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What to do with personal values? A systematic review of conscientious objection in healthcare

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What to do with personal values?
A systematic review of Conscientious objection in healthcare

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What to do with personal values? The conscientious objection in healthcare

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Faculdade de Medicina da Universidade do Porto, 21/03/2021

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Abstract

Conscientious objection (CO) is defined as the refusal to perform a legal role or responsibility due to personal beliefs. In the context of healthcare, CO is when health professionals like physicians, nurses, and midwives refuse to provide a legally available treatment or procedure that has been requested by the patient on the claim that doing so would be acting against their conscience. The right of professionals to CO is highly debated, with some proponents believing it to be an undeniable right, others believing it to be completely inadmissible, and many believing a middle path should be followed. This paper is a systematic review of scientific articles studying the theme, with the objective of studying and reviewing the most common areas in which CO is discussed, the arguments for and against CO, and the various positions regarding CO are reviewed in order to better understand the state of the literature around the topic and to reach a conclusion that summarizes and reconciles what was found.

Key words: Conscientious objection, Refusal to treat, Health professionals, Bioethics.

Resumo

A objeção de consciência (OC) é definida como a recusa em desempenhar um papel ou responsabilidade legal devido a crenças pessoais. No contexto dos cuidados de saúde, OC é quando profissionais de saúde, como médicos, enfermeiros e parteiras, se recusam a fornecer um tratamento ou procedimento legalmente disponível que foi solicitado pelo paciente, tendo por base dessa recusa de que fazê-lo seria agir contra sua consciência. O direito dos profissionais à OC é muito debatido, com alguns defensores acreditando ser um direito inegável, outros acreditando ser completamente inadmissível e muitos acreditando que um meio-termo deveria ser atingido. Este artigo é uma revisão sistemática de artigos científicos que discutem o tema, com o objetivo de estudar e rever as áreas mais comuns em que a OC é discutida, os argumentos a favor e contra e as várias posições em relação à OC são revistas para melhor compreender o estado da literatura em torno do tema e chegar a uma conclusão que resuma e concilie o que foi encontrado.

Introduction

Conscientious objection (CO) is defined as the refusal to perform a legal role or responsibility because of personal beliefs (Berlinger 2008). In the context of healthcare, this translates to health professionals like physicians, nurses, and midwives refusing to participate in the provision of a certain treatment or procedure on the grounds that doing so would be against their morality and the dictates of their conscience.

This is a “refusal to treat” based on conscience, which isn’t the case for all refusals to treat. There are also refusals to treat based on medical or economic reasons, for example, which tend to center around refusing demands that go against accepted medical practice, or refusal due to the patient’s health insurance and monetary situation. These refusals must be distinguished from conscientious objection, since the morality and discussion behind them is completely distinct and separate from refusals based on the professional’s conscience.

When discussing conscientious objection, the term “request for accommodation” is used when the objector requests that their refusal to treat is accommodated by others, be it the institution they represent or the patients themselves. It is a request for their morality and conscience to be accommodated and allow the professional to refuse treatment.

The context of healthcare is different from other contexts of conscientious objection, however. In these contexts, like the refusal of performing military service, generally involve an individual’s conscience clashing with the “obligations” imposed upon them by an institution or their country. These requests are generally accommodated, even if these can sometimes be criticized as the skirting of an individual’s duty to “defend their country or community”. Nevertheless, the right to be different is more and more accepted.

In healthcare, however, this clash is between the rights of the professional and the rights of the patient, which at base level seems to be more conflicting than the previous example. Professionals have the right to follow their own conscience, but the patients have the right to their personal autonomy and the right to receive legally available procedures they need or believe to need. The rights of two individuals that are equal in the eyes of the law, which means that favoring either one would be unjust.

It is a paradigm in which either health professionals need to violate their fundamental beliefs in order to serve the good of the patients, or the good of the patients must be sacrificed in order to accommodate the moral needs of health professionals. Neither seems acceptable in modern society.

According to the second article of the Universal Declaration of Human Rights (UN General Assembly, 1948), no distinction should be made between the fundamental rights of one individual over the other, but the discussion is much more nuanced than that. The same declaration also states, in its 29th article, “everyone has duties to the community in which alone the free and full development of his personality is possible”, which would mean everyone has duties within their community which, by accomplishing said duties, allows them and others to be their own selves.

In a plural and diverse society, individuals are different and will have different moral values and different frameworks of morality. Even in the microcosm of healthcare, patients will invariably contact with health professionals with different values. Being an inherent part of a person's identity, these values' structure the individual's decision making and how they view the world, which means they aren't easily discarded or ignored. It may even be distressing to go against such values.

Even if it is argued that the healthcare professional's values only have moral weight when they align with the core values of their Medicine (Wicclair, 2000), this doesn't make it any easier on the professional to break the dictates of their conscience. Professionals should try to align their values with the core values of their profession, but their most fundamental values may be impossible to re-align in a late stage of their lives.

The discussion surrounding conscientious objection became much more important in the 1970s following the United States Supreme Court 1973 decision Roe v. Wade, in which the constitutional right to abortion was established in the United States (Clarke, 2017). Abortion is the most divisive procedure in healthcare. Many health professionals believe abortion to be highly immoral, so the establishment of abortion as a legally available procedure gave rise to the need for the introduction of the right to refuse participation in abortion on the grounds of moral objection.

This highlights that in our society there are moral values that are controversial, that aren't consensual. This makes it so that we can't really claim certain values as "right" or "wrong", since that judgement will always depend on the moral tradition of whoever judges. To compound on this issue, it's also extremely difficult to convince others of the superiority of your moral tradition over theirs (Lawrence & Curlin, 2007). Even if we could convince them, in a pluralistic and diverse society, such differences are encouraged and protected, or at least they should be. Only the human rights established in its universal declaration, which are the simplest form of values that were able to be agreed upon with consensus, can be claimed as consensual and unobjectionable in our society, precisely because they are (mostly) consensual. If different moral and ethical traditions do not disrespect what we consider the consensual human rights enshrined in this declaration, it is unethical to discriminate against these moral traditions.

After all considerations, it can be concluded that conscientious objection is anything but a consensual subject and is very important to understand and discuss. It directly affects the lives of many patients, which are in a state of greater need by definition and affects the lives of health professionals that must deal with the reality of having their right to conscience challenged. That is why studies like this are paramount, so that we may further the discussion better informed.

