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# BMJ Open

## Factors contributing to practitioner choice when declining involvement in legally available care: A scoping protocol

Journal:	<i>BMJ Open</i>
Manuscript ID	bmjopen-2018-023901
Article Type:	Protocol
Date Submitted by the Author:	29-Apr-2018
Complete List of Authors:	Brown, Janine; University of Regina, Faculty of Nursing; University of Saskatchewan College of Medicine, Health Sciences Graduate Program Goodridge, Donna; University of Saskatchewan, Thorpe, Lillian; University of Saskatchewan, Departments of Community Health & Epidemiology and Psychiatry Chipanshi, Mary; University of Regina
Keywords:	conscientious objection, MEDICAL ETHICS, refusal to treat, abstention, choice, health

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**Factors contributing to practitioner choice when declining involvement in legally available care: A scoping protocol**

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Word Count 2942

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2  
3 37 **ABSTRACT**  
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6 38 **Introduction:** As legislation addressing medical treatments continues to evolve, there are several  
7  
8 39 circumstances (e.g. abortion, assisted dying) in which health practitioners may choose to not provide  
9  
10 40 legally available treatments. This results in tension between a practitioner's right to refrain from  
11  
12 41 practices morally objectionable to the practitioner, and the care recipient's right to access legally  
13  
14 42 available treatments. It is not always clear what underlies practitioner choice, as some research has  
15  
16 43 suggested that non-participation is not always due to an ethical abstention but may represent other  
17  
18 44 factors. The aim of this systematic scoping review is to identify the current knowledge regarding the  
19  
20 45 factors influencing practitioner's choices when declining involvement in legally available healthcare  
21  
22 46 options.  
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26  
27 47 **Methods and Analysis:** Arksey and O'Malley's scoping framework in concert with Levac et al.'s  
28  
29 48 enhancements will guide the systematic scoping review methodological processes. English language  
30  
31 49 documents from January 1, 1998 to current will be sought utilizing MEDLINE, CINAHL, JSTOR, EMBASE,  
32  
33 50 ProQuest Dissertations and Theses Global, PsychINFO and Sociological Abstracts. MeSH headings, key  
34  
35 51 words and synonyms will be adjusted utilizing an iterative search process. Theses and dissertations will  
36  
37 52 be included in the search protocol; however, other grey literature will be accessed only as required. Two  
38  
39 53 research team members will screen the abstracts and full articles against inclusion criteria. Article  
40  
41 54 information will be extracted via a data collection tool and undergo thematic analysis. Descriptive  
42  
43 55 summary (visual summary and study contextual information) and a presentation of analytical themes  
44  
45 56 will align findings back to the research question.  
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50 57 **Ethics and Dissemination:** Ethics approval is not required. The PRISMA-P checklist will be utilized to  
51  
52 58 support transparency of findings and guide translation of findings. Findings will be disseminated in peer  
53  
54 59 reviewed journals and conferences via abstract and presentation.  
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60 **Keywords: conscientious objection, medical ethics, refusal to treat, abstention, health, choice**

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For peer review only

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3 **62 STRENGTHS AND LIMITATIONS:**  
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- 6 63 • This article outlines protocol to be utilized to identify the current knowledge regarding the  
7  
8 64 factors influencing practitioner's choices when declining involvement in legally available  
9  
10 65 healthcare practices.  
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12  
13 66 • This protocol highlights the utilization of Arksey and O'Malley's framework in concert with  
14  
15 67 Levac, Colquhoun and O'Brien et al.'s enhancements and the PRISMA-P checklist (in absence of  
16  
17 68 a specific scoping checklist) in the scoping project and which will support transparency of  
18  
19 69 findings and guide translation of findings.  
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22 70 • This scoping review will assist in understanding the factors that influence practitioners'  
23  
24 71 involvement in legally available care and may be used by healthcare providers, healthcare  
25  
26 72 managers and administrators in planning practice supports for ethically safe care participation  
27  
28 73 and by professional associations in the development of practice standards.  
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30  
31 74 • Limitations in the identified project include differing reasons for non-participation based on  
32  
33 75 profession, cultural influences and practice area, selected data bases for data procurement and  
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35 76 chosen medical subject headings, key words and synonyms, as well as the set exclusion criteria  
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37 77 may result in the exclusion of studies of other health professional groups.  
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## 86 INTRODUCTION

### 87 Practitioner's Choice in Care Participation

88 Healthcare practice and care options evolve and expand as laws change and as health science  
89 and technology advances. Additionally, practitioners and care recipients are morally and culturally  
90 pluralistic and diverse. Within this diversity, individual practitioners have dual roles, both as providers of  
91 healthcare and as members of society. This necessitates reconciliation of professional roles and  
92 responsibilities with personal beliefs and values as healthcare practice options and moral diversity is  
93 respected. Healthcare practitioners make choices regarding the care they provide and engage in  
94 conscientious objection (CO) when the refusal to provide a service is based on the belief that doing so is  
95 against personal conscience.[1] CO can further be operationalized as non-participation in a legally  
96 available healthcare practice based on "a particularly important subset of an agent's ethical or religious  
97 beliefs – [or] core moral beliefs." [1, p.4] In some situations, practitioners may find their understanding  
98 and application of ethical principles differs from that of the patient or the healthcare delivery system, or  
99 the practitioners' moral and ethical beliefs are in conflict with the care that the care recipients request  
100 or are available.[2]

101 A number of healthcare practice areas bring the dialogue of practitioner choice in care  
102 participation forward in the literature; pregnancy termination, reproductive technology, genetic choices,  
103 end of life care practices, assisted dying, organ/tissue donation, harm reduction strategies and  
104 biomedical research. Within the Canadian context, the legalization of assisted dying has elicited  
105 polarizing discussions regarding practitioner choice in care participation, CO and the factors influencing  
106 practitioner's choices in participation in this end of life care option.

### 107 Conscientious Objection

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3 108           Positions for and against practitioner choice in participation in legally available medical care may  
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5 109   be placed along a continuum.[1] On one end is conscientious absolutism, when a practitioner's  
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7 110   declaration of CO is morally binding at all times. On the opposite end of the spectrum are those who  
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9 111   assert firm upholding of professional norms and standards, or professionalism. This view requires  
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11 112   practitioner's moral or ethical values to be considered secondary to the profession's accepted standards  
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13 113   and processes. A compromise approach seeks to balance practitioner's CO with the need to uphold the  
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15 114   care recipient's rights to treatment and believes the application of CO must be facilitated within  
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17 115   parameters.[1] A number of models are available to guide the application of CO, such as the Lynch  
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19 116   approach, Wicclair approach, Cantor and Baum approach, and the Magelssen approach.[3] These  
20  
21 117   approaches agree that CO can, and should be, facilitated when non-participation in care is based on  
22  
23 118   conscience, moral or religious rationale, and when non-participation in care does not hinder client  
24  
25 119   access to care.[1, 3-7] Further, there is general agreement, in the balance of practitioner's' and care  
26  
27 120   recipient's needs that processes that create an undue burden on care recipients cannot be condoned.[3-  
28  
29 121   7,14] Literature suggests practitioners are "divided about whether they ever have a professional  
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31 122   obligation to do things they may personally believe are wrong"[2 p1280] highlighting the concern of  
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33 123   practitioner ambiguity in participation or non-participation in legally available care options.  
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40 124           When practitioners choose not to participate in legally available options, a tension can arise  
41  
42 125   between a practitioners' right to refrain from morally objectionable practices and the right of the care  
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44 126   recipient to access these options. Vagueness in conceptualization and application of CO results in  
45  
46 127   confusion regarding what practitioners are "obligated or permitted to do when they conscientiously  
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48 128   object to providing healthcare services to which patients have a legal right of access." [8 p.iii] It is also  
49  
50 129   not always clear what underlies non-participation, as non-participation in care may not always be due to  
51  
52 130   an underlying ethical abstention. Practitioners may choose non-participation for a variety of factors,  
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54 131   such as time commitments, workload, emotional investment.[9-12] Additionally, there is a need to  
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3 132 distinguish CO from non-participation precipitated by fears (of legal prosecution, judgment from peers,  
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5 133 being viewed as among the least virtuous healthcare providers, of causing death), and from non-  
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7 134 participation in care that is precipitated by high emotional burden of care, self-interest, discrimination  
8  
9  
10 135 or prejudice.[9,11-12]  
11

