.52) - spirits: -0.64 (-0.70, -0.58) - alcohol: -0.58 (-0.64, -0.52) <p>Total own-price elasticities, full samples, medians</p> <ul style="list-style-type: none"> - beer: -0.32 - wine: -0.57 - spirits: -0.67 - alcohol: -0.54
Study's conclusion	The average price elasticities reported imply that reducing alcohol consumption through price or tax increases will be less effective or more costly than previously suggested or claimed.
Limitations/ risk of bias	<p>Substantial overlap with Nelson, 2013 - Journal of Wine Economics and Nelson, 2014 - J Health Econ.</p> <p>No formal quality assessment conducted; opaque selection of individual studies' estimates; unclear if short-run and long-run estimates have been pooled together; heterogeneity not formally assessed; efforts to minimize the potential effect of alcohol prices on alcohol use apparent; data/ results do not support all conclusions.</p>

Nelson JP. Robust Demand Elasticities for Wine and Distilled Spirits: Meta-Analysis with Corrections for Outliers and Publication Bias. Journal of Wine Economics 2013; 8(3): 294-317. [25]

Type of review / publication	- meta-analysis - Journal: Journal of Wine Economics
Was an 'a priori' design provided?	No
Was there duplicate study selection and data extraction?	No
Was a comprehensive literature search performed?	Yes. Search clearly described and comprehensive. - databases: AgEcon Search, EconLit, JSTOR, RePEc, SSRN, EBSCO Host, ProQuest, ScienceDirect Journals, Wiley Online Library; - Year / month of last search: August-September 2012; - # of studies included: 125 - LMIC: 6 (Wang, Halbrendt, Jensen, 1997 - China; Troncoso-Valverde, 2004 - Chile; Meyerhoefer et al., 2005 - Romania; Pan, Fang, Malaga, 2006 - China; Treisman, 2010 - Russia; Tian, Liu, 2011 - China; Pang Fang, 2003 was included although it is an earlier version of Pan, Fang, Malaga, 2006)
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Yes
Was a list of studies (included and excluded) provided?	No. List of excluded studies not provided.
Were the characteristics of the included studies provided?	No
Was the scientific quality of the included studies assessed and documented?	Some studies excluded because of poor reporting (e.g., missing standard erros), or poor methods "linear model or poor data"; quality of included studies not generally assessed (no formal quality assessment approach/tool used); unclear which study was excluded and why.
Was the scientific quality of the included studies used appropriately in formulating conclusions?	Unclear
Were the methods used to combine the findings of studies appropriate?	Yes. Meta-analysis conducted using fixed- and random-effect models; results presented for full and trimmed samples (10%); heterogeneity not formally assessed.
Was the likelihood of publication bias assessed?	Yes, funnel plots, Egger tests.
Funding, conflicts of interest reported?	- Review: International Center for Alcohol Policies (ICAP), Washington, DC. - Included studies: No. Strong links between ICAP and alcohol industry and author's close ties to alcohol industry could be more clearly reported.

Results	<p>Pooled total own-price elasticities, full samples (95%CI)</p> <ul style="list-style-type: none"> - fixed effects: - wine: -0.63 (-0.65, -0.61) - spirits: -0.48 (-0.50, -0.46) - random effects: - wine: -0.62 (-0.74, -0.50) - spirits: -0.65 (-0.73, -0.57) <p>Pooled total own-price elasticities, trimmed samples</p> <ul style="list-style-type: none"> - same as Nelson, 2013 (Health Econ Rev)
Study's conclusion	<p>Results in this paper provide evidence that price elasticities for wine and spirits are contaminated by publication bias. The bias is toward larger (more elastic) values. Given the evidence for publication bias, averages obtained using cumulative meta-analyses are a useful compromise. Cumulative random-effect averages (at the 50th percentile) are approximately: wine price elasticity, -0.45 and spirits price elasticity, -0.55.</p>
Limitations/risk of bias	<p>Substantial overlap with Nelson, 2013 - Health Econ Rev.</p> <p>No formal quality assessment conducted; opaque selection of individual studies' estimates; unclear if short-run and long-run estimates have been pooled together; heterogeneity not formally assessed; efforts to minimize the potential effect of alcohol prices on alcohol use apparent; data / results do not support all conclusions.</p>