This study was made with the intention to explore all these nuances that are amply discussed in the literature, as well as identify what are the topics that usually surround conscientious objection and analyze the argumentation in favor and against conscientious objection in healthcare for health professionals. In doing so, it was the intention of this study to learn what the landscape of the discussion looks like in order to try and arrive at some sort of defensible conclusion that tries to include the most from all of these different perspectives.

That being said, it would be ignorant to claim this study will be the final answer to the dilemma.

Methods

In order to study conscientious objection in healthcare professionals, a systematic review of scientific articles was realized.

The search for articles was carried out during December of 2021, and the MeSH terms “conscientious objection”, “refusal to treat”, and “health professionals” were used on the search query “(conscientious objection OR refusal to treat) AND health professionals”. Additional search terms were combined with this query, physicians, nurses, and midwives, in order to ascertain if there were more articles that should be included, but this did not yield additional papers relevant to the topic of interest. The query was ran through PubMed. This selection of database took into account how this theme is very well studied in the medical field. An additional filter regarding the year of publication was added (only articles from the year 2000 and beyond).

To be included in the systematic review, articles had to comply to these criteria: (a) articles must be either literature reviews, theoretical articles, quantitative, qualitative, or mixed studies; (b) articles must discuss conscientious objection in physicians, nurses, or midwives; (c) articles must provide arguments regarding conscience or morality regarding conscientious objection; (d) articles must have full-texts available; (e) articles must be written in English. Articles were excluded if: (a) discussed conscientious objection outside the realm of physicians, nurses, and midwives (for example, pharmacists); (b) focused on the statistical findings regarding conscientious objection without engaging the subject matter on moral or conscience arguments (for example, articles studying the prevalence of conscientious objection in a certain region); (c) full-text was unavailable; (d) not written in English.

Using this search strategy, 831 peer-reviewed articles were found (Figure 1). These articles were then screened, removing articles that were duplicated (n=26), and then articles were removed by reading the title and abstract (n=686). Articles were further removed if the full-text wasn’t available (n=31).

Articles were excluded by title when the title left no doubts that the paper does not discuss the subject matter, for example, “Denial of pain medication by healthcare providers predicts in-hospital illicit drug abuse”. When reading the title would leave doubts if the paper should be excluded, the abstract was then read and a decision whether to exclude would be made. The main reason to exclude 686 articles was articles addressing the refusal to treat without discussing conscientious objection.

The full-texts of 88 articles were then analyzed for eligibility. Of these, 45 were excluded for being off-topic. These texts were mainly focused on numerical and statistical findings regarding conscientious objection without engaging in the moral discussion surrounding the topic, or because the texts focused on the legal background regarding the subject. In the end, 43 articles were included in the review.

Thematic categorical analysis was used, and information was organized using Excel. A skimming reading was performed to explore the content of the articles. After reading, the material themes were identified. The articles were coded by year, country, objective and main conclusions (Table 1). Two researchers independently performed the content analysis, and disagreements were solved through discussion with a third researcher.

The review of each article had the objective of identifying which topic or are of conscientious objection was the article focused on (in general, in abortion, or in end-of-life care), the main subject or argument in consideration (right to conscience, guarantee of treatment, public disclosure and justification, or protection against discrimination), and where did the article stand in regards to conscientious objection (was in favor, was against, or was in favor under certain conditions).

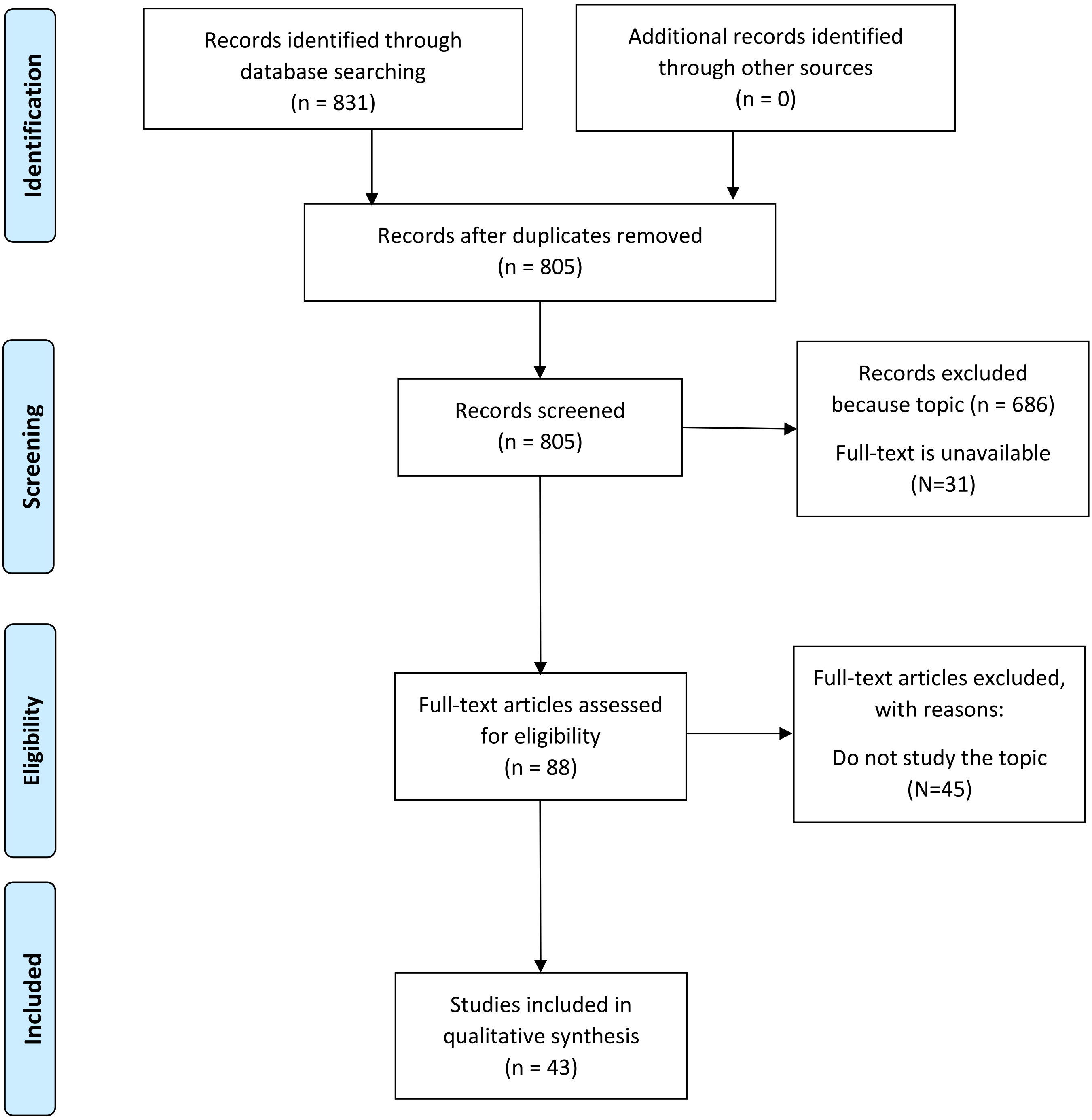

Figure 1. PRISMA flow diagram (Moher, Liberati, Tetzlaff, & Altman, 2009).