### 12 136 **Practitioner Choice in Care Participation: The Canadian Context**

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14  
15 137 There are a number of factors to consider when considering practitioner's declining involvement  
16  
17 138 in legally available care. The Canada Health Act (1984) specifies criteria and conditions that provinces  
18  
19 139 must conform to for continuation of federal payments; public administration, comprehensiveness,  
20  
21 140 accessibility, portability and universality.[13] These principles are applied across the lifespan and  
22  
23 141 spectrum of healthcare options, including potentially ethically sensitive areas. Individuals have the right  
24  
25 142 to fair, timely and equitable access to all legally available healthcare services. The ability to refuse to  
26  
27 143 participate in legally available healthcare option due to reasons of conscience aligns with The Canadian  
28  
29 144 Charter of Rights and Freedoms that protects the fundamental freedom of conscience and religion.[15]  
30  
31 145 Guidance is provided in a multitude of documents, but a there is no definitive solution on how  
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33 146 practitioners should provide the care recipient with the best care while preserving an internal sense of  
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35 147 moral integrity.[1,3]  
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41 148 The project objective will support the overall scoping review goal which is to identify the current  
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43 149 knowledge regarding the factors contributing to practitioner choice in declining involvement in legally  
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45 150 available healthcare practices. This information may be utilized to summarize current state of the  
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47 151 literature, identify gaps in knowledge and policy as well as inform and support future areas of  
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49 152 practice.[16] This scoping project will be undertaken by a review team of four, including a librarian, one  
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51 153 Physician and two Registered Nurses.  
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### 55 154 **METHODS AND ANALYSIS**

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3 155 Scoping reviews are useful to map key concepts and to examine emerging knowledge when it  
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5 156 unclear what detailed questions are required in the area of study.[17] They are also useful to identify  
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7 157 knowledge gaps, and report on the available knowledge to inform a practice area or topic.[17] These  
8  
9  
10 158 offer substantive reason to undertake this scoping project in relation to factors contributing to  
11  
12 159 practitioner choice in participation or non-participation in legally available care. This scoping review will  
13  
14 160 utilize Arksey and O'Malley's framework which identifies the scoping methodological stages of 1)  
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16 161 identifying the research question, 2) identifying the relevant studies, 3) study selection, 4) charting the  
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18 162 data, and 5) collating, summarizing and reporting results.[18] Levac, Colquhoun and O'Brien et al.'s  
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20 163 enhancements to the original framework[19] and the PRISMA-P checklist[21] (in absence of a specific  
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22 164 scoping checklist) will be utilized to support transparency of findings and guide translation of findings.  
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25 165 Individual study methodology quality will not be critiqued in this scoping review. This is consistent with a  
26  
27 166 number of guidance statements regarding the conduction of scoping reviews.[16-20]

### 167 **Identification of Research Question and Objectives**

168 This scoping review will determine the range, depth and characteristics of the known literature  
169 regarding factors influencing practitioner choice when declining involvement in a legally available  
170 healthcare practice. The research team guiding this project determined the research question to be  
171 "What is known regarding the factors influencing practitioner choice when declining involvement in a  
172 legally available care option?" The specific objective of this scoping review is: to identify factors  
173 influencing practitioner choices in declining involvement in a legally available healthcare procedure  
174 A review of the International Prospective Register of Systematic Reviews demonstrates a lack of work in  
175 this area.

### 176 **Identification of Relevant Studies**

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3 177 The development of the search protocol will be led by the team librarian with the support by all  
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5 178 team members. The search date will be limited from January 1, 1998 to current and this timeline may be  
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7 179 adjusted depending on the quantity and quality of search returns to meet the project goal and  
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10 180 objectives. Final search time frame will be reflected in the final scoping review report. Identified  
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12 181 databases will include MEDLINE, Cumulative Index to Nursing and Allied Health Literature (CINAHL),  
13  
14 182 JSTOR, PsycINFO, ProQuest Dissertations and Theses Global, EMBASE and Sociological Abstracts. The  
15  
16 183 search will be conducted utilizing the Sampson et al. evidence based-practice guideline for the peer  
17  
18 184 review of electronic search strategies.[22] The search strategy will include Medical Subject Headings  
19  
20 185 (MeSH), key words and synonyms as appropriate e.g. Physicians, Nurses, Health Personnel,  
21  
22 186 conscientious objection, conscience, refusal to treat, attitude of health personnel, professional  
23  
24 187 autonomy, and objector (Appendix A). The final subjected headings, key words and synonyms will be  
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26 188 reflected in the final manuscript.  
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31 189 Theses and dissertations will be included in the search protocol; however, other grey literature  
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33 190 will be accessed only as required. Additional grey literature may include conference proceedings,  
34  
35 191 technical specifications and standards, bibliographies and official documents and reports (i.e. preprints,  
36  
37 192 preliminary progress and advanced reports, institutional, technical and statistical reports, market  
38  
39 193 research and commission reports).[23] The reference lists of relevant studies will be examined to  
40  
41 194 identify other relevant articles. For this scoping review, we will include studies published in English.  
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### 45 195 **Study Selection**

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48 196 The scoping review objective will use the following inclusion criteria: a) includes both Physicians  
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50 197 and Registered Nurses, b) includes discussion of the reasons or factors that precipitate or influence a  
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52 198 practitioner choice to decline involvement in a legally available healthcare option. Exclusion criteria will  
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54 199 involve: studies examining students of the two identified profession; other healthcare professional  
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3 200 group; opinion piece commentaries; editorials; and theoretical or philosophical examinations of  
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5 201 conscience and CO. Scoping review inclusion and exclusion criteria may also be determined post-hoc  
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7 202 within an iterative, dynamic process, resulting in revisiting and refining the search strategy.[17,24] As  
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9  
10 203 such, changes or modifications to the inclusion and exclusion criteria as a result of the iterative process  
11  
12 204 will be described in the final manuscript.

13  
14  
15 205 Literature research results will be uploaded into Covidence™[25] where duplicate entries will be  
16  
17 206 deleted. The scoping review team will meet at the onset of the project to review the above pre-set  
18  
19 207 inclusion and exclusion criteria and to utilize inclusion and exclusion criteria on a selection of articles  
20  
21 208 (minimum 30). Individual team member application of inclusion and exclusion criteria will be cross-  
22  
23 209 checked to support consistent application of inclusion and exclusion criteria and to enhance reliability.  
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25 210 As required, additional inclusion and exclusion criteria and training rounds will be conducted. Two team  
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27 211 members will continue to screen titles and abstracts to determine if inclusion criteria is being met.  
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29 212 Individual study authors will be contacted if additional information on methodology or results are  
30  
31 213 required to support the determination of inclusion. This will be followed by a second round of reviewing  
32  
33 214 by two reviewers examining the full text article to the article inclusion criteria to determine final  
34  
35 215 inclusion into the scoping review. Should disagreement between study inclusion occur at the full text  
36  
37 216 screening stage, the third reviewer will be asked to review and determine final study inclusion or  
38  
39 217 exclusion.

## 218 **Charting the Data**

219 A data collection tool has been developed *a priori* to extract the study characteristics and  
220 findings of the final identified studies (Appendix B). This tool will be piloted by two reviewers on a  
221 sample of included articles and cross-checked for reliability. Any adjustments in the data collection tool  
222 that may be required as part of the iterative process will be highlighted in the final manuscript

223 preparation. Information will be extracted and housed in Excel™ document format and will include  
224 study characteristics (year, author, country and journal), study design (objectives, methodology,  
225 participant profession, and sample size) and findings in relation to the review question.[26]

226 The following data will be extracted from the included studies: 1) factors precipitating or  
227 influencing practitioner choice in declining involvement in care, 2) determination if the factors are  
228 related to conscience or for reasons other than conscience, and 3) healthcare practice areas  
229 precipitating the objection (i.e. pregnancy termination, reproductive technology, genetic choices, end of  
230 life care practices, organ/tissue donation, biomedical research).

### 231 **Collating, Summarizing and Reporting Results**

232 Data will be collated and presented in two formats: a descriptive numerical summary of the  
233 scoping review process and a presentation of themes. Descriptive summary will include a visual  
234 flowchart outlining the review decision processes study identification containing primary screening  
235 results, determination of eligibility and final study inclusion number. It will also include characteristics of  
236 the included studies (year of publication, country, study methodology, professional group represented  
237 and research participant numbers). This information will provide contextual information for the  
238 presentation of themes.

