

This is a repository copy of *Prevalence of visits to massage therapists by the general population: A systematic review.* 

White Rose Research Online URL for this paper: http://eprints.whiterose.ac.uk/96914/

Version: Accepted Version

## Article:

Harris, P.E., Cooper, K.L., Relton, C. et al. (1 more author) (2014) Prevalence of visits to massage therapists by the general population: A systematic review. Complementary Therapies in Clinical Practice, 20 (1). pp. 16-20. ISSN 1744-3881

https://doi.org/10.1016/j.ctcp.2013.11.001

Article available under the terms of the CC-BY-NC-ND licence (https://creativecommons.org/licenses/by-nc-nd/4.0/)

#### Reuse

This article is distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND) licence. This licence only allows you to download this work and share it with others as long as you credit the authors, but you can't change the article in any way or use it commercially. More information and the full terms of the licence here: https://creativecommons.org/licenses/

#### Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



eprints@whiterose.ac.uk https://eprints.whiterose.ac.uk/

# Prevalence of visits to massage therapists by the general population worldwide: a systematic review

## Philip E Harris<sup>a</sup>, Katy L Cooper<sup>b</sup>, Clare Relton<sup>b</sup>, Kate J Thomas<sup>b</sup>.

<sup>a</sup>Cardiff School of Health Sciences, Cardiff Metropolitan University, PO Box 377, Western Avenue, Cardiff, CF5 2YB, UK.

<sup>b</sup>School of Health and Related Research, University of Sheffield, Regent Court, 30 Regent Street, Sheffield, S1 4DA, UK.

## Corresponding author:

Philip E Harris, [Mr]

Cardiff School of Health Sciences, Cardiff Metropolitan University, PO Box 377, Western Avenue, Cardiff, CF5 2YB, UK. Email: <a href="mailto:peharris@cardiffmet.ac.uk">peharris@cardiffmet.ac.uk</a>. Tel: +44(0)29 20205609

Disclosures: None.

Keywords: systematic review, prevalence, massage

## Abstract

<u>Objective</u>: To systematically review 12-month prevalence of visits to massage therapists by representative samples of the general population across countries.

<u>Methods</u>: Surveys reporting estimates of overall CAM use were included. Studies were identified via database searches. Study quality was assessed using a six-item tool.

<u>Results</u>: Twenty-two surveys across six countries were included. Estimates for 12-month prevalence of visits to massage therapists by adults ranged from 0.4% to 20% and the median was 5.5%. Estimates for children were 0.3% to 3.8% (median 0.7%), while estimates for older adults were 1.5% to 16.2% (median 5.2%). 16 surveys (73%) met at least four of six quality criteria.

<u>Conclusions</u>: This review summarises 12-month prevalence of visits to massage therapists in six countries (USA, UK, Canada, Australia, Singapore and South Korea). A small but significant percentage of these general populations visit massage therapists each year.

#### Introduction

We recently published results of a broad-scale systematic review assessing prevalence of use of complementary and alternative medicine (CAM) within general populations across 15 countries.<sup>1</sup> Estimates of 12-month prevalence of use of any CAM ranged from 9.8% to 76% (based on 32 studies), while estimates of 12-month prevalence of visits to CAM practitioners ranged from 1.8% to 48.7% (based on 33 studies). Though these ranges were wide, estimates of 12-month prevalence of any CAM use (excluding prayer) from surveys using consistent measurement methods showed stability within some countries, such as Australia (49%, 52% and 52% in 1993, 2000 and 2004 respectively) and USA (36% and 38% in 2002 and 2007). We separately reported data from these general population studies on 12-month prevalence of visits to practitioners for five types of complementary and alternative medicine (CAM): acupuncture, homeopathy, osteopathy, chiropractic, and medical herbalism.<sup>2</sup>

The study presented here is a systematic review of the subset of these general population studies which have reports of 12-month prevalence of visits to massage therapists. Massage is an umbrella term for an array of different styles and techniques (e.g. Swedish, Sports, Aromatherapy, Reflexology, and Shiatsu massage) involving the application of bodily contact and physical pressure using hands, fingers, forearms, elbows, knees, or feet, with therapeutic intent. Attempts to define and classify the extensive range of types of massage have met with limited success and sometimes confusion.<sup>3</sup> However, the use of massage for relaxation and remedial purposes has a long history and is evident in most cultures. Massage was and remains an integral part of traditional Chinese medicine and Ayurvedic medicine, and a wide range of massage styles have evolved in other eastern countries as well as in Australia, Europe and the USA.<sup>3</sup> Indeed, the very diversity of style and technique is itself reflective of the persistence and popularity of this type of therapy. There is evidence that massage is beneficial for low-back pain,<sup>4</sup> one of the most common and costly musculoskeletal problems, and there are ongoing funded studies investigating the effects of massage on a variety of conditions including chronic neck pain and low-back pain; anxiety and depression in patients with advanced AIDS; and fatigue, pain and distress in cancer patients in the USA.<sup>5</sup>