Results & Discussion

Table 1 (in Appendix, Page 23) presents the findings of all included articles (n=43), all written in English. Of the 43 reviewed articles, 42 are from countries in which conscientious objection is enshrined into law or protected via policies (24 USA, 6 Canada, 4 United Kingdom, 2 Australia, 2 Austria, 1 Belgium, 1 Germany, 1 New Zealand, and 1 Norway), with only one article was from a country in which the right to conscientious objection is not granted (1 Finland). Of these countries, the objector's duty to refer – the duty of the objector to refer a different professional that can provide the procedure they refuse to provide - is only specified in Belgium and New Zealand ("objector must refer"), and public justifications for objection are not given in any of these countries. Most articles (n=33) approached conscientious objection in healthcare in general, while others focused on conscientious objection in abortion/reproductive rights (6) and end-of-life care (4). Eleven (n=11) of the reviewed articles reject conscientious objection categorically, while nine (n=9) defended conscientious objection without reservation. The remaining articles (n=22) defended conscientious objection while also accepting its limitations and attempting to lessen its potential harm to patients.

Due to the subjective nature of the variables in question and the nature of the reviewed articles (which are mostly opinion articles), it is difficult to say evaluate the strength of the primary outcome. That being said, the results show there are more authors attempting to bridge defenders and opponents of conscientious objection than both combined, and that there are many arguments and suggestions that have become crucial in the discussion. Understanding the current landscape of the discussion and knowing where bioethicists and other authors stand is still very valuable for those that wish to restructure the healthcare system, especially regarding conscientious objection.

After reviewing the literature on conscientious objection, four reoccurring topics were identified in the ongoing debate between those that would allow conscientious objection in healthcare and those that would disallow it. The main topic of discussion is the right to conscience itself, and the different models through which this right is analyzed. Beyond the right to conscience there are also three topics that seek to moderate the discussion: the guarantee of treatment, public disclosure and justification of objection, and the protection against discrimination.

Right to Conscience

The right to conscience is an underlying theme across the reviewed literature, but the topic is more profoundly explored in twelve articles (Beal & Cappiello, 2008; Brudney, 2014; Byrnes, 2021; Curlin & Tollefsen, 2019; Gold, 2010; Harter, 2021; Huxtable & Mullock, 2015; Kennett, 2017b; Lafollette, 2017; Maclure & Dumont, 2017; Schuklenk & Smalling, 2017; Wicclair, 2000). The very definition and concept of conscience is discussed (Clarke, 2017; Huxtable & Mullock, 2015; Lawrence & Curlin, 2007). This proves to be an obstacle in the advancement of this discussion: if an agreeable and generally accepted definition of conscience cannot be defined, discussions regarding the right to conscience will ultimately reach a standstill. Lawrence at al. (2007) advances that this issue can only be resolved in one of three ways: by proving one's moral tradition as superior (which may never be achieved), by removing religious traditions from the discussion (since these traditions seem to be the hardest to dissuade) or bypassing the validity of one's basis of conscience and discuss directly the means and ends of Medicine itself.

The definition of conscience aside, the right to conscience is the basis upon the whole discussion regarding conscientious objection is planted upon. And there are many opinions and stances regarding the right to conscience. There is the opinion that everyone, including health professionals, have an undeniable right to serve their internal morality and dictates of conscience. If we believe in this perspective, conscientious objection is also an undeniable right since it is the vehicle through which health professionals may follow their internal morality. In its most absolutist form, this line of thought defends that whatever the shape this objection takes – with conditions to less harm to others or without them – is always valid, even if the reasoning behind the objection may be discriminatory in itself (Ancell & Sinnott-Armstrong, 2017).

There is also the opposite position, that defends the right to conscience can never overcome the right to autonomy and well-being of others. Following this line of thought, health professionals should never be allowed to reject legally available treatment on the basis of their internal morality, since doing so is removing the patient's right of choosing what they believe is best for themselves (Fiala & Arthur, 2017).

Between these two more extreme perspectives, there is an entire spectrum of different positions that try to bridge them. Some more accepting of conscientious objection then others, this spectrum of opinion tries to balance the rights of health professionals as human beings with the potential harm that conscientious objection can cause to patients. In this paradigm, two different trains of thought can be defined: the humanistic model and the professional model.

The humanistic model tends more heavily to the side that defends the preservation of conscientious objection. In this model it is defended that health professionals should be considered as individual agents with their own needs, claiming that denying conscientious objection without exception reduces the professional to a tool. The model also considers the patients, believing that blanket permission of conscientious objection is too harmful to be allowed. The humanistic model believes that conversation and negotiation with patients nurtures the patient-physician relationship. Neither side should be forced into a situation that would inflict harm upon them – be this physical or moral harm (Curlin & Tollefsen, 2019).

In this person-centered approach, both the patient and professionals are moral equals. By fostering discussion and negotiation between both, it is possible to reach an agreement in which neither side is forced into a noxious relationship that could either compromise the professional's moral integrity or the patient's needs. It's the institution that should try and institute mechanisms that can accommodate the needs of both its professionals and the patients and attempt to give both sides what they want and need.

The humanistic model is also concordant upon the liberal, pluralist grounds on which some of the opposition against conscientious objection is grounded upon. Ethical healthcare practices should promote respect for the differences between patients while considering what's in their best interest. The most ethical decision will always be the one that includes the most diversity, which also includes accommodating health professionals with different moral values – which requires some form of accommodation of conscientious objection. The more diverse the “cast” of professionals, the better the needs of the public are served. In this model, the professionals are enabled to express their personal differences in their professional duty, but not at the expense of dehumanizing the patient (Schuklenk, 2018).