239 Presentation of themes will occur after extracted data has undergone thematic analysis. The  
240 thematic analysis approach includes text coding, development of descriptive themes and further  
241 generation of analytical themes. [26] Descriptive themes typically remain closely aligned to the primary  
242 studies, whereas analytical themes will facilitate interpretation of the data to produce explanations and  
243 constructs.[26] Depending on the volume of the data generated, computer software facilitated coding  
244 (i.e. NVivo™[27]) may be utilized to facilitate this process. Thematic results will be presented in a

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3 245 diagrammatical map of the data which will align the findings to the project goal and objectives as  
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5 246 outlined in step one of the Arksey and O'Malley framework.[18]  
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## 8 247 **STRENGTHS AND LIMITATIONS**

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10  
11 248 The goal of this scoping project is an enhanced understanding of the factors influencing  
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13 249 practitioner choice of non-participation in a legally available healthcare practice. Practitioners have the  
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15 250 right to conscientiously object and care recipients have the right to access to legally available care.  
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18 251 Negotiating the practice realities of ethically sensitive healthcare areas requires attention to the both  
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20 252 the healthcare provider's and the care recipient's needs. As non-participation in care provision and CO is  
21  
22 253 not unique to a specific healthcare area, or to a professional practice group, synthesis of this  
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24 254 information from a variety of healthcare practices and from two of the largest healthcare provider  
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26 255 groups will enrich the understanding of the factors influencing a practitioner choice in the participation  
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29 256 in legally available care. This enriched understanding of the current literature will subsequently highlight  
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31 257 literature gaps, and may inform future areas of study and exploration.  
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34 258 The thematic findings of this scoping review will not only assist in understanding the factors that  
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36 259 influence practitioners involvement in legally available care and the application of conscientious  
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38 260 objection, but may be used to inform the development of practice supports required for ethically safe  
39  
40 261 care participation. As there may be unintended consequences after non-participation in care to the  
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42 262 practitioner, the care recipient and the healthcare delivery system, an enhanced understanding of the  
43  
44 263 rationale precipitating non-participation may assist in mitigating the unintended consequences.  
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47 264 Healthcare and client options for care will continue to evolve and as new practices emerge, and an  
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49 265 enhanced understanding of non-participation and its multifaceted impacts will be crucial to guide  
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51 266 practice and facilitate care that is appropriate for both the care provider and the care recipient.  
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3 267           There may be a number of limitations in the identified project. Motivations for non-participation  
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5 268   may differ depending on practice areas and professional groups, within individual cultural contexts and  
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7 269   within healthcare practice areas. Utilization of identified databases is to the exclusion of others and  
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9 270   searching of these other data bases may result in additional studies for inclusion. Additionally, careful  
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11 271   consideration, and the revisiting and adjusting of medical subject headings, key words and synonyms  
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13 272   will occur throughout the iterative process of study identification. Inconsistencies and ambiguity in  
14  
15 273   terminology within the academic literature of this field may result in some studies inadvertently being  
16  
17 274   excluded. Questions regarding operationalization of terms and study findings will be mitigated by  
18  
19 275   connecting with study primary authors for clarification. Finally, the inclusion of Registered Nurses and  
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21 276   Physicians may result in the inadvertent exclusion of studies of other health professional groups.

## 26 277 **ETHICS AND DISSEMINATION**

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29 278           Ethical approval and consent to participate is not applicable. The PRISMA-P checklist will be  
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31 279   utilized to support transparency of findings and guide translation and dissemination of the findings. A  
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33 280   presentation of the scoping findings will include both descriptive and thematic presentation of findings.  
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35 281   Discussion will occur regarding the implications of the findings in relation to clinical practice for  
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37 282   healthcare providers, for healthcare managers and administrators in healthcare planning and for  
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39 283   professional associations in the development of practice standards. Scoping project findings will be  
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41 284   disseminated in peer reviewed journals and conferences via abstract and presentation.  
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3 **287 DECLARATIONS**

4  
5 288 Availability of Supporting Data: This is a study protocol. All literature cited in the protocol is available  
6  
7 289 through the University of Saskatchewan and University of Regina libraries system and cited in the  
8  
9 290 reference list.

10  
11  
12 291 Ethical approval and consent to participate: Not applicable

13  
14  
15 292 Competing Interests: The authors declare that they have no actual or potential conflict of interest  
16  
17 293 including any financial, personal or other relationships with other people or organizations within three  
18  
19 294 years of beginning the submitted work that could inappropriately influence, or be perceived to  
20  
21 295 influence, their work.

22  
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25 296 Funding: This research received no specific grant from any funding agency in the public, commercial or  
26  
27 297 not-for-profit sectors.

28  
29  
30 298 Authors Contributions

31  
32  
33 299 JB is the guarantor, leads the study and was responsible for initial development of all components of the  
34  
35 300 protocol. MC developed and refined the search strategies in collaboration with JB and DG and LT. JB, DG  
36  
37 301 and LT participated in refinement of the research questions as well as the inclusion and exclusion criteria  
38  
39 302 and approved the final manuscript.

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**References**

1. Wicclair MR. Conscientious objection in health care: an ethical analysis. Cambridge: Cambridge University Press; 2011.
2. Lawrence RE, Curlin FA. Physicians' beliefs about conscience in medicine: a national survey. *Acad Med.* 2009; 84(9):1276-1282. doi: 10.1097/ACM.0b013e3181b18dc5.
3. O'Dell J, Abhyankar R, Malcolm A, et al. In: ScholarWorks. Conscientious objection in the healing professions: a readers' guide to ethical and social issues, ethical analysis. 2014. <https://scholarworks.iupui.edu/handle/1805/3844>. Accessed 2 April 2018.
4. Murphy S. Conflicts of conscience in health care: an institutional compromise. 2008. <http://consciencelaws.org/archive/documents/2009-12-17-conflicts-health-care-lynch.pdf>. Accessed 2 April 2018.
5. Lynch HF. Conflicts of conscience in health care: an institutional compromise. Cambridge: MIT Press; 2008.
6. Cantor J, Baum K. The limits of conscientious objection – may pharmacists refuse to fill prescriptions for emergency contraception. *N Engl J Med.* 2004; 351(19): 2008-2012. doi: 10.1056/NEJMs042263
7. Magelssen M. When should conscientious objection be accepted? *J Med Ethics.* 2012; 38:18-21. <http://dx.doi.org/10.1136/jme.2011.043646>
8. McLeod C, Downie J. Let conscience be their guide? Conscientious refusals in health care. *Bioeth.* 2014; 28(1):ii-iv. <https://doi.org/10.1111/bioe.12075>
9. Opatrny L, Bouthillier M-E. Decoding conscientious objection in medical aid in dying: First results from a unique study. *Le Specialiste.* 2017; 19(4):36–40.
10. Payot A, Bouthillier M-E. Stakes in clinical ethics and medical aid in dying. *Le Specialiste.* 2016; 18(4):26–9.

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2  
3 332 11. Lachman V. Conscientious objection in nursing: definition and criteria for acceptance. *Medsurg*  
4  
5 333 *Nurs.* 2014; 23(3):196–8.  
6  
7 334 12. Deans Z. Might a conscientious clause be used for non-moral or prejudiced reasons? *J Med*  
8  
9 *Ethics.* 2016; 42(2): 76-77. <http://dx.doi.org/10.1136/medethics-2015-102798>  
10 335  
11  
12 336 13. Government of Canada. Canada Health Act, 1984. 1985. [lois.justice.gc.ca/eng/acts/c-6/](http://laws-</a><br/>13<br/>14 337 <a href=). Accessed 2 April 2018.  
15  
16 338 14. Brindley P, Kerrie J. Conscientious objection and medical assistance in dying in Canada. *Difficult*  
17  
18 *questions – insufficient answers.* *Can J Gen Intern Med.* 2016; 11(4):7–10.  
19 339  
20  
21 340 15. Government of Canada. Constitution Act, 1982 Part 1: Canadian Charter of Rights and Freedoms.  
22  
23 341 1982. <http://laws-lois.justice.gc.ca/eng/Const/page-15.html>. Accessed 2 April 2018.  
24  
25 342 16. Peters M, Godfrey C, Khalil H, et al. Guidance on conducting systematic scoping reviews. *Int J*  
26  
27 *Evid Based Healthc.* 2015; 13(3): 141-6. doi: 10.1097/XEB.0000000000000050.  
28 343  
29  
30 344 17. The Joanna Briggs Institute. The Joanna Briggs Institute reviewers' manual 2015: methodology  
31  
32 345 for JBI scoping reviews. 2015. [www.joannabriggs.org/assets/docs/sumari/reviewersmanual-](http://www.joannabriggs.org/assets/docs/sumari/reviewersmanual-2014.pdf)  
33  
34 346 [2014.pdf](http://www.joannabriggs.org/assets/docs/sumari/reviewersmanual-2014.pdf). Accessed 2 April 2018.  
35  
36 347 18. Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *Int J Soc Res*  
37  
38 *Methodol.* 2005; 8(1):19-32. <https://doi.org/10.1080/1364557032000119616>  
39 348  
40  
41 349 19. Levac D, Colquhoun H, O'Brien K. Scoping studies: advancing the methodology. *Implement Sci.*  
42  
43 350 2010; 5(69): 1-9. <https://doi.org/10.1186/1748-5908-5-69>  
44  
45 351 20. Davis K, Drey N, Gould D. What are scoping studies? A review of the nursing literature. *Int J of*  
46  
47 *Nurs Stud;* 46(10):1386-1400. <https://doi.org/10.1016/j.ijnurstu.2009.02.010>  
48 352  
49  
50 353 21. Shamseer L, Moher D, Clarke M, et al., PRISMA-P Group. Preferred reporting items for  
51  
52 354 systematic review and meta-analysis protocols (PRISMA-P) 2015: elaboration and explanation.  
53  
54 355 *BMJ.* 2015; Jan 2;349(jan021):g7647. <https://doi.org/10.1136/bmj.g7647>  
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3 356 22. Sampson M, McGowan J, Cogo E, et al. An evidence-based practice guideline for the peer review  
4  
5 357 of electronic search strategies. *J Clin Epidemiol*. 2009; 62:944-952. doi:  
6  
7 358 10.1016/j.jclinepi.2008.10.012.
- 9  
10 359 23. Alberani V, Pietrangeli P, Mazza A. The use of grey literature in health sciences: a preliminary  
11  
12 360 survey. *Bull Med Libr Assoc*. 1990; 78(4): 358-363.
- 13  
14 361 24. Colquhoun H, Levac D, O'Brien K, et al. Scoping reviews: time for clarity in definition, methods,  
15  
16 362 and reporting. *J Clin Epidemiol*. 2014; 67: 1291-1294.  
17  
18 363 <https://doi.org/10.1016/j.jclinepi.2014.03.013>
- 19  
20  
21 364 25. Covidence systematic review software, Veritas Health Innovation, Melbourne, Australia.  
22  
23 365 Available at <https://www.covidence.org/>.
- 24  
25 366 26. Thomas J, Harden A. Methods for the thematic synthesis of qualitative research in systematic  
26  
27 367 reviews. *BMC Med Res Methodol*. 2008; 8(45): 1-10. <https://doi.org/10.1186/1471-2288-8-45>
- 28  
29 368 27. NVivo, Software that supports qualitative and mixed methods research, QST International.  
30  
31 369 Available at <http://www.qsrinternational.com/nvivo/what-is-nvivo>