Nelson JP. Estimating the price elasticity of beer: meta-analysis of data with heterogeneity, dependence, and publication bias. J Health Econ 2014; 33: 180-7. [26]

Type of review / publication	- meta-analysis - Journal: J Health Econ
Was an 'a priori' design provided?	No
Was there duplicate study selection and data extraction?	No
Was a comprehensive literature search performed?	Yes. Search clearly described and comprehensive. - databases: AgEcon Search, EconLit, JSTOR, RePEc, SSRN, EBSCO Host, ProQuest, ScienceDirect Journals, Wiley Online Library; - Year / month of last search: August-October 2012 - # of studies included: 114 - LMIC: unclear
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Yes
Was a list of studies (included and excluded) provided?	No
Were the characteristics of the included studies provided?	None
Was the scientific quality of the included studies assessed and documented?	No
Was the scientific quality of the included studies used appropriately in formulating conclusions?	n/a
Were the methods used to combine the findings of studies appropriate?	Yes; meta-analysis conducted using fixed- and random-effect models; results presented for full and 'restricted' samples that exclude 9 studies that used similar data; heterogeneity not formally assessed.
Was the likelihood of publication bias assessed?	Yes, funnel plots, Egger tests.
Funding, conflicts of interest reported?	- Review: International Center for Alcohol Policies (ICAP), Washington, DC. - Included studies: No. Strong links between ICAP and alcohol industry and author's close ties to alcohol industry could be more clearly reported.

Results	Pooled total own-price elasticities (95%CI) – fixed effects: - beer, full sample: -0.23 (-0.24, -0.22) - beer, trimmed sample: -0.20 (-0.39, -0.31) – random effects: - beer, full sample: -0.35 (-0.21, -0.19) - beer, trimmed sample: -0.23 (-0.27, -0.19)
Study's conclusion	Overall, the analysis indicates the average price elasticity of beer is about -0.20 , which is 50% less elastic than previously reported averages.
Limitations/risk of bias	Substantial overlap with Nelson, 2013 - Health Econ Rev. No formal quality assessment conducted; opaque selection of individual studies' estimates; unclear if short-run and long-run estimates have been pooled together; heterogeneity not formally assessed; efforts to minimize the potential effect of alcohol prices on alcohol use apparent; data/ results do not support all conclusions.

b. Individual-level data

Nelson JP. Does Heavy Drinking by Adults Respond to Higher Alcohol Prices and Taxes? A Survey and Assessment. *Economic Analysis and Policy* 2013; 43(3): 265-91. [27]

Type of review / publication	- narrative review - Journal: <i>Econ Anal Pol</i>
Was an 'a priori' design provided?	No
Was there duplicate study selection and data extraction?	No
Was a comprehensive literature search performed?	Yes. Search clearly described and comprehensive. - databases: AgEcon Search, EconLit, JSTOR, RePEc, SSRN, EBSCO Host, ProQuest, ScienceDirect Journals, Wiley Online Library; - Year / month of last search: August-October 2012 - # of studies included: 19 - LMIC: 1 (Shi, 2011 - China)
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Yes
Was a list of studies (included and excluded) provided?	No. List of excluded studies not provided.
Were the characteristics of the included studies provided?	Yes. Very broad characteristics of included studies were provided (study / country / time period; average age; main findings).
Was the scientific quality of the included studies assessed and documented?	Some limitations were generally discussed. No formal quality assessment approach / tool used.
Was the scientific quality of the included studies used appropriately in formulating conclusions?	Unclear
Were the methods used to combine the findings of studies appropriate?	n/a
Was the likelihood of publication bias assessed?	n/a
Funding, conflicts of interest reported?	- Review: International Center for Alcohol Policies (ICAP), Washington, DC. - Included studies: No. Strong links between ICAP and alcohol industry and author's close ties to alcohol industry could be more clearly reported.