This is the first study to systematically review the data on the prevalence of visits to massage therapists by the general public worldwide. The review focusses on visits to therapists rather than self-treatment. This decision was made on the basis that estimates for visits to massage therapists are likely to be better-defined and less prone to recall bias than estimates for self-massage.

#### Methods

#### Search strategy

The systematic review followed the recommendations in the PRISMA statement.<sup>6</sup> The following databases were searched in February 2011: MEDLINE, Medline in Process, EMBASE, Cochrane Database of Systematic Reviews, Cochrane CENTRAL Register of Controlled Trials, HTA database, Science Citation Index, AMED, and PsycINFO. The search strategy combined terms for: i) complementary and alternative medicines, ii) prevalence, surveys or patterns of use, and iii) population-level or national-level data. The full search strategy is provided in our previous article on prevalence of use of any CAM.<sup>1</sup> The search was restricted to studies published from 1998 onwards. Studies published prior to 1998 were identified from two previous systematic reviews of CAM prevalence.<sup>7;8</sup> Bibliographies of included papers were checked for further relevant studies.

#### Inclusion and exclusion criteria

Studies were included if they reported 12-month prevalence of visits to massage therapists, in addition to prevalence of overall CAM use and/or visits to CAM practitioners (the latter were inclusion criteria for the broader review). Prevalence had to be reported over a 12-month retrospective period within a representative general population sample of a nation or a defined geographical area. Surveys of clearly-defined age groups (such as adults, children or older adults) were included. Included studies used survey methods such as structured interviews or self-complete questionnaires. Studies were excluded if they did not report 12-month prevalence, or were not written in English. Studies were also excluded if they were not based on representative samples of the general population; for example, surveys of sub-populations with specific clinical conditions or socio-demographic characteristics (other than age).

#### Study selection and data extraction

Study titles retrieved by the search were assessed for inclusion by one reviewer and a sample of excluded titles was checked by a second reviewer. Potentially relevant abstracts and full texts were assessed by two reviewers and any discrepancies resolved through discussion. Data were extracted by one reviewer and checked by a second.

#### Quality assessment

There is no agreed set of criteria for assessing the quality of health-related surveys. As part of our wider systematic review on prevalence of overall CAM use, we devised a six-item, literaturebased quality assessment tool comprising important and assessable criteria of methodological quality.<sup>1</sup> This was applied to each of the included studies. The criteria covered by the quality assessment tool include 1) whether CAM-use questions were clearly described and number of therapies/questions reported; 2) whether the survey was piloted (this was assumed for government surveys); 3) whether the sample size was  $\geq$ 1,000 and/or a CAM-specific sample size calculation was reported; 4) whether the reported response rate was  $\geq$ 60%; 5) whether data were weighted to population characteristics (where appropriate) to reduce non-response bias; and 6) whether a 95% confidence interval or standard error were reported for the 12month prevalence of CAM use.

#### Results

#### Number of surveys included

The wider search for surveys on CAM use identified 2312 unique citations. Of these, 2208 were excluded at the title and abstract stage, while the full texts of 104 references were examined. A total of 26 references were included in this review, reporting data from 22 independent surveys conducted in six countries (USA, UK, Canada, Australia, Singapore and South Korea). There were 18 surveys reporting data on adults or all ages, 4 reporting data for children and 6 reporting data for older adults (Table 1).

#### Definitions of massage therapy

Our analysis is restricted to surveys which specified visits to a massage therapist rather than self-massage or informal massage by friends or family. Few surveys reported whether they provided a definition of massage therapy to respondents. For example, one study specified "therapeutic massage", though this was not defined further (Table 1),<sup>9</sup> and another study specified "Western massage therapy", though again this was not defined.<sup>10</sup> Although most surveys or survey subsections related to health and healthcare, few surveys reported whether massage therapist visits were for health reasons or for recreational reasons (Table 1). Five surveys (within 7 reports) reported specifying to respondents that the visits should be for health reasons,<sup>11-17</sup> while two implied that the visits may be for any reason;<sup>18;19</sup> other surveys were not clear on this point.