### 370 Appendix A

371 Database: Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations, Ovid  
372 MEDLINE(R) Daily and Ovid MEDLINE(R) <1946 to Present> Search Strategy  
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| 1 | conscientious objection.mp. (370)                          |
| 2 | Refusal to Treat.mp. or Refusal to Treat/ (2892)           |
| 3 | Conscience/ (1379)   |
| 4 | Ethical Relativism/ or ethical relativism.mp. (490)        |
| 5 | objector.mp. (26)  |
| 6 | objection.mp. (1412)                                       |
| 7 | moral obligations.mp. or Moral Obligations/ (6379)         |
| 8 | personal autonomy.mp. or Personal Autonomy/ (15789)        |
| 9 | PROFESSIONAL AUTONOMY.mp. or Professional Autonomy/ (9519) |

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4 10 LEGISLATION, MEDICAL/es [Ethics] (66)  
5 11 Attitude of Health Personnel.mp. or "Attitude of Health Personnel"/ (109553)  
6 12 exp NURSES/ (81963)  
7 13 exp PHYSICIANS/ (119185)  
8 14 exp Health Personnel/ (455515)  
9 15 1 or 2 or 3 or 4 or 5 or 6 or 7 (11710)  
10 11 or 12 or 13 or 14 (513874)  
11 12 7 or 8 or 9 or 10 (30148)  
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**Appendix B**

Study Information (year, author, country and journal)	Study Design (objectives, methodology, participant profession, and sample size)	Factors precipitating or influencing practitioner’s participation in care (list)	List the reasons/factors that are in relation to conscience (list)	List the reasons/factors that are not related to conscience (list)	Healthcare practice area

For peer review only

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10 April 29, 2018  
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12 Dr. Trish Groves  
13 Editor  
14 BMJ Open  
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16  
17 Dear Dr. Groves,  
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19 Please find attached submission documents for a manuscript, *Factors contributing to practitioner choice*  
20 *when declining involvement in legally available care: A scoping protocol* on behalf of myself and co-  
21 authors Donna Goodridge, Lilian Thorpe and Mary Chipanshi. We believe this scoping protocol is an  
22 excellent fit with the aims and scope of BMJ Open. We feel it is a valuable contribution to research and  
23 will be of significant interest to your readership specifically within the areas of professional choices,  
24 health systems and health policies.  
25

26 There are no submissions or previous reports that would be regarded as redundant publication. The authors  
27 do not have any issues with regard to the journal's policies. The authors declare that they have no actual  
28 or potential conflict of interest including any financial, personal or other relationships with other people  
29 or organizations within three years of beginning the submitted work that could inappropriately influence,  
30 or be perceived to influence, their work.  
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33 All authors have contributed to the manuscript and have approved the manuscript for submission.  
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37 We look forward to correspondence regarding this submission.  
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41 Sincerely,  
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45 Janine Brown, RN MSN  
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## PRISMA-P 2015 Checklist (Used in absence of a specific scoping checklist)

This checklist has been adapted for use with protocol submissions to *Systematic Reviews* from Table 3 in Moher D et al: Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. *Systematic Reviews* 2015 4:1

Section/topic	#	Checklist item	Information reported		Line number(s)
			Yes	No	
<b>ADMINISTRATIVE INFORMATION</b>					
<b>Title</b>					
Identification	1a	Identify the report as a protocol of a systematic review	<input checked="" type="checkbox"/>	<input type="checkbox"/>	44,66
Update	1b	If the protocol is for an update of a previous systematic review, identify as such	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A
<b>Registration</b>	2	If registered, provide the name of the registry (e.g., PROSPERO) and registration number in the Abstract	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A
<b>Authors</b>					
Contact	3a	Provide name, institutional affiliation, and e-mail address of all protocol authors; provide physical mailing address of corresponding author	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4-22
Contributions	3b	Describe contributions of protocol authors and identify the guarantor of the review	<input checked="" type="checkbox"/>	<input type="checkbox"/>	300-303
<b>Amendments</b>	4	If the protocol represents an amendment of a previously completed or published protocol, identify as such and list changes; otherwise, state plan for documenting important protocol amendments	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A
<b>Support</b>					
Sources	5a	Indicate sources of financial or other support for the review	<input checked="" type="checkbox"/>	<input type="checkbox"/>	297-298
Sponsor	5b	Provide name for the review funder and/or sponsor	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A
Role of sponsor/funder	5c	Describe roles of funder(s), sponsor(s), and/or institution(s), if any, in developing the protocol	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A
<b>INTRODUCTION</b>					
<b>Rationale</b>	6	Describe the rationale for the review in the context of what is already known	<input checked="" type="checkbox"/>	<input type="checkbox"/>	87-147
<b>Objectives</b>	7	Provide an explicit statement of the question(s) the review will address with reference to	<input checked="" type="checkbox"/>	<input type="checkbox"/>	148-153



Section/topic	#	Checklist item	Information reported		Line number(s)
			Yes	No	
		participants, interventions, comparators, and outcomes (PICO)			168-175
<b>METHODS</b>					
<b>Eligibility criteria</b>	8	Specify the study characteristics (e.g., PICO, study design, setting, time frame) and report characteristics (e.g., years considered, language, publication status) to be used as criteria for eligibility for the review	<input checked="" type="checkbox"/>	<input type="checkbox"/>	177-180 184-188
<b>Information sources</b>	9	Describe all intended information sources (e.g., electronic databases, contact with study authors, trial registers, or other grey literature sources) with planned dates of coverage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	180-184 189-195
<b>Search strategy</b>	10	Present draft of search strategy to be used for at least one electronic database, including planned limits, such that it could be repeated	<input checked="" type="checkbox"/>	<input type="checkbox"/>	372-375
<b>STUDY RECORDS</b>					
Data management	11a	Describe the mechanism(s) that will be used to manage records and data throughout the review	<input checked="" type="checkbox"/>	<input type="checkbox"/>	206 224-226
Selection process	11b	State the process that will be used for selecting studies (e.g., two independent reviewers) through each phase of the review (i.e., screening, eligibility, and inclusion in meta-analysis)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	206-217
Data collection process	11c	Describe planned method of extracting data from reports (e.g., piloting forms, done independently, in duplicate), any processes for obtaining and confirming data from investigators	<input checked="" type="checkbox"/>	<input type="checkbox"/>	219-225
<b>Data items</b>	12	List and define all variables for which data will be sought (e.g., PICO items, funding sources), any pre-planned data assumptions and simplifications	<input checked="" type="checkbox"/>	<input type="checkbox"/>	226-230
<b>Outcomes and prioritization</b>	13	List and define all outcomes for which data will be sought, including prioritization of main and additional outcomes, with rationale	<input checked="" type="checkbox"/>	<input type="checkbox"/>	232-238
<b>Risk of bias in individual studies</b>	14	Describe anticipated methods for assessing risk of bias of individual studies, including whether this will be done at the outcome or study level, or both; state how this information will be used in data synthesis	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A
<b>DATA</b>					
<b>Synthesis</b>	15a	Describe criteria under which study data will be <b>quantitatively</b> synthesized	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A
	15b	If data are appropriate for quantitative synthesis, describe planned summary measures, methods of	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A