The professional model tends more towards the rejection of conscientious objection. This approach attempts to frame healthcare not by its individual acts and professionals, but rather as the expectations that society itself places on every profession (Kolers, 2014; Schuklenk & Smalling, 2017). Understanding that society grants health professionals a monopoly in healthcare and expect that these services will be provided, it would seem unreasonable to accept requests for accommodation on grounds of personal beliefs in this model.

In such a model, the obligations of practitioners are explained by “appeal to the normative structure of professions and confluence of morally valuable aims” that professions normally achieve (Kolers, 2014). In this view, the expected “value” of a profession that society sets upon it determines the obligations the professionals in that field are expected to fulfill.

The “incompatibility thesis” is the core argument of the professional model and is discussed in five articles (Buetow & Gauld, 2018; Kolers, 2014; Lyus, 2017a; Schuklenk, 2018; Schuklenk & Smalling, 2017). The argument states that professionals willingly choose to become health professionals, and that they knew of the expected services that society legally adjudicates to them. Since they enter the profession willingly knowing and accepting these expectations, it is defended they have no moral claim to object to fulfilling these professional obligations (Kolers, 2014; Schuklenk & Smalling, 2017).

Several articles contested this argument directly, specifically denouncing the “absolutist role obligation” of this model, which subordinates and instrumentalizes the physician and other health professionals (Buetow & Gauld, 2018). It is further argued that it is unfair to expect the very young people that apply for degrees in healthcare should have an established conclusion regarding these complex topics, topics that even veteran professionals in the field still struggle with (Lyus, 2017a).

But the argument makes more sense when we reevaluate it under the professional model. The guiding principles of healthcare are known from the start, even if the practices to be performed in the future are not. The expectations and obligations society imposes upon healthcare workers are also known. After all, it should be expected that the reason those that enter healthcare do so is the fact that they share the guiding values of healthcare and are willing to follow them. Furthermore, legal healthcare services are, by definition, accepted by the laws that govern society. If we accept that aspiring health professionals know beforehand that health professionals are expected to care for their patients and patients will request legally available health services from them, one would be hard pressed to accept that, when entering healthcare, professionals have willingly consented to providing these services (Kolers, 2014).

However, this is a very convenient interpretation. Even if medical or nursing students would willingly consent to the idea of healthcare and its obligations, they might not necessarily consider every legally available service to be an obligation of Medicine itself. Aspiring health professionals might not even have considered they would work in the areas which contact with the more contested topics (like abortion). And even if they did, they shouldn’t be expected to have a completely developed opinion about a subject they never experienced directly (Lyus, 2017a).

If we analyze both models carefully, there is room to balance both positions simultaneously. In the end, the professional model's final demand is that the expectations society has placed upon healthcare professionals are fulfilled. At the same time, the humanistic model only demands that professionals and patients are treated as equals, a demanded that doesn't require the subservience of either to the other's needs.

This means both positions might be possible to balance. And there are many suggestions that attempt to balance them. If these suggestions can be followed, both models can be satisfied. These suggestions are the guarantee of treatment, public and a priori disclosure of objector status, justification of objections, and protection against discrimination.

Guarantee of Treatment

The guarantee of treatment is a commonly demanded condition to accept the accommodation of conscientious objection. Most of those that accept the right to conscience of health professionals as an undeniable right also believe that blanket permission for such refusal cannot be given to professionals. This is because other core values of biomedical ethics of undeniable importance, such as patient autonomy, well-being, and dignity, must be equally protected (Wicclair, 2000). The guarantee of treatment is an attempt at balancing this undeniable right with the protection of patients.

Accepting that professionals are bound to serve their patients but their right to conscience must be respected, a neutral stance that attempts to satisfy both must be searched (Huxtable & Mullock, 2015). By guaranteeing an alternative for the patient, be it alternative treatment or an alternative professional, the potential harm is reduced or even avoided, which justifies acceptance of requests for accommodation (Brudney, 2014; Kantymir & McLeod, 2014).

The guarantee of treatment is the first demand to allow a conditioned format for conscientious objection. To protect the patients while allowing professionals the right to conscience, the first condition that is demanded is redundancy in the system. This is commonly associated with the "duty to refer", which is enshrined in certain countries.

The duty of the health professional to refer their patients to colleagues that they know will accept providing the desired procedure distinguishes traditional objection – an objection to performing the act but referring to another - from non-traditional objection - objection to the act occurring at all, which includes avoiding referring. The latter undermines the autonomy of society itself, imposing the objectors' values upon the patient and removing their agency in choosing what is best for them (Greenblum & Kasperbauer, 2018).

This may not always be possible, however. In Heino et al. (2013), the authors detail how certain European countries in which conscientious objection is guaranteed (such as Portugal and Italy), have such a high percentage of conscientious objectors to abortion that the rest of the system is becoming overloaded, and that women from certain regions of their country have more difficulty to obtain such procedure (which is a form of socio-economic discrimination).

When referral isn't possible or when an alternative cannot be offered to the patient, what should be done? This isn't decided upon very clearly in any study but, if the spirit of this argument is to be preserved, it would stand to reason that such refusals to treat should not be accommodated. This rejection for accommodation is not because the request is immoral, however. It is because the patient can't be guaranteed treatment, which was the established condition.

Nevertheless, the potential harm of conscientious objection is not limited to the denial of a required or desired treatment. It also includes the confrontation of denial in front of the health professional (Beal & Cappiello, 2008) and the time and resources lost by the patient in searching another treatment (Harter, 2015).

This argument works in tandem with public disclosure. If the institution knowns the objector status, preparations can be made to make sure there are enough "non-objectors" to satisfy the need of the served population (Buetow & Gauld, 2018). The two arguments work together in this way, suggesting the creation of a redundant system that protects the patient from ever contacting with the objector, sparing time and resources to all parts of the system.

Public Disclosure and Justification of Objection

Public Disclosure and justification are discussed together in nine articles (n=9), with different authors presenting different models and formats in which it should or should not be applied. While these two different suggestions can be considered individually, they are more commonly addressed as a pairing. When health professionals are providing justifications for their objection to a third-party, they are also publicly disclosing their objector status. This makes it simpler to discuss both in tandem.

The argument for public disclosure seems to attempt to bridge between the humanistic and the professional model by balancing the obligations of objectors with their right to conscience. In this model, objectors are given a medium through which their requests can be made *a priori* and accepted in advance, while the patient is protected from the undue harm that may be caused by the sudden confrontation with the denial of their health professional (Harter, 2015).