## Prevalence of visits to massage therapists

Table 1 presents the 12-month prevalence of visits to massage therapists as reported in the 22 surveys. Survey data are ordered by country, then survey type (government, other national, or sub-national), then year of survey. Data are grouped by age: adults or all ages; children; and older adults. Further detail (sampling and data collection methods for each survey) is provided in our earlier publication.<sup>1</sup> Table 2 provides a summary of the median and range for prevalence of visits for each age group.

Based on all surveys, estimates for 12-month prevalence of visits to massage therapists by adults (18 surveys) ranged from 0.4% to 20% and the median was 5.5% (Table 2). Estimates

for children (4 surveys) ranged from 0.3% to 3.8% with a median of 0.7%, while estimates for older adults (6 surveys) ranged from 1.5% to 16.2% with a median of 5.2%.

Estimates from government surveys were more consistent. For example, the five US government surveys estimated that between 2.0% and 8.3% of the adult (or all ages) population had visited a massage therapist in the previous 12 months. Rates were similar over the years surveyed (1995-2007). Rates for other government surveys were similar: 2.1% to 6.0% for the UK (2001-2005) and 2.0% to 7.8% for Canada (1994-2005). Ranges and medians for government surveys are presented in Table 2.

#### Study quality

Table 3 provides a summary of the quality of included survey reports. Full details for each survey are reported in our earlier publication.<sup>1</sup> The proportion of all survey reports achieving each of our criteria ranged from 59% to 91%. Of all 22 surveys, 16 (73%) met four or more quality criteria; these percentages were 100% for government-sponsored surveys and 45% for other surveys. This difference was partly due to the piloting criterion, where we made the assumption that all government-sponsored surveys were piloted.

#### Discussion

This report provides a comprehensive and systematic review of surveys reporting 12-month prevalence of visits by general populations to massage therapists. This complements our previous reports which systematically reviewed prevalence of any CAM use and visits to any CAM practitioner,<sup>1</sup> and visits to acupuncturists, homeopaths, chiropractors, osteopaths and medical herbalists.<sup>2</sup> The data reported here include estimates from 22 surveys across six countries.

The survey data indicated that the percentage of the general population (adult or all ages) visiting massage therapists over the previous 12 months was in the range of 0.4% to 20%, with a median estimate of 5.5%. Our findings suggest that the general public (adult or all ages) of the six countries surveyed were more likely to visit a massage therapist than a practitioner of four of the five therapies previously reported: acupuncture (median 1.4%); homeopathy (median 1.5%); osteopathy (median 1.9%); and medical herbalist (median 0.9%). Only chiropractors (median 7.5%) were visited more often and this was accounted for by its popularity in Australia, Canada, and the USA.<sup>2</sup>

Data were obtained from surveys which also reported overall 12-month prevalence of any CAM use and/or visits to any CAM practitioner. Therefore, any surveys only reporting visits specifically to massage therapists but not reporting overall CAM use or visits were not included

6

in this review. This is a potential limitation of this review, however, data from the types of survey included here (many of which were government-sponsored surveys or large population surveys) may be expected to be of higher quality than data from surveys of a single therapy. Although English-language reports of surveys from any country were included, this study is limited by the exclusion of studies not reported in English.

The quality of methodological reporting was variable; 16 of 22 surveys (73%) met four or more of six quality criteria. These rates were higher for government surveys, though this was partly due to our assumption that all government-sponsored surveys were piloted. Our earlier report showed wide variation in estimates of 12-month prevalence of any CAM use (range 9.8% to 76%) and visits to CAM practitioners (range 1.8% to 48.7%), which was likely due in part to the variation in the way CAM is defined for data collection. Conversely, data reported here on visits to massage therapists were less varied.

Our analysis was restricted to reports specifying visits to a massage practitioner, and most estimates were in the context of a survey or survey subsection relating to health and healthcare. However, few surveys reported providing a definition of massage therapy to respondents, and only 5 of the 22 surveys specified that massage was used for health reasons. We recommend that all future health surveys specify to respondents that the visits to massage therapists are for health reasons. We also recommend that future surveys concerned exclusively with the prevalence of massage use, ask respondents about the type of massage used. Finally further research which helps identify the most frequently used types of massage therapy within a culture will provide useful data for formulating research questions.