Section/topic	#	Checklist item	Information reported		Line number(s)
			Yes	No	
		handling data, and methods of combining data from studies, including any planned exploration of consistency (e.g., $I^2$ , Kendall's tau)			
	15c	Describe any proposed additional analyses (e.g., sensitivity or subgroup analyses, meta-regression)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A
	15d	If quantitative synthesis is not appropriate, describe the type of summary planned	<input checked="" type="checkbox"/>	<input type="checkbox"/>	239-247
<b>Meta-bias(es)</b>	16	Specify any planned assessment of meta-bias(es) (e.g., publication bias across studies, selective reporting within studies)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A
<b>Confidence in cumulative evidence</b>	17	Describe how the strength of the body of evidence will be assessed (e.g., GRADE)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A (scoping)

# BMJ Open

## Factors contributing to practitioner choice when declining involvement in legally available care: A scoping protocol

Journal:	<i>BMJ Open</i>
Manuscript ID	bmjopen-2018-023901.R1
Article Type:	Protocol
Date Submitted by the Author:	12-Jul-2018
Complete List of Authors:	Brown, Janine; University of Regina, Faculty of Nursing; University of Saskatchewan College of Medicine, Health Sciences Graduate Program Goodridge, Donna; University of Saskatchewan, Thorpe, Lilian; University of Saskatchewan, Departments of Community Health & Epidemiology and Psychiatry Chipanshi, Mary; University of Regina
<b>Primary Subject Heading</b>:	Ethics
Secondary Subject Heading:	Health policy, Health services research
Keywords:	conscientious objection, MEDICAL ETHICS, refusal to treat, abstention, choice, non-participation

SCHOLARONE™  
Manuscripts

**Factors contributing to practitioner choice when declining involvement in legally available care: A scoping protocol**

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Word Count 2942

**ABSTRACT**

**Introduction:** As legislation addressing medical treatments continues to evolve, there are several circumstances (e.g. abortion, assisted dying) in which health practitioners may choose to not provide legally available care options. It is not always clear what underlies practitioner choice, as some research has suggested non-participation in care provision is not always due to an ethical abstention but may represent other factors. This results in tension between a practitioner's right to refrain from practices deemed morally objectionable by the practitioner, and the care recipient's right to access legally available treatments. The aim of this systematic scoping review is to identify the current knowledge regarding the all the factors influencing practitioner's choices when declining involvement in legally available healthcare options.

**Methods and Analysis:** Arksey and O'Malley's scoping framework in concert with Levac et al.'s enhancements will guide the systematic scoping review methodological processes. English language documents from January 1, 1998 to current will be sought utilizing MEDLINE, CINAHL, JSTOR, EMBASE, ProQuest Dissertations and Theses Global, PsychINFO and Sociological Abstracts. MeSH headings, key words and synonyms will be adjusted utilizing an iterative search process. Theses and dissertations will be included in the search protocol; however, other grey literature will be accessed only as required. Two research team members will screen the abstracts and full articles against inclusion criteria. Article information will be extracted via a data collection tool and undergo thematic analysis. Descriptive summary (visual summary and study contextual information) and a presentation of analytical themes will align findings back to the research question.

**Ethics and Dissemination:** Ethics approval is not required. The PRISMA checklist will be utilized to support transparency and guide translation of findings. Findings will be disseminated through professional networks, in peer reviewed journals and conferences via abstract and presentation.

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**Keywords: conscientious objection, medical ethics, refusal to treat, abstention, health, non-participation**

For peer review only

**STRENGTHS AND LIMITATIONS:**

- This protocol will be utilized to identify the current knowledge regarding the factors (of both a conscience and non-conscience origin) influencing practitioner's choices when declining involvement in legally available healthcare practices.
- This protocol is based on valid methodological frameworks, and the review will be conducted using an exhaustive, iterative search strategy with both descriptive and analytic theme outcomes.
- This resultant study may be used by healthcare providers, healthcare managers, ethicists and administrators in planning for ethically safe care and by professional associations in the development of practice standards and supports.
- Limitations in the identified project include differing reasons for non-participation based on profession, cultural and practice area influences, selected databases for data procurement and chosen medical subject headings, key words and synonyms, as well the set exclusion criteria may result in the exclusion of studies of other health professional groups.
- Quality of evidence will not be evaluated in this scoping review.

## INTRODUCTION

### Practitioner's Choice in Care Participation

Healthcare practice and care options evolve and expand as laws change and as health science and technology advances. Additionally, practitioners and care recipients are morally and culturally pluralistic and diverse. Within this diversity, individual practitioners have dual roles, both as providers of healthcare and as members of society. This necessitates reconciliation of professional roles and responsibilities with personal beliefs and values as healthcare practice options and moral diversity is respected. Healthcare practitioners make choices regarding the care they provide. In some instances, healthcare practitioners engage in conscientious objection (CO); when the refusal to provide a service is based on the belief that doing so is against personal conscience.[1] CO can further be operationalized as non-participation in a legally available healthcare practice based on “a particularly important subset of an agent’s ethical or religious beliefs – [or] core moral beliefs.”[1, p.4] Practitioners may find their understanding and application of ethical principles differs from that of the patient or the healthcare delivery system, or the practitioners’ moral and ethical beliefs are in conflict with the care that the care recipients request or are available.[2]

However, it is not always clear what underlies non-participation, as non-participation in care may not always be due to an underlying ethical abstention. Practitioners may choose non-participation for a variety of factors, such as time commitments, workload, emotional investment.[3–6] Additionally, there is a need to distinguish CO from non-participation precipitated by fears (of legal prosecution, judgment from peers, being viewed as among the least virtuous healthcare providers, of causing death), and from non-participation in care that is precipitated by high emotional burden of care, self-interest, discrimination or prejudice.[3,5,6]



## Factors Contributing to Declining Participation 6

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3 A number of healthcare practice areas bring the dialogue of practitioner choice in care  
4 participation forward in the literature; pregnancy termination, reproductive technology, genetic choices,  
5 end-of-life care practices, assisted dying, organ/tissue donation, harm reduction strategies and  
6 biomedical research. Within the Canadian context, the legalization of medical assistance in dying has  
7 elicited polarizing discussions regarding practitioner choice in care participation, CO in addition to  
8 factors influencing practitioner's choices in participation in this end of life care option.  
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17 There are a number of features to consider when considering practitioner's declining  
18 involvement in legally available care. The Canada Health Act (1984) specifies criteria and conditions that  
19 provinces must conform to for continuation of federal payments; public administration,  
20 comprehensiveness, accessibility, portability and universality.[7] These principles are applied across the  
21 lifespan and spectrum of healthcare options, including ethically sensitive areas. Care recipients have the  
22 right to fair, timely and equitable access to all legally available healthcare services. When practitioners  
23 choose not to participate in legally available options, a tension can arise between a practitioners' right  
24 to refrain from morally objectionable practices and the right of the care recipient to access these  
25 options. The ability to refuse to participate in legally available healthcare option due to reasons of  
26 conscience aligns with The Canadian Charter of Rights and Freedoms that protects the fundamental  
27 freedom of conscience and religion.[8] Although guidance is provided in a multitude of documents,  
28 there is no definitive solution on how practitioners should provide the care recipient with the best care  
29 while preserving an internal sense of moral integrity.[1,9] Additionally, there is little guidance on how  
30 care provision should proceed when healthcare practitioners object for reasons other than conscience.  
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### 49 **Reflections on Conscientious Objection**

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52 Conscientious objection, as both a theoretical and conceptual construct within various  
53 practitioner groups and practice environments is present in academic and clinical literature.[5,10–18]  
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3 Positions for and against practitioner choice in participation in legally available medical care may be  
4 placed along a continuum.[1] On one end is conscientious absolutism, when a practitioner's declaration  
5 of CO is morally binding at all times. On the opposite end of the spectrum are those who assert firm  
6 upholding of professional norms and standards, or professionalism. This view requires practitioner's  
7 moral or ethical values to be considered secondary to the profession's accepted standards and  
8 processes. A compromise approach seeks to balance practitioner's CO with the need to uphold the care  
9 recipient's rights to treatment and believes the application of CO must be facilitated within  
10 parameters.[1] A number of models are available to guide the application of CO, such as the Lynch  
11 approach, Wicclair approach, Cantor and Baum approach, and the Magelssen approach.[9] These  
12 approaches agree that CO can, and should be, facilitated when non-participation in care is based on  
13 conscience, moral or religious rationale, and when non-participation in care does not hinder client  
14 access to care.[1,9,19–21] Further, there is general agreement, in the balance of practitioner's' and care  
15 recipient's needs that processes that create an undue burden on care recipients cannot be  
16 condoned.[9,19–23] Literature suggests practitioners are "divided about whether they ever have a  
17 professional obligation to do things they may personally believe are wrong"[2, p.1280] highlighting the  
18 concern of practitioner ambiguity in participation or non-participation in legally available care options.  
19 Vagueness in conceptualization and application of CO results in confusion regarding what care  
20 practitioners are obligated to provide when conscientiously objecting to care which patients have legal  
21 right of access.[24]