Results	<p>Only broad results presented. Results generally not clearly synthesized.</p> <ul style="list-style-type: none"> - heavy drinking unlikely to be associated with prices or taxes (2/19 studies found statistically significant and substantial price/ tax response by heavy drinking adults); - prices/taxes likely associated with moderate drinking; - prices/taxes possibly associated with heavy drinking among youth.
Study's conclusion	<p>It cannot be argued convincingly that heavy drinking by adults can be curbed extensively by higher alcohol prices or higher taxes. On the other hand, the evidence is consistent with price being important for moderate drinkers and possibly for participation and drinking by the youngest adult respondents.</p> <p>The price/ tax elasticity for heavy drinkers appears to approach zero in most instances. This result is robust across countries, time periods, drinking measures, and model specifications.</p>
Limitations/ risk of bias	<p>No formal quality assessment conducted; no differentiating between types of elasticities; tax and price interventions not separated; limited generalizability to LMIC.</p>

Nelson JP. Gender differences in alcohol demand: a systematic review of the role of prices and taxes. Health Econ 2014; 23(10): 1260-80.[28]

Type of review / publication	- narrative review - Journal: Health Econ
Was an 'a priori' design provided?	No
Was there duplicate study selection and data extraction?	No
Was a comprehensive literature search performed?	Yes. Search clearly described and comprehensive. - databases: AgEcon Search, EconLit, JSTOR, RePEc, SSRN, EBSCO Host, ProQuest, ScienceDirect Journals, Wiley Online Library; - Year / month of last search: August-October 2012 - # of studies included: 21 - LMIC: 5 (Andrienko, Nemtsov, 2006 - Russia; Baltagi, Geishecker, 2006 - Russia; Belanciuc, 2006 - Ukraine; Shi, 2001 - China; Tian and Liu, 2011 - China)
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Yes
Was a list of studies (included and excluded) provided?	No. List of excluded studies not provided.
Were the characteristics of the included studies provided?	Yes. Broad characteristics of included studies were provided (authors / year of publication; country; data source; sample size; average age of survey respondents; drinking measures; price or tax measure; econometric model; explanatory variables; empirical results).
Was the scientific quality of the included studies assessed and documented?	Some limitations were generally discussed. No formal quality assessment approach / tool used.
Was the scientific quality of the included studies used appropriately in formulating conclusions?	Unclear
Were the methods used to combine the findings of studies appropriate?	n/a
Was the likelihood of publication bias assessed?	n/a
Funding, conflicts of interest reported?	- Review: International Center for Alcohol Policies (ICAP), Washington, DC. - Included studies: No. Strong links between ICAP and alcohol industry and author's close ties to alcohol industry could be more clearly reported.

Results	<p>Results not clearly synthesized. Study's conclusion:</p> <ul style="list-style-type: none"> - adult men had less elastic demands compared with women; - there was little or no price response by heavy-drinking adults, regardless of gender; - although the sample was small, price might be important for drinking participation for younger adults; - results were mixed but strongly suggested that heavy drinking by young adults, regardless of gender, was not easily dissuaded by higher prices.
Study's conclusion	<ul style="list-style-type: none"> - First, adult men have less elastic demands compared with women; - Second, there is little or no price response by heavy-drinking adults, regardless of gender; - Third, although the sample is small, price might be important for drinking participation for younger adults; - Fourth, results are mixed but strongly suggest that heavy drinking by young adults, regardless of gender, is not easily dissuaded by higher prices;
Limitations/risk of bias	<p>No formal quality assessment conducted; unclear exclusion criteria; data/results do not support all conclusions; limited generalizability to LMIC.</p>