This disclosure must be justified and divulged publicly beforehand. And by "publicly", it generally means "to the system" or institution they represent, not necessarily the patient community (although some defend this should also be the case). By adding this condition, both defender and opposers of conscientious objection can be satisfied, since it allows the right to objection, but removes blanket permission to request accommodation, protects patients' rights to legally available services, and also has the potential to make objectors reflect on their position and, potentially, change their minds (Meyers, 2019).

The fact that the disclosure must be public is a very important aspect of this argument. The creation of this database allows healthcare institutions (and patients, for some authors) to know beforehand which doctors are willing to provide a service. This allows institutions to know how many providers of a certain procedure they have at any given time, allowing them to adjust and prepare their workforce to the demands of the population they serve.

If there is a certain demand for a particular procedure in their population that is not being met, additional professionals that are willing to provide this service can be adjudicated or hired. It also serves as the highest degree of advanced notification. The patients themselves may be able to look up what their doctors are or are not willing to do. This can save them time, money, and discomfort by seeking a physician they already know will accept their request (Harter, 2015).

Public justification is suggested in order to attempt to ascertain reasonability, genuineness and sincerity of the objector's claims. This is important in order to curtail the number of objections that aren't sincere, to reduce how many objectors that wish to instrumentalize the system without having a real moral qualm with the procedure they are refusing.

In most suggested systems, objectors are required to provide justifications that are evaluated by a third-party, usually an ethical committee from their community and institution. It should include representatives of the medical community as well as other professions, people from various religions and moral systems, and people from the patient population. This committee will then decide if such an objection will be accommodated, either in a case by case model or by establishing a priori what should or shouldn't be accepted (Ben-Moshe, 2021). There is, of course, the possibility that certain areas of conscientious objection could be decided upon *a priori*, and not in a case-by-case fashion.

Justification is, however, very difficult to evaluate. Matters of conscience tend to be difficult to transmit, being more akin to feeling rather than logic. The dictates of the conscience are difficult to transmit, they are inherently personal, almost visceral in some ways.

It's also very difficult to ascertain how genuine these claims really are. Most systems to evaluate genuineness are either too permissive or too restrictive, and a good methodology to evaluate them has not been found (Ben-Moshe, 2021; Kantymir & McLeod, 2014; Marsh, 2014; McConnell & Card, 2019). This makes judging these justifications a difficult task that can make this condition impractical to implement (Kantymir & McLeod, 2014).

By demanding objectors to justify their objection to a panel of peers and representatives of the community, objectors can internalize and rationalize their own morals and core beliefs. Attempting to rationalize their position might help objectors understand where this position stems from. More than that, it allows the community at large to peer into their motivations and potentially validate their beliefs.

If the justification presented is not acceptable, then the validity of conscience is protected by combating the abuse and misapplications of conscientious objection. If it's accepted, the community feels satisfied that it is being done for the right reasons, and the objector is validated as a member of their community. In doing so, the highest form of conscientious objection is preserved.

Protection against Discrimination

It can be said that the objective behind protecting conscientious objection is to preserve plurality and diversity among health professionals. At its core, it allows health professionals with different backgrounds and ethical frameworks to enter and remain in healthcare professions without being forced to choose between their job and their morality or religion.

It has been argued that a decision is more ethical when promoting diversity within the healthcare system, especially if patients can be protected from the undue harm this might cause (Wicclair, 2011). Following this logic, protecting conscientious objection also protects against discrimination of access to the healthcare field from certain cultures and ethnic groups, especially those with a strong religious background.

However, this same protection can also leave other protected groups in a situation of greater risk. Diversity and plurality can only be supported as long as it does not promote inequality and discrimination in more fragile groups of patients, as is the case of women (West-Oram & Buyx, 2016).

In existing literature, this problem is discussed by a number of authors that reject conscientious objection in the specific case of abortion, and they reject it exactly because of the unbalanced harm it causes to a protected group of patients, such as the case of women and the access to abortion services (Fiala et al., 2016; Fiala & Arthur, 2017; Heino et al., 2013; West-Oram & Buyx, 2016). Articles that focus on abortion are clearer in this distinction, but even in articles where conscientious objection is discussed in its most general form, abortion is addressed as a special topic, with some authors even considering abortion as a potential point of contention where conscientious objection could be less acceptable (Ancell & Sinnott-Armstrong, 2017; Beal & Cappiello, 2008; Buetow & Gauld, 2018; Gold, 2010; Huxtable & Mullock, 2015; Kantymir & McLeod, 2014; Kennett, 2017a; Schuklenk, 2019; Wicclair, 2014).

In Heino at al. (2013), the authors claim that "conscientious objection mainly concerns women" and has very real consequences to their reproductive health and, by consequence, their entire life. The article presents statistics from several European countries and shows that, in countries were abortion is legal and conscientious objection is protected, a vast majority of physicians enabled to perform abortions object from doing so, which burdens the rest of the system. This makes access to abortion even more difficult for women with lower socio-economic status, which is a form of socio-economic discrimination (Fiala et al., 2016), even if this discrimination was an unintentional consequence of conscientious objection. It is advanced that conscientious objection infringes upon patient's rights in general, but since abortion is the most important and most objected practice, conscientious objection infringes upon women's rights and their reproductive autonomy in specific (West-Oram & Buyx, 2016).

While it is undeniably true that conscientious objection in abortion mainly concerns women's rights, conflating the discussion regarding conscientious objection with women's rights will only lead to further entrenchment of positions. Allowing conscientious objectors blanket permission is certainly undesirable, and it would cause undue harm to women much more than men, but blanket prohibition of conscientious objection with disregard to the professional as a human is also crude, denying the nuance this complex topic entails (Lyus, 2017b).

What is mainly concerning in this topic is that blind, blanket acceptance of conscientious objection seems to allow the rampant misuse of this right, which causes a strain in the system that can only aggravate already existing inequalities.

Conclusion

Conscientious objection is a complex topic, with many perspectives that seem to be excessively intrenched to allow any budge or movement. There are those that believe it's an undeniable right and should be accepted even if it causes harm to patients and even if it's based on discriminatory reasoning. There is also the opinion that it's always unacceptable in a pluralistic society, even if blanket prohibition would cause moral distress upon the professionals and would discriminate access of certain moral traditions into healthcare jobs.

In between these two extremist positions is a large spectrum of models that attempt to bridge both, with the humanist model being more permissive towards conscientious objection, and the professional model, which is stricter towards it.