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46 This scoping review will look at factors of both a conscience and non-conscience origin that  
47 influence practitioner practitioner choice when declining involvement in a legally available healthcare  
48 practice. The research team guiding this project determined the research question to be "What is known  
49 regarding the factors influencing practitioner choice when declining involvement in a legally available  
50 care option?" This information may be utilized to summarize current state of the literature, identify gaps

## Factors Contributing to Declining Participation 8

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3 in knowledge and policy as well as inform and support future areas of practice.[25] A search of the  
4 International Prospective Register of Systematic Reviews[26] does not reveal an ongoing review in this  
5 area. This scoping review will be undertaken by a review team of four, including a librarian, one  
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7  
8 Physician and two Registered Nurses.  
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## 11 12 **METHODS AND ANALYSIS**

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15 Scoping reviews are useful to map key concepts and to examine emerging knowledge when it  
16 unclear what detailed questions are required in the area of study.[27] They are also useful to identify  
17 knowledge gaps, and report on the available knowledge to inform a practice area or topic.[27] These  
18 offer substantive reason to undertake this scoping project in relation to factors contributing to  
19 practitioner choice in participation or non-participation in legally available care. This scoping review will  
20 utilize Arksey and O'Malley's framework which identifies the scoping methodological stages of 1)  
21 identifying the research question, 2) identifying the relevant studies, 3) study selection, 4) charting the  
22 data, and 5) collating, summarizing and reporting results.[28] Levac, Colquhoun and O'Brien et al.'s  
23 enhancements to the original framework[29] and the PRISMA checklist[30] (in absence of a specific  
24 scoping checklist) will be utilized to support transparency and guide translation of findings. Individual  
25 study methodology quality will not be critiqued in this scoping review which is consistent with a number  
26 of guidance statements regarding the conduction of scoping reviews.[25,27–29,31]  
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### 43 **Patient and Public Involvement**

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46 Patients and public were not involved in the formulation of this scoping review protocol, nor will  
47 be involved in the scoping review itself upon commencement. However, subsequent knowledge  
48 translation activities to disseminate findings to knowledge users, including advocacy groups and the  
49 public are anticipated.  
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### 55 **Eligibility Criteria**

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3 The search date will be limited from January 1, 1998 to current and this timeline may be  
4  
5 adjusted depending on the quantity and quality of search returns to meet the project goal. Final search  
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7 time frame will be reflected in the final scoping review report. We will include studies published in  
8  
9 English. The scoping review will use the following inclusion criteria: a) includes both Physicians and  
10  
11 Registered Nurses, b) includes discussion of the reasons or factors that precipitate or influence a  
12  
13 practitioner choice to decline involvement in a legally available healthcare option. Exclusion criteria will  
14  
15 include: studies examining students of the two identified profession; other healthcare professional  
16  
17 groups. Scoping review inclusion and exclusion criteria may also be determined post-hoc within an  
18  
19 iterative, dynamic process, resulting in revisiting and refining the search strategy.[27,32] As such,  
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21 changes or modifications as a result of the iterative process will be described in the final manuscript.  
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### 26 **Search Strategy and Information Sources**

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29 The development of the search protocol will be led by the team librarian with the support by all  
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31 team members. Identified databases will include MEDLINE, Cumulative Index to Nursing and Allied  
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33 Health Literature (CINAHL), JSTOR, PsycINFO, ProQuest Dissertations and Theses Global, EMBASE and  
34  
35 Sociological Abstracts. The search will be conducted utilizing the Sampson et al. evidence based-practice  
36  
37 guideline for the peer review of electronic search strategies.[33] The search strategy will include Medical  
38  
39 Subject Headings (MeSH), key words and synonyms as appropriate e.g. Physicians, Nurses, Health  
40  
41 Personnel, conscientious objection, conscience, refusal to treat, attitude of health personnel,  
42  
43 professional autonomy, and objector (Appendix A). The reference lists of relevant studies will be  
44  
45 examined to identify other relevant articles. Theses and dissertations will be included in the search  
46  
47 protocol; however, other grey literature will be accessed only as required. Grey literature includes  
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49 conference proceedings, technical specifications and standards, bibliographies and official documents  
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51 and reports (i.e. preprints, preliminary progress and advanced reports, institutional, technical and  
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3 statistical reports, market research and commission reports).[34] The final subjected headings, key  
4 words and synonyms will be reflected in the final manuscript.  
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### 8 **Study Selection**

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11 Two researchers will screen all abstracts, and full text studies for inclusion into the scoping  
12 review. Literature research results will be uploaded into Covidence™[35] where duplicate entries will be  
13 deleted. The scoping review team will meet at the onset of the project to review and utilize the pre-set  
14 inclusion and exclusion criteria on a selection of articles (minimum 30). Individual team member  
15 application of criteria will be cross-checked to support consistent application and enhance reliability.  
16 Additional training rounds and revision of selection criteria will be conducted as required. Two team  
17 members will then continue to screen remaining titles and abstracts. Individual study authors will be  
18 contacted if additional information on methodology or results are required. This will be followed by a  
19 full text article screening by two reviewers against eligibility criteria to determine final inclusion into the  
20 scoping review. Should reviewer disagreement on study eligibility occur at this stage, the third reviewer  
21 will be asked to determine eligibility.  
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### 36 **Data Items and Data Collection Process**

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39 A data collection tool has been developed *a priori* to extract the study characteristics and  
40 findings of the final identified studies (Appendix B). This tool will be piloted by two reviewers on a  
41 sample of included articles and cross-checked for reliability. Any adjustments in the data collection tool  
42 that may be required as part of the iterative process will be highlighted in the final manuscript  
43 preparation. Information will be extracted and housed in Excel™ document format and will include  
44 study characteristics (year, author, country and journal), study design (objectives, methodology,  
45 participant profession, and sample size) and findings in relation to the review question.[36]  
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3 The following data will be extracted from the included studies: 1) factors precipitating or  
4 influencing practitioner choice in declining involvement in care, 2) determination if the factors are  
5 related to conscience or for reasons other than conscience, and 3) healthcare practice areas  
6 precipitating the objection (i.e. pregnancy termination, reproductive technology, genetic choices, end of  
7 life care practices, organ/tissue donation, biomedical research).  
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### 14 15 **Synthesis**

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17 Data will be collated and presented in two formats: a descriptive numerical summary of the  
18 scoping review process and a presentation of themes. Descriptive summary will include a visual  
19 flowchart outlining the review decision processes study identification containing primary screening  
20 results, determination of eligibility and final study inclusion number. It will also include characteristics of  
21 the included studies (year of publication, country, study methodology, professional group represented  
22 and research participant numbers). This information will provide contextual information for the  
23 presentation of themes.  
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34 Presentation of themes will occur after extracted data has undergone thematic analysis.[37] The  
35 thematic analysis approach includes text coding, development of descriptive themes and further  
36 generation of analytical themes.[36] Descriptive themes typically remain closely aligned to the primary  
37 studies, whereas analytical themes will facilitate interpretation of the data to produce explanations and  
38 constructs.[36] Depending on the volume of the data generated, computer software facilitated coding  
39 (i.e. NVivo™[38]) may be utilized to facilitate this process. Thematic results will be presented in a  
40 diagrammatical map of the data which will align the findings to the project goal and objectives as  
41 outlined in step one of the Arksey and O'Malley framework.[28]  
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### 52 53 **STRENGTHS AND LIMITATIONS**