Nelson JP. Binge drinking and alcohol prices: a systematic review of age-related results from econometric studies, natural experiments and field studies. Health Econ Rev 2015; 5: 6.[29]

Type of review / publication	- narrative review - Journal: Health Econ Rev
Was an 'a priori' design provided?	No
Was there duplicate study selection and data extraction?	No
Was a comprehensive literature search performed?	Yes. Search comprehensive but poorly described. - databases: EconLit, JSTOR, ProQuest, Wiley Online Library, MEDLINE (PubMed), EMBASE; - Year / month of last search: not reported - # of studies included: 65 - LMIC: 0
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Yes
Was a list of studies (included and excluded) provided?	No. List of excluded studies not provided.
Were the characteristics of the included studies provided?	Yes. Broad characteristics of included studies were provided (binge drinking measures & quantity, price / tax measures, statistical significance, data, methods, controls, results)
Was the scientific quality of the included studies assessed and documented?	Some limitations were generally discussed. No formal quality assessment approach / tool used.
Was the scientific quality of the included studies used appropriately in formulating conclusions?	Unclear
Were the methods used to combine the findings of studies appropriate?	n/a
Was the likelihood of publication bias assessed?	n/a
Funding, conflicts of interest reported?	- Review: International Center for Alcohol Policies (ICAP), Washington, DC. - Included studies: No. Strong links between ICAP and alcohol industry and author's close ties to alcohol industry could be more clearly reported.

Results	<p>Effects of prices/taxes on binge drinking, among youth, young adult, and adult population varied between studies. Overall, very heterogeneous and mixed evidence:</p> <ul style="list-style-type: none"> - for youth 3/18 studies found statistically significant protective effects on heavy drinking from price/tax interventions, 10 null results, and others mixed; - for young adults 1/5 studies which pooled men and women found statistically significant protective effects, 2/7 found significant protective effects for men, and 2/4 found significant protective effects for women; - for adults 5/19 studies indicated statistically significant protective effects and 4/19 suggest mixed results.
Study's conclusion	<ul style="list-style-type: none"> - First, adult men were found to be less price responsive than women; - Second, there was little or no price response by heavy-drinking adults, regardless of sex; - Third, although the sample was small, price may have been important for drinking participation for younger adults; - Fourth, results were mixed but strongly suggested that heavy drinking by young adults, regardless of sex, was not easily dissuaded by higher prices;
Limitations/risk of bias	<p>No formal quality assessment conducted; unclear exclusion criteria; data/results do not support all conclusions; limited generalizability to LMIC.</p>

c. impact of tax/price policy changes in 5 countries (Denmark, Finland, Hong Kong, Sweden, Switzerland)

Nelson JP, McNall AD. What happens to drinking when alcohol policy changes? A review of five natural experiments for alcohol taxes, prices, and availability. Eur J Health Econ 2017; 18(4): 417-34.[30]

Type of review / publication	- narrative review - Journal: Eur J Health Econ
Was an 'a priori' design provided?	No
Was there duplicate study selection and data extraction?	Yes
Was a comprehensive literature search performed?	No. Search clearly described but not comprehensive. - databases: PubMed, AMPHORA, International Alliance for Responsible Drinking (IARD) research database; - Year / month of last search: not reported - # of studies included: 29 - LMIC: 0
Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Yes
Was a list of studies (included and excluded) provided?	Yes, list of included and excluded studies were provided (list of excluded provided upon request)
Were the characteristics of the included studies provided?	Yes. Broad characteristics of included studies were provided (authors; country; data; methods; policy effects).
Was the scientific quality of the included studies assessed and documented?	Some limitations were generally discussed. No formal quality assessment approach / tool used.
Was the scientific quality of the included studies used appropriately in formulating conclusions?	Unclear
Were the methods used to combine the findings of studies appropriate?	n/a
Was the likelihood of publication bias assessed?	n/a
Funding, conflicts of interest reported?	- Review: International Center for Alcohol Policies (ICAP), Washington, DC. - Included studies: No. Strong links between ICAP and alcohol industry and author's close ties to alcohol industry could be more clearly reported.