In summary, this review provides a comprehensive overview of prevalence of visits to massage therapists by general populations in the USA, UK, Canada, Australia, Singapore and South Korea.

## Acknowledgements: None

## Conflict of interest statement: None.

**Author contributions:** All authors contributed to the design of the review, extraction and compiling of the data, drafting and critical revision of the manuscript.

#### References

- Harris PE, Cooper KL, Relton C, Thomas KJ. Prevalence of complementary and alternative medicine (CAM) use by the general population: a systematic review and update. *Int J Clin Pract* 2012; 66(10):924-939.
- (2) Cooper KL, Harris PE, Relton C, Thomas KJ. Prevalence of visits to five types of complementary and alternative medicine practitioners by the general population: A systematic review. *Complement Ther Clin Pract* 2013; Online publication: <u>http://dx.doi.org/10.1016/j.ctcp.2013.06.006</u>.
- (3) Casanelia L, Stelfox D. Foundations of Massage. 3rd ed. Churchill Livingstone; 2009.
- (4) Furlan AD, Imamura M, Dryden T, Irvin E. Massage for low-back pain. *Cochrane Database Syst Rev* 2008;(4):CD001929.
- (5) National Center for Alternative and Complementary Medicine (NCCAM). Massage Therapy: An Introduction. NCCAM-Funded Research on Massage Therapy. NCCAM Pub No: D327. <u>http://nccam.nih.gov/health/massage/massageintroduction.htm#funded</u>. 2010.
- (6) Moher D, Liberati A, Tetzlaff J, Altman DG. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *Ann Intern Med* 2009; 151(4):264-269.
- (7) Ernst E. Prevalence of use of complementary/alternative medicine: a systematic review. *Bulletin of the World Health Organization* 2000; 78(2):252-257.
- (8) Harris P, Rees R. The prevalence of complementary and alternative medicine use among the general population: a systematic review of the literature. *Complementary Therapies in Medicine* 2000; 8(2):88-96.
- (9) Paramore LC. Use of alternative therapies: Estimates from the 1994 Robert Wood Johnson Foundation National Access to Care Survey. *Journal of Pain and Symptom Management* 1997; 13(2):83-89.
- (10) Xue CC, Zhang AL, Lin V, Da CC, Story DF. Complementary and alternative medicine use in Australia: a national population-based survey. *Journal of Alternative & Complementary Medicine* 2007; 13(6):643-650.
- (11) Druss BG, Rosenheck RA. Association between use of unconventional therapies and conventional medical services. *JAMA* 1999; 282(7):651-656.
- (12) Eisenberg DM, Kessler RC, Foster C, Norlock FE, Calkins DR, Delbanco TL. Unconventional medicine in the United States - Prevalence, costs, and patterns of use. *New England Journal of Medicine* 1993; 328(4):246-252.
- (13) Arcury TA, Preisser JS, Gesler WM, Sherman JE. Complementary and Alternative Medicine Use Among Rural Residents in Western North Carolina. *Complementary Health Practice Review* 2004; 9(2):93-102.
- (14) Metcalfe A, Williams J, McChesney J, Patten SB, Jette N. Use of complementary and alternative medicine by those with a chronic disease and the general population--results of a national population based survey. *BMC Complementary & Alternative Medicine* 2010; 10:58.