## Factors Contributing to Declining Participation 12

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3 The goal of this scoping project is an enhanced understanding of the factors (conscience and  
4 non-conscience in origin) influencing practitioner choice of non-participation in a legally available  
5 healthcare practice. Practitioners have the right to conscientiously object and care recipients have the  
6 right to access to legally available care. Negotiating the practice realities of ethically sensitive healthcare  
7 areas requires attention to the both the healthcare provider's and the care recipient's needs. As non-  
8 participation in care provision and CO is not unique to a specific healthcare area, or to a professional  
9 practice group, reviewing this information from a variety of healthcare practices and from two of the  
10 largest healthcare provider groups will enrich the understanding of the factors influencing a practitioner  
11 choice in the participation in legally available care. This enriched understanding of the current literature  
12 will subsequently highlight literature gaps, and may inform future areas of study and exploration.  
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26 There may be a number of limitations in the identified project. Motivations for non-participation  
27 in care provision may differ depending on practice areas and professional groups, within individual  
28 cultural contexts and within healthcare practice areas. Utilization of identified databases is to the  
29 exclusion of others and searching of these other data bases may result in additional studies for inclusion.  
30 Additionally, careful consideration, and the revisiting and adjusting of medical subject headings, key  
31 words and synonyms will occur throughout the iterative process of study identification. Inconsistencies  
32 and ambiguity in terminology within the academic literature of this field may result in some studies  
33 inadvertently being excluded. Questions regarding operationalization of terms and study findings will be  
34 mitigated by connecting with study primary authors for clarification. Finally, the inclusion of Registered  
35 Nurses and Physicians may result in the inadvertent exclusion of studies of other health professional  
36 groups.  
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## 51 **ETHICS AND DISSEMINATION**

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3 Ethical approval and consent to participate is not applicable. The PRISMA checklist will be  
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5 utilized to support transparency and guide translation and dissemination of the findings. A presentation  
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7 of the scoping findings will include both descriptive and thematic presentation of findings. Discussion  
8  
9 will include the implications of the findings in relation to clinical practice for healthcare providers, for  
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11 healthcare managers and administrators in healthcare planning and for professional associations in the  
12  
13 development of practice standards. Results will be shared with a wide variety of knowledge users  
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15 including advocacy groups, general public, professional associations, employers, health ethicists, legal  
16  
17 consultants, and health care practitioners. It is anticipated that results will be shared locally, provincially,  
18  
19 nationally and internationally via posters and individual presentations to both academic and clinical  
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21 knowledge users as well as through peer-reviewed journals.  
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26 The thematic findings of this scoping review will not only assist in understanding the factors that  
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28 influence practitioners involvement in legally available care and the application of conscientious  
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30 objection, but may be used to inform the development of practice supports required for ethically safe  
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32 care participation. As there may be unintended consequences after non-participation in care provision  
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34 to the practitioner, the care recipient and the healthcare delivery system, an enhanced understanding of  
35  
36 the rationale precipitating non-participation may assist in mitigating the unintended consequences.  
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38 Healthcare and client options for care will continue to evolve and as new practices emerge, and an  
39  
40 enhanced understanding of non-participation in care provision and its multifaceted impacts will be  
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42 crucial to guide practice and facilitate care that is appropriate for both the care provider and the care  
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**DECLARATIONS**

Availability of Supporting Data: This is a study protocol. All literature cited in the protocol is available through the University of Saskatchewan and University of Regina libraries system and cited in the reference list.

Ethical approval and consent to participate: Not applicable

Competing Interests: The authors declare that they have no actual or potential conflict of interest including any financial, personal or other relationships with other people or organizations within three years of beginning the submitted work that could inappropriately influence, or be perceived to influence, their work.

Funding: This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

**Authors Contributions**

JB is the guarantor, leads the study and was responsible for initial development of all components of the protocol. JB, DG and LT participated in refinement of the research question. MC developed and refined the search strategies, inclusion and exclusion criteria in collaboration with JB and DG and LT. All authors approved the final manuscript.

## References

- 1 Wicclair MR. *Conscientious objection in health care: an ethical analysis*. Cambridge: Cambridge University Press 2011.
- 2 Lawrence RE, Curlin FA. Physicians' Beliefs About Conscience in Medicine: A National Survey: *Acad Med* 2009;**84**:1276–82. doi:10.1097/ACM.0b013e3181b18dc5
- 3 Opatrny L, Bouthillier M-E. Decoding conscientious objection in medical aid in dying: First results from a unique study. *Le Specialiste*;**19**:36–40.
- 4 Payot A, Bouthillier M-E. Stakes in clinical ethics and medical aid in dying. *Le Specialiste*;**18**:26–9.
- 5 Lachman V. Conscientious objection in nursing: Definition and criteria for acceptance. *Medsurg Nurs*;**23**:196–8.
- 6 Deans Z. Might a conscience clause be used for non-moral or prejudiced reasons? *J Med Ethics* 2016;**42**:76–7. doi:10.1136/medethics-2015-102798
- 7 Government of Canada. Canada Health Act, 1984. <http://laws-lois.justice.gc.ca/eng/acts/c-6/> (accessed 1 Jul 2018).
- 8 Government of Canada. Constitution Act, 1982 Part 1: Canadian Charter of Rights and Freedoms. 1982.<http://laws-lois.justice.gc.ca/eng/Const/page-15.html> (accessed 29 Dec 2017).
- 9 O'Dell J, Abhyankar R, Malcolm A, *et al*. Conscientious objection in the healing professions: A readers' guide to ethical and social issues, ethical analysis. 2014.<https://scholarworks.iupui.edu/handle/1805/3844> (accessed 17 Dec 2017).
- 10 Catlin A, Volat D, Hadley MA, *et al*. Conscientious Objection: A Potential Neonatal Nursing Response to Care Orders That Cause Suffering at the End of Life? Study of a Concept. *Neonatal Netw* 2008;**27**:101–8. doi:10.1891/0730-0832.27.2.101
- 11 Cowley C. Conscientious objection in healthcare and the duty to refer. *J Med Ethics* 2017;**43**:207–12. doi:10.1136/medethics-2016-103928
- 12 Fleming V, Frith L, Luyben A, *et al*. Conscientious objection to participation in abortion by midwives and nurses: a systematic review of reasons. *BMC Med Ethics* 2018;**19**. doi:10.1186/s12910-018-0268-3
- 13 Lamb C. Conscientious Objection: Understanding the Right of Conscience in Health and Healthcare Practice. *New Bioethics* 2016;**22**:33–44. doi:10.1080/20502877.2016.1151252
- 14 Nordberg EMK, Skirbekk H, Magelssen M. Conscientious objection to referrals for abortion: pragmatic solution or threat to women's rights? *BMC Med Ethics* 2014;**15**. doi:10.1186/1472-6939-15-15

## Factors Contributing to Declining Participation 16

- 15 Harter TD. Toward accommodating physicians' conscientious objections: an argument for public disclosure. *Journal of Medical Ethics* 2015;**41**:224–8. doi:10.1136/medethics-2013-101731
- 16 Savulescu J. Conscientious objection in medicine. *BMJ* 2006;**332**:294–7. doi:10.1136/bmj.332.7536.294
- 17 Stahl RY, Emanuel EJ. Physicians, Not Conscripts — Conscientious Objection in Health Care. *NEJM* 2017;**376**:1380–5. doi:10.1056/NEJMs1612472
- 18 Wester G. Conscientious Objection by Health Care Professionals: Conscientious Objection by Health Care Professionals. *Phil Compass* 2015;**10**:427–37. doi:10.1111/phc3.12235
- 19 Lynch HF. *Conflicts of conscience in health care: an institutional compromise*. Cambridge: : MIT Press 2008.
- 20 Cantor J, Baum K. The Limits of Conscientious Objection — May Pharmacists Refuse to Fill Prescriptions for Emergency Contraception? *N Engl J Med* 2004;**351**:2008–12. doi:10.1056/NEJMs16042263
- 21 Magelssen M. When should conscientious objection be accepted? *J Med Ethics* 2012;**38**:18. doi:10.1136/jme.2011.043646
- 22 Murphy S. Conflicts of Conscience in Health Care: An Institutional Compromise. 2008.<http://consciencelaws.org/archive/documents/2009-12-17-conflicts-health-care-lynch.pdf> (accessed 1 Jul 2018).
- 23 Brindley P, Kerrie J. Conscientious objection and medical assistance in dying in Canada. Difficult questions – insufficient answers. *Can J Gen Intern Med*; **11**:7–10.
- 24 McLeod C, Downie J. Let Conscience Be Their Guide? Conscientious Refusals in Health Care: Editorial. *Bioeth* 2014;**28**:ii–iv. doi:10.1111/bioe.12075
- 25 Peters MDJ, Godfrey CM, Khalil H, *et al*. Guidance for conducting systematic scoping reviews: *Evid Based Healthc* 2015;**13**:141–6. doi:10.1097/XEB.0000000000000050
- 26 National Institute for Health Research. PROSPERO: International Prospective Register of Systematic Reviews. <https://www.crd.york.ac.uk/prospéro/#aboutpage>
- 27 The Johanna Briggs Institute. The Joanna Briggs Institute reviewers' manual 2015: Methodology for JBI scoping reviews. 2015.[www.joannabriggs.org/assets/docs/sumari/reviewersmanual-2014.pdf](http://www.joannabriggs.org/assets/docs/sumari/reviewersmanual-2014.pdf) (accessed 1 Jul 2018).
- 28 Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *Int J Soc Res Method* 2005;**8**:19–32. doi:10.1080/1364557032000119616
- 29 Levac D, Colquhoun H, O'Brien KK. Scoping studies: advancing the methodology. *Imp Sci* 2010;**5**. doi:10.1186/1748-5908-5-69