The humanist model tries to consider health professionals and patients as moral equals, with the personal values of both deserving of equal consideration in the ethical balance. The model encourages conversation and negotiation between both participants, which can only preserve and protect the patient-professional relationship. Both parties should be willing to accept accommodation, with the professional being willing to help the patient in fulfilling their needs the best way they can, be it by referral or by conceding and accepting the patient's request when a referral or an alternative cannot be guaranteed. But this also means the patient should be willing to accept the professionals request for accommodation, validating them as a human being with personal values and not a mere tool to be instrumentalized.

The professional model tries to remind professionals they have accepted their duties upon entering the healthcare system. The internal values of healthcare and medicine are well-known and well defined, it is expected that those that enter the healthcare system know and understand these values, if not even share these same values themselves. Society has granted healthcare professionals a monopoly over the provision of certain services, like abortion and end-of-life care, which means society has an expectation placed upon these professionals that these services are to be provided and guaranteed. This means that professionals should not think of themselves and their conscience as the end-all and be-all of their decision-making process. There are other values and duties to which professionals must abide to so that everyone may continue to exist and manifest their individuality in society.

These models aren't mutually exclusive, which is usually the case for spectrums. To balance out the requirements of both models, several topics are commonly brought up: the guarantee of treatment, the public *a priori* disclosure of objections and their justification, and the protection against discrimination.

The guarantee of treatment is incredibly important for both, since the patient's rights and needs can only be protected in a system that allows conscientious objection if they are guaranteed access to the treatment or procedure they require. The duty to refer is paramount here. Even if a professional objects to a procedure, they must always refer the patient to a colleague that will guarantee the treatment. This can't always be done, such as in the case of emergencies or facilities with lack of means. It's advised that, in these cases, conscientious objection should be denied on the grounds, even if it seems forceful against professionals.

The truth of the matter is that small concessions must be made on both sides in order to allow a healthy format for conscientious objection – if it’s too rampant, it strains the entire system; if it’s too restricted, the professionals are discriminated against and subjected to moral distress.

The guarantee of treatment should always be strived towards regardless, and other arguments and suggestions may come in to help this condition be achieved more easily.

Such is the case of public and *a priori* disclosure. By submitting a request for accommodation regarding a certain procedure before the fact, a central database of professionals with conscientious objector status can be created, which could even be specific of which procedures are objected. This could potentially allow healthcare systems and institutions to manage the distribution of objectors vs. non-objectors to be optimized, with areas with high demand for a procedure but with high numbers of objectors to be compensated with new hirings of non-objectors to curtail this strain. This can be adjusted regionally, in order to diminish potential region-based and socio-economic discrimination.

Justification of objection is a way to bring the discussion to an intellectual and logical level and attempt to remove emotional bias from the subject. Morality and conscience are very personal subjects, and are very difficult to transmit, but this shouldn’t deter society from attempting to bring them into the logical sphere. By “forcing” professionals into justifying what they feel deeply in their soul, they are enabled to rationalize and objectify their own beliefs and values in a way they may not have done before, which could even cause them to change their mind.

This brings the discussion into a higher level and validates the opinions of both professionals and the community they serve, since both get the say in the matter. It can only make professionals feel a part of their community, and not dissenters or deserters that are abandoning their peers. Furthermore, it allows for the curtailing of misusage of conscientious objection, since genuineness, reasonability, and sincerity of the objection are analyzed. If none of these criteria are fulfilled, it’s entirely possible the objector is merely abusing their right to conscience.

Protection against discrimination works in both sides of the balance, since it requests that both professionals of certain cultural groups are protected from discrimination upon entering healthcare professions, as well as patients should not have different access to treatment or health choices due to their gender, geolocation, or socio-economic status. It is a consideration that enters every other facet of the discussion and should always be considered as a mediating factor to be considered.

All in all, it seems that all can concede that the patient’s should be protected from harm. This is the fundamental notion that most never be forgotten. When this is guaranteed, it becomes much easier to discuss and allow health professionals to follow their moral compass, wherever it may point. This means we must insist on structuring the healthcare system so that it guarantees access to these procedures, maybe using some of the many suggestions that have been discussed for the past several years.

What is important in this discussion, that is far from ever being over, is to at least attempt to consider both sides of the same coin and not fall into the pit of ideological intrenchment. There must remain a space for movement in ones’ position, to allow the consideration that “we can be wrong about this”.

References

Ancell, A., & Sinnott-Armstrong, W. (2017). How to Allow Conscientious Objection in Medicine while Protecting Patient Rights. In *Cambridge Quarterly of Healthcare Ethics* (Vol. 26, Issue 1, pp. 120–131). Cambridge University Press. https://doi.org/10.1017/S0963180116000694

Beal, M. W., & Cappiello, J. (2008). Professional right of conscience. *Journal of Midwifery & Women's Health*, *53*(5), 406–412; quiz 487–488. https://doi.org/10.1016/j.jmwh.2008.05.009

Ben-Moshe, N. (2019). Might there be a medical conscience? *Bioethics*, *33*(7), 835–841. https://doi.org/10.1111/bioe.12611

Ben-Moshe, N. (2021). Conscientious Objection in Medicine: Making it Public. *HEC Forum : An Interdisciplinary Journal on Hospitals' Ethical and Legal Issues*, *33*(3), 269–289. https://doi.org/10.1007/s10730-020-09401-z

Brudney, D. (2014). "Pregnancy is not a disease": conscientious refusal and the argument from concepts. *The Hastings Center Report*, *44*(5), 43–49. https://doi.org/10.1002/hast.357

Buetow, S., & Gauld, N. (2018). Conscientious objection and person-centered care. *Theoretical Medicine and Bioethics*, *39*(2), 143–155. https://doi.org/10.1007/s11017-018-9443-2

Byrnes, J. (2021). The Problem of "Core Moral Beliefs" as the Ground of Conscientious Objection. *HEC Forum : An Interdisciplinary Journal on Hospitals' Ethical and Legal Issues*, *33*(3), 291–305. https://doi.org/10.1007/s10730-020-09425-5

Card, R. F. (2017). Reasons, reasonability and establishing conscientious objector status in medicine. *Journal of Medical Ethics*, *43*(4), 222–225. https://doi.org/10.1136/medethics-2016-103792

CLARKE, S. (2017). Two Concepts of Conscience and their Implications for Conscience-Based Refusal in Healthcare. *Cambridge Quarterly of Healthcare Ethics*, *26*(1), 97–108. https://doi.org/10.1017/S0963180116000670