- (15) Millar WJ. Use of alternative health care practitioners by Canadians. *Canadian Journal of Public Health* 1997; 88(3):154-158.
- (16) Davis MP, Darden PM. Use of complementary and alternative medicine by children in the United States. *Archives of Pediatrics & Adolescent Medicine* 2003; 157(4):393-396.
- (17) Yussman SM, Ryan SA, Auinger P, Weitzman M. Visits to complementary and alternative medicine providers by children and adolescents in the United States. *Ambulatory Pediatrics* 2004; 4(5):429-435.
- (18) Lim MK, Sadarangani P, Chan HL, Heng JY. Complementary and alternative medicine use in multiracial Singapore. *Complementary Therapies in Medicine* 2005; 13(1):16-24.
- (19) Smith C, Eckert K. Prevalence of complementary and alternative medicine and use among children in South Australia. *Journal of Paediatrics & Child Health* 2006; 42(9):538-543.
- Barnes PM, Bloom B, Nahin RL. Complementary and alternative medicine use among adults and children: United States, 2007. *National health statistics reports* 2008;(12):1-23.
- (21) Barnes PM, Powell-Griner E, McFann K, Nahin RL. Complementary and alternative medicine use among adults: United States, 2002. *Advance Data* 2004;(343):1-19.
- (22) Ni H, Simile C, Hardy AM. Utilization of complementary and alternative medicine by United States adults: results from the 1999 national health interview survey. *Medical Care* 2002; 40(4):353-358.
- (23) Honda K, Jacobson JS. Use of complementary and alternative medicine among United States adults: the influences of personality, coping strategies, and social support. *Preventive Medicine* 2005; 40(1):46-53.
- (24) Eisenberg DM, Davis RB, Ettner SL, Appel S, Wilkey S, Van Rompay M. et al. Trends in alternative medicine use in the United States, 1990-1997: results of a follow-up national survey. JAMA 1998; 280(18):1569-1575.
- (25) Landmark Healthcare. The Landmark report on public perceptions of alternative care. 1998. Sacramento, Landmark Healthcare.
- (26) Hunt KJ, Coelho HF, Wider B, Perry R, Hung SK, Terry R et al. Complementary and alternative medicine use in England: results from a national survey. *International Journal of Clinical Practice* 2010; 64(11):1496-1502.
- (27) Thomas K, Coleman P. Use of complementary or alternative medicine in a general population in Great Britain. Results from the National Omnibus survey. *Journal of Public Health* 2004; 26(2):152-157.
- (28) Ernst E, White A. The BBC survey of complementary medicine use in the UK. *Complementary Therapies in Medicine* 2000; 8(1):32-36.
- (29) Ock SM, Choi JY, Cha YS, Lee J, Chun MS, Huh CH et al. The use of complementary and alternative medicine in a general population in South Korea: results from a national survey in 2006. *Journal of Korean Medical Science* 2009; 24(1):1-6.
- (30) McMahan S, Lutz R. Alternative therapy use among the young-old (Ages 65 to 74): An evaluation of the MIDUS database. *Journal of Applied Gerontology* 2004; 23(2):91-103.

- (31) Astin JA, Pelletier KR, Marie A, Haskell WL. Complementary and alternative medicine use among elderly persons: one-year analysis of a Blue Shield Medicare supplement. *Journals of Gerontology Series A-Biological Sciences & Medical Sciences* 2000; 55(1):M4-M9.
- (32) Cheung CK, Wyman JF, Halcon LL. Use of complementary and alternative therapies in community-dwelling older adults. *Journal of Alternative and Complementary Medicine* 2007; 13(9):997-1006.
- (33) Zhang AL, Xue CC, Lin V, Story DF. Complementary and alternative medicine use by older Australians. *Annals of the New York Academy of Sciences* 2007; 1114:204-215.
- (34) Feng L, Chiam PC, Kua EH, Ng TP. Use of complementary and alternative medicines and mental disorders in community-living Asian older adults. *Archives of Gerontology & Geriatrics* 2010; 50(3):243-249.