Results	<p>The review assessed the impact of tax/price policy changes in five countries (Denmark, Finland, Hong Kong, Sweden, Switzerland). Results not clearly synthesized; little to no discussion of effect sizes; of the 29 studies included, 13 used Nordic Tax Study (NTS) data:</p> <ul style="list-style-type: none"> - binge drinking was reduced in 4/18 studies included; young adults and youth responded to changes in 4/14 studies, and changes seemed to have had little effect on older adults.
Study's conclusion	<ul style="list-style-type: none"> - General lack of consistent results that can provide a sound evidence-base for development of alcohol tax policy; - Effectiveness of prices and taxes still open to debate; - Evidence from five countries tends to support more nuanced effects that depend on time, place, demographics, culture, and so forth.
Limitations/risk of bias	<p>Search strategy not comprehensive; no formal quality assessment conducted; poorly justified or unclear exclusion criteria; data/results do not support all conclusions; limited generalizability to LMIC.</p>

Appendix 6. Excluded studies

Not a review

- Adams, M., and Effertz, T. (2010). Effective prevention against risky underage drinking--the need for higher excise taxes on alcoholic beverages in Germany. *Alcohol and Alcoholism*, 45(4): 387-394.
- Anderson, K. (2010). Reforming Taxes on Wine and Other Alcoholic Beverage Consumption. *Economic Papers A Journal of Applied Economics and Policy*, 29(2): 107-199.
- Anderson, P. (1998). Alcohol, cardiovascular diseases and public health policy. *Novartis Foundation Symposium*, 216: 237-48.
- Anderson, P. (2009). Global alcohol policy and the alcohol industry. *Current Opinion in Psychiatry*, 22(3): 253-7.
- Anderson, K., Valenzuela, E., and Wittwer, G. (2011). Wine Export Shocks and Wine Tax Reform in Australia: Regional Consequences Using an Economy-Wide Approach. *Economic Papers A Journal of Applied Economics and Policy*, 30(3): 386-399.
- Mora, T. (2018). [On alcoholic beverage taxation in Spain]. *Gaceta Sanitaria*, 32(2): 176-180.
- Bennett, R. (2008). Alcohol: price, policy and public health. Report on the findings of the expert workshop on price convened by SHAAP. *Alcohol Alcohol*, 43(2): 123.
- Chelwa G., Toan P.N., Hien N.T.T., Thu L.T, Anh P.T.H., and Ross, H. (2019). Do beer and wine respond to price and tax changes in Vietnam? Evidence from the Vietnam Household Living Standards Survey. *BMJ Open*, 9:e027076.
- Task Force on Community Health Preventative Services. (2010). Increasing Alcoholic Beverage Taxes Is Recommended to Reduce Excessive Alcohol Consumption and Related Harms. Task Force on Community Health Preventative Services. *American Journal of Preventative Medicine*, 38(2): 230-232.
- Ludbrook, A., Holmes, J., and Stockwell, T. (2014). Gender Differences in Alcohol Demand: A Systematic Review of the Role of Prices and Taxes: Comment. *Health Economics*, 23: 1281-1283.

Qualitative reviews

- Matanje Mwangomba, B.L., Nkhata, M.J., Baldacchino, A., Wisdom, J., and Ngwira, B. (2018). Alcohol policies in Malawi: inclusion of WHO "best buy" interventions and use of multi-sectoral action. *BMC Public Health*, 18:957.
- Al-Ansari, B., Thow, A.M., Mirzaie, M., Day, C.A., and Conigrave, K.M. (2019). Alcohol policy in Iran: Policy content analysis. *Int J Drug Policy*, 73:185-198.