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2  
3 30 Liberati A, Altman DG, Tetzlaff J, *et al.* The PRISMA Statement for Reporting Systematic Reviews and  
4 Meta-Analyses of Studies That Evaluate Health Care Interventions: Explanation and Elaboration.  
5 *PLOS Med* 2009;**6**:e1000100. doi:10.1371/journal.pmed.1000100  
6  
7 31 Davis K, Drey N, Gould D. What are scoping studies? A review of the nursing literature. *Int J Nurs*  
8 *Stud* 2009;**46**:1386–400. doi:10.1016/j.ijnurstu.2009.02.010  
9  
10 32 Colquhoun HL, Levac D, O’Brien KK, *et al.* Scoping reviews: time for clarity in definition, methods,  
11 and reporting. *J Clin Epidemiol* 2014;**67**:1291–4. doi:10.1016/j.jclinepi.2014.03.013  
12  
13 33 Sampson M, McGowan J, Cogo E, *et al.* An evidence-based practice guideline for the peer review of  
14 electronic search strategies. *J Clin Epidemiol* 2009;**62**:944–52. doi:10.1016/j.jclinepi.2008.10.012  
15  
16 34 Alberani V, Pietrangeli P, Mazza A. The use of grey literature in health sciences: a preliminary  
17 survey. *Bull Med Libr Assoc* 1990;**78**:358–63.  
18  
19 35 Veritas Health Innovation. Covidence systematic review software.  
20  
21 36 Thomas J, Harden A. Methods for the thematic synthesis of qualitative research in systematic  
22 reviews. *BMC Med Res Methodol* 2008;**8**. doi:10.1186/1471-2288-8-45  
23  
24 37 Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol* 2006;**3**:77–101.  
25  
26 38 QST International. NVivo, Software that supports qualitative and mixed methods research.  
27 <http://www.qsrinternational.com/nvivo/what-is-nvivo>  
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**Appendix A**

Database: Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) <1946 to Present>Search Strategy

- 1 conscientious objection.mp. (370)
- 2 Refusal to Treat.mp. or Refusal to Treat/ (2892)
- 3 Conscience/ (1379)
- 4 Ethical Relativism/ or ethical relativism.mp. (490)
- 5 objector.mp. (26)
- 6 objection.mp. (1412)
- 7 moral obligations.mp. or Moral Obligations/ (6379)
- 8 personal autonomy.mp. or Personal Autonomy/ (15789)
- 9 PROFESSIONAL AUTONOMY.mp. or Professional Autonomy/ (9519)
- 10 LEGISLATION, MEDICAL/es [Ethics] (66)
- 11 Attitude of Health Personnel.mp. or "Attitude of Health Personnel"/ (109553)
- 12 exp NURSES/ (81963)
- 13 exp PHYSICIANS/ (119185)
- 14 exp Health Personnel/ (455515)
- 15 1 or 2 or 3 or 4 or 5 or 6 or 7 (11710)
- 16 11 or 12 or 13 or 14 (513874)
- 17 7 or 8 or 9 or 10 (30148)
- 18 15 and 16 (2797)
- 19 17 and 18 (1567)
- 20 limit 19 to (english language and yr="1998 -Current") (717)

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**Appendix B**

Study Information (year, author, country and journal)	Study Design (objectives, methodology, participant profession, and sample size)	Factors precipitating or influencing practitioner’s participation in care (list)	List the reasons/factors that are in relation to conscience (list)	List the reasons/factors that are not related to conscience (list)	Healthcare practice area

For peer review only

## PRISMA-P 2015 Checklist (Used in absence of a specific scoping checklist)

This checklist has been adapted for use with protocol submissions to *Systematic Reviews* from Table 3 in Moher D et al: Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. *Systematic Reviews* 2015 4:1

Section/topic	#	Checklist item	Information reported		Line number(s)
			Yes	No	
<b>ADMINISTRATIVE INFORMATION</b>					
<b>Title</b>					
Identification	1a	Identify the report as a protocol of a systematic review	<input checked="" type="checkbox"/>	<input type="checkbox"/>	48,64
Update	1b	If the protocol is for an update of a previous systematic review, identify as such	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A
<b>Registration</b>	2	If registered, provide the name of the registry (e.g., PROSPERO) and registration number in the Abstract	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A
<b>Authors</b>					
Contact	3a	Provide name, institutional affiliation, and e-mail address of all protocol authors; provide physical mailing address of corresponding author	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4-22
Contributions	3b	Describe contributions of protocol authors and identify the guarantor of the review	<input checked="" type="checkbox"/>	<input type="checkbox"/>	303-306
<b>Amendments</b>	4	If the protocol represents an amendment of a previously completed or published protocol, identify as such and list changes; otherwise, state plan for documenting important protocol amendments	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A
<b>Support</b>					
Sources	5a	Indicate sources of financial or other support for the review	<input checked="" type="checkbox"/>	<input type="checkbox"/>	300-301
Sponsor	5b	Provide name for the review funder and/or sponsor	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A
Role of sponsor/funder	5c	Describe roles of funder(s), sponsor(s), and/or institution(s), if any, in developing the protocol	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A
<b>INTRODUCTION</b>					
<b>Rationale</b>	6	Describe the rationale for the review in the context of what is already known	<input checked="" type="checkbox"/>	<input type="checkbox"/>	89-150
<b>Objectives</b>	7	Provide an explicit statement of the question(s) the review will address with reference to	<input checked="" type="checkbox"/>	<input type="checkbox"/>	151-155

Section/topic	#	Checklist item	Information reported		Line number(s)
			Yes	No	
		participants, interventions, comparators, and outcomes (PICO)			
<b>METHODS</b>					
<b>Eligibility criteria</b>	8	Specify the study characteristics (e.g., PICO, study design, setting, time frame) and report characteristics (e.g., years considered, language, publication status) to be used as criteria for eligibility for the review	<input checked="" type="checkbox"/>	<input type="checkbox"/>	178-188
<b>Information sources</b>	9	Describe all intended information sources (e.g., electronic databases, contact with study authors, trial registers, or other grey literature sources) with planned dates of coverage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	189-203
<b>Search strategy</b>	10	Present draft of search strategy to be used for at least one electronic database, including planned limits, such that it could be repeated	<input checked="" type="checkbox"/>	<input type="checkbox"/>	189-203
<b>STUDY RECORDS</b>					
Data management	11a	Describe the mechanism(s) that will be used to manage records and data throughout the review	<input checked="" type="checkbox"/>	<input type="checkbox"/>	206 217-223
Selection process	11b	State the process that will be used for selecting studies (e.g., two independent reviewers) through each phase of the review (i.e., screening, eligibility, and inclusion in meta-analysis)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	205-215
Data collection process	11c	Describe planned method of extracting data from reports (e.g., piloting forms, done independently, in duplicate), any processes for obtaining and confirming data from investigators	<input checked="" type="checkbox"/>	<input type="checkbox"/>	217-224
<b>Data items</b>	12	List and define all variables for which data will be sought (e.g., PICO items, funding sources), any pre-planned data assumptions and simplifications	<input checked="" type="checkbox"/>	<input type="checkbox"/>	224-228
<b>Outcomes and prioritization</b>	13	List and define all outcomes for which data will be sought, including prioritization of main and additional outcomes, with rationale	<input checked="" type="checkbox"/>	<input type="checkbox"/>	232-238
<b>Risk of bias in individual studies</b>	14	Describe anticipated methods for assessing risk of bias of individual studies, including whether this will be done at the outcome or study level, or both; state how this information will be used in data synthesis	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A
<b>DATA</b>					
<b>Synthesis</b>	15a	Describe criteria under which study data will be <b>quantitatively</b> synthesized	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A
	15b	If data are appropriate for quantitative synthesis, describe planned summary measures, methods of handling data, and methods of combining data from studies, including any planned exploration of consistency (e.g., $I^2$ , Kendall's tau)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A



Section/topic	#	Checklist item	Information reported		Line number(s)
			Yes	No	
	15c	Describe any proposed additional analyses (e.g., sensitivity or subgroup analyses, meta-regression)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A
	15d	If quantitative synthesis is not appropriate, describe the type of summary planned	<input checked="" type="checkbox"/>	<input type="checkbox"/>	230-244
<b>Meta-bias(es)</b>	16	Specify any planned assessment of meta-bias(es) (e.g., publication bias across studies, selective reporting within studies)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A
<b>Confidence in cumulative evidence</b>	17	Describe how the strength of the body of evidence will be assessed (e.g., GRADE)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A (scoping)