## Table 1: Prevalence of visits to massage therapists across six countries

Country	Survey type	Year of survey	Name of survey <sup>†</sup>	Sample size	Sample ages (% males)	Meets ≥4 quality criteria	Visited massage therapist (%)	Visited any CAM practitioner (%)	Reference	Definition of massage in survey	Health reasons or any reason
Adult or all ages											
USA	Government national	2007 2002 1999 1996 1995-6	NHIS NHIS NHIS MEPS MIDUS	23,393 31,044 30,801 16,068 4,242	18+ (NR) 18+ (NR) 18+ (NR) 18+ (47) 25-74 (43)	Yes Yes Yes Yes Yes	8.3 5.0 6.4 2.0 8.2	16.2 12.5 - 8.3 -	Barnes (2008) <sup>20</sup> Barnes (2004) <sup>21</sup> Ni (2002) <sup>22</sup> Druss (1999) <sup>11</sup> Honda (2005) <sup>23</sup>	- - - -	- - Health -
USA	Other national	1997 1997 1994 1990		2,055 1,500 2,056 1,539	18+ (48) 18+ (NR) 18-64 (49) 18+ (52)	Yes - Yes Yes	6.8 14.0 4.5 2.9	19.5 - 9.4* 12.3	Eisenburg (1998) <sup>24</sup> Landmark (1998) <sup>25</sup> Paramore (1997) <sup>9</sup> Eisenberg (1993) <sup>12</sup>	- - Therapeutic -	- - - Health
USA	Sub-national	1999		1,059	18+ (NR)	-	0.4	8.6	Arcury (2004) <sup>13</sup>	-	Health
UK	Government national	2005 2001	HSE NOS	7,630 1,794	16+ (45) 16+ (47)	Yes Yes	6.0 2.1	12.1 10.0	Hunt (2010) <sup>26</sup> Thomas (2004) <sup>27</sup>	-	-
UK	Other national	1999		1,204	18+ (45)	-	1.2	-	Ernst (2000) <sup>28</sup>	-	-
Canada	Government national	2001-5 1994-5	CCHS NPHS	400,055 17,626	12+ (49) 15+ (NR)	Yes Yes	7.8 2.0	12.4 15.0	Metcalfe (2010) <sup>14</sup> Millar (1997) <sup>15</sup>	-	Health Health
Australia	Other national	2005		1,067	18+ (49)	Yes	20.0	44.1	Xue (2007) <sup>10</sup>	Western	-
Singapore	Sub-national	2002		468	18+ (46)	-	7.8	-	Lim (2005) <sup>18</sup>	-	Any
South Korea	Other national	2006		3,000	30-69 (50)	-	1.4	-	Ock (2009) <sup>29</sup>	-	-
Children											
USA	Government national	2007 1996	NHIS MEPS	9,417 6,262	0-17 (NR) 0-17 (52)	Yes Yes	1.0 0.3	- 1.8	Barnes (2008) <sup>20</sup> Davis (2003), Yussman (2004) <sup>16;17</sup>	-	- Health
USA	Other national	1994		980	1-17 (NS)	Yes	0.4	-	Paramore (1997) <sup>9</sup>	Therapeutic	Any
Australia	Government sub-national	2004	SAHOS	911	0-15 (46)	Yes	3.8	-	Smith (2006) <sup>19</sup>	-	Any
Older adults											
USA	Government national	1995-6	MIDUS	335	65-74 (48)	Yes	4.0	-	Honda (2005), McMahan (2004) <sup>23,30</sup>	-	-
USA	Other national	1994		414	65+ (NS)	Yes	1.5	-	Paramore (1997) <sup>9</sup>	Therapeutic	-
USA	Sub-national	1997-8 NR		728 445	65+ (45) 65-94 (45)	-	6.0 16.2	-	Astin (2000) <sup>31</sup> Cheung (2007) <sup>32</sup>	-	-
Australia	Other national	2005		178	65+ (43)	Yes	13.9	34.9	Xue (2007), Zhang (2007) <sup>10;33</sup>	Western	-
Singapore	Government national	2003-4	NMHSE	1,092	60+ (44)	Yes	4.4	-	Feng (2010) <sup>34</sup>	-	-

\*Estimate for all ages. <sup>†</sup>Survey names are provided where reported for government-sponsored surveys: CCHS = Canadian Community Health Survey; HSE = Health Survey for England; MEPS = Medical Expenditure Panel Survey; MIDUS = Midlife Development in the US; NHIS = National Health Interview Survey; NOS = National Omnibus Survey; NMHSE = National Mental Health Survey of the Elderly; NPHS = National Population Health Survey; SAHOS = South Australian Health Omnibus Survey.

## Table 2: Summary of prevalence of visits to massage therapists

Age group		All surveys	Gvtsponsored surveys			
	N surveys	Median % (range)	N surveys	Median % (range)		
Adults or all ages	18	5.5 (0.4 to 20.0)	9	6.0 (2.0 to 8.3)		
Children	4	0.7 (0.3 to 3.8)	3	1.0 (0.3 to 3.8)		
Older adults	6	5.2 (1.5 to 16.2)	2	4.2 (4.0 to 4.4)		

Table 3: Summary of the methodological quality of surveys

	All s rep N :	urvey oorts = 22	Gvt. sponsored survey reports N = 11		Other CAM survey reports N = 11	
Quality criterion	n	%	n	%	n	%
1. CAM-use questions clearly described and number of therapies/questions reported	19	86	10	91	9	82
2. Piloting of survey reported (or assumed for government surveys)	16	73	11	100 (assumed)	5	45
3. Sample size ≥1,000 and/or CAM-specific sample size calculation reported	20	91	11	100	9	82
4. Reported survey response rate ≥60%	14	64	9	82	5	45
5. Data weighted to population characteristics (where appropriate) to reduce non-response bias	16	73	9	82	7	64
6. 95% confidence interval or standard error reported for main prevalence estimates	13	59	7	64	6	55
Four or more criteria met	16	73	11	100*	5	45

\*This includes the assumption that the piloting criterion is met by 100% of government-sponsored surveys.