Broader reviews with not enough relevant details to extract and synthesize

- n/a. (2000). Economic analysis aids alcohol research. *Alcohol Research & Health : the journal of the National Institute on Alcohol Abuse and Alcoholism*, 24(1):62-71.
- n/a. (2010). Latest approaches to preventing alcohol abuse and alcoholism. *Alcohol Research & Health : the journal of the National Institute on Alcohol Abuse and Alcoholism*, 24(1): 42-51.
- de Walque, Damien. (2020). The use of financial incentives to prevent unhealthy behaviors: A review. *Soc Sci Med* 261:113236.
- Elliott, Lana M, Sarah L Dalglish, and Stephanie M Topp. (2020). Health Taxes on Tobacco, Alcohol, Food

and Drinks in Low- and Middle-Income Countries: A Scoping Review of Policy Content, Actors, Process and Context. *Int J Health Policy Manag.*

Lai, T., and Habicht, J. (2011). Decline in alcohol consumption in Estonia: combined effects of strengthened alcohol policy and economic downturn. *Alcohol Alcohol*, 46(2): 200-3.

Chaloupka, F.J., Powell, L.M., and Warner, K.E. (2019). The Use of Excise Taxes to Reduce Tobacco, Alcohol, and Sugary Beverage Consumption. *Annu Rev Public Health*, 40:187-201.

Miracolo, Aurelio, Marisa Sophiea, Mackenzie Mills, and Panos Kanavos. (2021). Sin taxes and their effect on consumption, revenue generation and health improvement: a systematic literature review in Latin America. *Health Policy Plan* 36 (5):790-810.

Neufeld, Maria, Anastacia Bobrova, Kairat Davletov, Mindaugas Stelemekas, Relika Stoppel, Carina Ferreira-Borges, Joao Breda, and Jurgen Rehm. (2021). Alcohol control policies in Former Soviet Union countries: A narrative review of three decades of policy changes and their apparent effects. *Drug Alcohol Rev* 40 (3):350-367.

Rehm, Jurgen, Maria Neufeld, Robin Room, Bundit Sornpaisarn, Mindaugas Stelemekas, Monica H Swahn, and Dirk W Lachenmeier. (2022). The impact of alcohol taxation changes on unrecorded alcohol consumption: A review and recommendations. *Int J Drug Policy* 99:103420.

Xu, X., and Chaloupka, F. J. (2011). The effects of prices on alcohol use and its consequences. *Alcohol Res Health*, 34(2): 236-45.

Not focused enough on tax/price

Cook, P. J., and Moore, M. J. (2002). The economics of alcohol abuse and alcohol-control policies. *Health Affairs*, 21(2):120-133.

Osterberg, E. (1992). Effects of alcohol control measures on alcohol consumption. *International Journal of the Addictions*, 27(2): 209-225.

Greisen, C., Grossman, E.R., Siegel, M., and Sager, M. (2019). Public Health and the Four P's of Marketing: Alcohol as a Fundamental Example. *J Law Med Ethics*, 47(S2): 51-54.

Anderson, P., Gual, A., & Rehm, J. (2018). Reducing the health risks derived from exposure to addictive substances. *Current Opinion in Psychiatry*, 31(4): 333-341.

Kerr, W.C., Williams, E., Ye, Y., Subbaraman, M.S., and Greenfield T.K. (2018). Survey estimates of changes in alcohol use patterns following the 2012 privatization of the Washington liquor monopoly. *Alcohol Alcohol*, 53(4): 470-476.

Anderson, P. (2011). Policy implications of the WHO strategy to reduce the harmful use of alcohol. *Sucht*, 57(2): 85-98.

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Appendix 7. Review Research Protocol

Based on PROSPERO (Prospective Register of Systematic Reviews).