Cummins, P. J. (2021). Conscientious Objection and Physician-Employees. *HEC Forum : An Interdisciplinary Journal on Hospitals' Ethical and Legal Issues*, *33*(3), 247–268. https://doi.org/10.1007/s10730-019-09390-8

Curlin, F. A., & Tollefsen, C. O. (2019). Conscience and the Way of Medicine. *Perspectives in Biology and Medicine*, *62*(3), 560–575. https://doi.org/10.1353/pbm.2019.0033

Fiala, C., & Arthur, J. H. (2017). There is no defence for 'Conscientious objection' in reproductive health care. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, *216*, 254–258. https://doi.org/10.1016/j.ejogrb.2017.07.023

Fiala, C., Gemzell Danielsson, K., Heikinheimo, O., Guðmundsson, J. A., & Arthur, J. (2016). Yes we can! Successful examples of disallowing 'conscientious objection' in reproductive health care. *The European Journal of Contraception & Reproductive Health Care*, *21*(3), 201–206. https://doi.org/10.3109/13625187.2016.1138458

Gold, A. (2010). Physicians' "right of conscience"- beyond politics. *The Journal of Law, Medicine & Ethics : A Journal of the American Society of Law, Medicine & Ethics*, *38*(1), 134–142. https://doi.org/10.1111/j.1748-720X.2010.00473.x

Goligher, E. C., Ely, E. W., Sulmasy, D. P., Bakker, J., Raphael, J., Volandes, A. E., Patel, B. M., Payne, K., Hosie, A., Churchill, L., White, D. B., & Downar, J. (2017). Physician-Assisted Suicide and Euthanasia in the ICU: A Dialogue on Core Ethical Issues. *Critical Care Medicine*, *45*(2), 149–155. https://doi.org/10.1097/CCM.0000000000001818

Greenblum, J., & Kasperbauer, T. J. (2018). Forget Evil: Autonomy, the Physician-Patient Relationship, and the Duty to Refer. *Journal of Bioethical Inquiry*, *15*(3), 313–317. https://doi.org/10.1007/s11673-018-9854-9

Harris, L. F., Halpern, J., Prata, N., Chavkin, W., & Gerdts, C. (2018). Conscientious objection to abortion provision: Why context matters. *Global Public Health*, *13*(5), 556–566. https://doi.org/10.1080/17441692.2016.1229353

Harter, T. D. (2015). Toward accommodating physicians' conscientious objections: an argument for public disclosure. *Journal of Medical Ethics*, *41*(3), 224–228. https://doi.org/10.1136/medethics-2013-101731

Harter, T. D. (2021). Why Tolerate Conscientious Objections in Medicine. *HEC Forum : An Interdisciplinary Journal on Hospitals' Ethical and Legal Issues*, *33*(3), 175–188. https://doi.org/10.1007/s10730-019-09381-9

Heino, A., Gissler, M., Apter, D., & Fiala, C. (2013). Conscientious objection and induced abortion in Europe. *European Journal of Contraception and Reproductive Health Care*, *18*(4), 231–233. https://doi.org/10.3109/13625187.2013.819848

Huxtable, R., & Mullock, A. (2015). Voices of discontent? Conscience, compromise, and assisted dying. *Medical Law Review*, *23*(2), 242–262. https://doi.org/10.1093/medlaw/fwv008

Kantymir, L., & McLeod, C. (2014). Justification for conscience exemptions in health care. *Bioethics*, *28*(1), 16–23. https://doi.org/10.1111/bioe.12055

Kennett, J. (2017a). The Cost of Conscience. *Cambridge Quarterly of Healthcare Ethics : CQ : The International Journal of Healthcare Ethics Committees*, *26*(1), 69–81. https://doi.org/10.1017/S0963180116000657

Kennett, J. (2017b). The Cost of Conscience: Kant on Conscience and Conscientious Objection. *Cambridge Quarterly of Healthcare Ethics*, *26*(1), 69–81. https://doi.org/10.1017/S0963180116000657

Kolers, A. (2014). Am I my profession's keeper? *Bioethics*, *28*(1), 1–7. https://doi.org/10.1111/bioe.12056

Lafollette, H. (2017). My Conscience May Be My Guide, but You May Not Need to Honor It. *Cambridge Quarterly of Healthcare Ethics : CQ : The International Journal of Healthcare Ethics Committees*, *26*(1), 44–58. https://doi.org/10.1017/S0963180116000256

Lawrence, R. E., & Curlin, F. A. (2007). Clash of definitions: controversies about conscience in medicine. *The American Journal of Bioethics : AJOB*, *7*(12), 10–14. https://doi.org/10.1080/15265160701709859

Lemmens, C. (2013). A new style of end-of-life cases: a patient's right to demand treatment or a physician's right to refuse treatment? The futility debate revisited. *European Journal of Health Law*, *20*(2), 167–183. https://doi.org/10.1163/15718093-12341268

Lewis-Newby, M., Wicclair, M., Pope, T., Rushton, C., Curlin, F., Diekema, D., Durrer, D., Ehlenbach, W., Gibson-Scipio, W., Glavan, B., Langer, R. L., Manthous, C., Rose, C., Scardella, A., Shanawani, H., Siegel, M. D., Halpern, S. D., Truog, R. D., White, D. B., & ATS Ethics and Conflict of Interest Committee. (2015). An official American Thoracic Society policy statement: managing conscientious objections in intensive care medicine. *American Journal of Respiratory and Critical Care Medicine*, *191*(2), 219–227. https://doi.org/10.1164/rccm.201410-1916ST

Lyus, R. J. (2017a). Response to: "Why medical professionals have no moral claim to conscientious objection accommodation in liberal democracies" by Schuklenk and Smalling. *Journal of Medical Ethics*, *43*(4), 250–252. https://doi.org/10.1136/MEDETHICS-2015-103643

Lyus, R. J. (2017b). Response to: ‘Why medical professionals have no moral claim to conscientious objection accommodation in liberal democracies’ by Schuklenk and Smalling. *Journal of Medical Ethics*, *43*(4), 250–252. https://doi.org/10.1136/medethics-2015-103643

Maclure, J., & Dumont, I. (2017). Selling conscience short: a response to Schuklenk and Smalling on conscientious objections by medical professionals. *Journal of Medical Ethics*, *43*(4), 241–244. https://doi.org/10.1136/medethics-2016-103903