Review title

Prices, taxes and alcohol use: a systematic review of reviews

Anticipated or actual start date

January, 2014

Anticipated completion date

January, 2016

Stage of review:

The review has started

Review stage

- a. Preliminary searches
 - i. started: y; completed: n
- b. Piloting the study selection process
 - i. started: y; completed: n
- c. Formal screening of search results against eligibility criteria
 - i. started: y; completed: n
- d. Data extraction
 - i. started: n; completed: n
- e. Risk of bias (quality) assessment
 - i. started: n; completed: n
- f. Data analysis
 - i. started: n; completed: n

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Funding sources/sponsors

International Development Research Centre

Conflicts of interest

None

Collaborators

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Review question

What is the impact of prices and taxes on alcohol use:

- Total own-price elasticities, including short-run vs. long-run;
- Participation/ consumption own-price elasticities;
- Associations between prices/ taxes and the transition from non-drinkers to drinkers and from drinkers to non-drinkers;
- Associations between prices/ taxes and heavy episodic drinking such as binge drinking, or any type of excessive, unhealthy or harmful drinking;
- Associations between non-tax price strategies such as minimum pricing of alcohol on alcohol use;
- Cross-price elasticities, between alcohol products, and between alcohol products and other non-alcoholic goods such as tobacco and psychoactive drugs.

Searches

MEDLINE: ((pric* OR tax* OR fiscal*)) AND (Alcohol drinking(MeSH) OR Alcohol* drink* OR Alcoholic beverages(MeSH) OR Alcohol* beverage* OR Beer(MeSH) OR Beer* OR Wine(MeSH) OR Wine* OR Liquor* OR Spirits OR Alcohol*) AND review*

EconLit: (TI(alcohol* OR wine* OR beer OR spirit* OR liquor*) OR AB(alcohol* OR wine* OR beer OR spirit* OR liquor*)) AND (TI(tax* OR price* OR fiscal* OR elasticit*) OR AB(tax* OR price* OR fiscal* OR elasticit*)) AND (TI(review*) OR AB(review*))

Embase:

1. pric*.mp.
2. tax*.mp.
3. fiscal*.mp.
4. 1 or 2 or 3
5. Alcohol drinking.mp. or exp drinking behavior /
6. Alcohol drink.mp.
7. exp alcoholic beverage /
8. exp alcohol consumption/ or Alcohol beverage.mp.
9. beer.mp. or exp beer /
10. exp wine/ or wine.mp.
11. Liquor.mp.
12. Spirits.mp.
13. Alcohol.mp.
14. 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13
15. "review" /
16. 4 and 14 and 15

LILACS: tw:(tw:(tw:(pric*)) OR (tw:(tax*)) AND (tw:(liquor*)) OR (tw:(spirits)) OR (tw:(beer*)) OR (tw:(wine)) OR (tw:(alcohol)) OR (mh:(alcohol beverages)) OR (mh:(beer)) OR (mh:(wine)) OR (mh:(alcohol drinking))) AND (db:("LILACS") AND type_of_study:(("systematic_reviews"))) AND (type_of_study:(("systematic_reviews" OR "overview" OR "policy_brief" OR "sysrev_observational_studies" OR "structured_summary_of_systematic_review")))

Intervention(s), exposure(s)

Prices, taxes (changes, levels)

Comparator(s)/control

When applicable, pre- price/ tax changes.

Types of study to be included

Reviews of studies that quantitatively examined the relationship between alcohol price and tax strategies and alcohol use

Context

All reviews; specific interest in low- and middle-income countries

Main outcome

Alcohol use

Data extraction (selection and coding)

- review type
- a priori protocol
- duplicate study selection and data extraction
- comprehensive search
- list of included / excluded studies
- characteristics of included studies
- assessment of the quality of the included studies
- methods to combine study findings
- assessment of likelihood of publication bias
- funding and competing clearly reported

Risk of bias (quality) assessment

Assessment of Multiple Systematic Reviews (AMSTAR) tool

Strategy for data synthesis

Narrative synthesis

Analysis of subgroups or subsets

Socioeconomic status, sex, age

Type and method of review

Systematic narrative review of reviews

Language

No exclusion

Keywords

alcohol; prices; taxes; review; low- and middle-income countries