Magelssen, M. (2017). Professional and conscience-based refusals: the case of the psychiatrist’s harmful prescription. *Journal of Medical Ethics*, *43*(12), 841–844. https://doi.org/10.1136/medethics-2017-104162

Marsh, J. (2014). Conscientious refusals and reason-giving. *Bioethics*, *28*(6), 313–319. https://doi.org/10.1111/bioe.12012

McConnell, D., & Card, R. F. (2019). Public reason in justifications of conscientious objection in health care. *Bioethics*, *33*(5), 625–632. https://doi.org/10.1111/BIOE.12573

Meyers, C. (2019). Protecting Moral Integrity Through Justified Exemption. *Perspectives in Biology and Medicine*, *62*(3), 527–542. https://doi.org/10.1353/pbm.2019.0031

Parker, J. C. (2011). Conscience and collective duties: do medical professionals have a collective duty to ensure that their profession provides non-discriminatory access to all medical services? *The Journal of Medicine and Philosophy*, *36*(1), 28–52. https://doi.org/10.1093/jmp/jhq059

Schuklenk, U. (2018). Conscientious objection in medicine: accommodation versus professionalism and the public good. *British Medical Bulletin*, *126*(1), 47–56. https://doi.org/10.1093/bmb/ldy007

Schuklenk, U. (2019). Conscience-based refusal of patient care in medicine: a consequentialist analysis. *Theoretical Medicine and Bioethics*, *40*(6), 523–538. https://doi.org/10.1007/s11017-019-09510-y

Schuklenk, U., & Smalling, R. (2017). Why medical professionals have no moral claim to conscientious objection accommodation in liberal democracies. *Journal of Medical Ethics*, *43*(4), 234–240. https://doi.org/10.1136/medethics-2016-103560

Smith, S. W. (2018). Individualised Claims of Conscience, Clinical Judgement and Best Interests. *Health Care Analysis : HCA : Journal of Health Philosophy and Policy*, *26*(1), 81–93. https://doi.org/10.1007/s10728-016-0330-6

West-Oram, P., & Buyx, A. (2016). Conscientious Objection in Healthcare Provision: A New Dimension. *Bioethics*, *30*(5), 336–343. https://doi.org/10.1111/BIOE.12236

Wicclair, M. R. (2000). Conscientious objection in medicine. *Bioethics*, *14*(3), 205–227. https://doi.org/10.1111/1467-8519.00191

Wicclair, M. R. (2008). Is conscientious objection incompatible with a physician’s professional obligations? *Theoretical Medicine and Bioethics*, *29*(3), 171–185. https://doi.org/10.1007/s11017-008-9075-z

Wicclair, M. R. (2011). Conscientious objection in health care, an ethical analysis. In *Conscientious Objection in Health Care: An Ethical Analysis*. Cambridge University Press. https://doi.org/10.1017/CBO9780511973727

Wicclair, M. R. (2014). Managing conscientious objection in health care institutions. *HEC Forum : An Interdisciplinary Journal on Hospitals’ Ethical and Legal Issues*, *26*(3), 267–283. https://doi.org/10.1007/s10730-014-9241-9

Appendix

Table 1: Characteristics and findings of the studies included in the analysis

Reference	Year	Country	Objective	Conclusions
(Ancell & Sinnott-Armstrong, 2017)	2017	Australia	To present and explore arguments in favor of the right to conscientious refusal of treatments based on moral believes.	The author argues that refusing accommodation for conscientious objectors who claim moral or ethical reasons should be avoided. They claim that forcing these professionals into performing a service they do not agree with would affect both them and the patient by forcing them into noxious doctor-patient relation.
(Beal & Cappiello, 2008)	2008	USA	Review the literature regarding the right to conscience of the healthcare professional and discuss institutional approach.	Claims there is a noticeable absence in the debate regarding the right to conscience, the mediating potential of "attention to mutual respect". Health professionals should respect and consider the patients values as much as their own. Institutions should do a better job at to proactively inform prospective patients of services they will or will not provide, avoiding having to put patients in the position of only discovering this when attempting to access these services. This level of respect has the potential to humanize abstract ethical principles and help consistently apply the same compassion and concern when referring patients for whatever reason.
(Ben-Moshe, 2019)	2019	USA	Present a model for conscientious objection in which the health professional justifies refusals to treat on the internal morality of medicine, opposed to general moral values.	The health professional is always justified in refusing treatment when said treatment is considered "wrong" in terms of practical medical norm. If a moral claim to refusal is justified based on the ideal of medicine it may as well be on the same level of a refusal based on the medical norm and, therefore, justified.
(Ben-Moshe, 2021)	2021	USA	An approach to conscientious objection that tries to solve the justification and complicity problems by bringing health professionals objection to the public sphere.	These problems might be solved by creating an expanded committee in which health professionals, representatives from several different religions and members of the patient community to evaluate which objections should be allowed in general (not individual objectors). Additionally, health professionals should disclose their objection in a public database.
(Brudney, 2014)	2014	USA	Explore the arguments defending right to conscience based on a conceptual definition of what is or isn't medicine or disease itself.	It finds some problems with the argument. However, even if this argument fails, the objector still has other moral questions to explore. It claims that one argument fails the rest of the position should be reevaluated, but not necessarily considered wrong. In the end, the author defends that there should always be some "common decency". If there are alternatives for the patient, accommodation should be considered for the objector.

(Buetow & Gauld, 2018)	2018	New Zealand	Present an approach that might bridge different positions in the debate, using a person-centered model in which the health professional can be respected, and the patient can still access requested treatment.	Opposing the incompatibility thesis, by claiming it reduces the health professional to a mere instrument, but also opposing the absolutism of conscience, it proposes a system in which the conscience of individuals is protected opposed to institutional conscience. Person centered care focus on both patients and professionals and considers them moral equals. By recognizing both as persons and not instruments, it is the institution that must change to accommodate both. This is accomplished by creating a diverse system adapted to the population it serves. In other words, a system with both objectors and non-objectors to provide required services in which the "ratio" between both should be determined by the population it is serving.
(Byrnes, 2021)	2021	Netherlands	Demonstrate how core moral beliefs should not serve as the basis for conscientious objection in healthcare. It also seeks to argue how grounding conscientious objection on such beliefs might have the unintended consequence of entrenching the problems said move would attempt to solve	To have core moral beliefs as the basis for conscientious objection would undermine the very objective of allowing conscientious objection: to allow plurality and moral diversity. Furthermore, it cannot be known the true core moral belief of an objector and the objector itself might be confused by the scope and extent of said core beliefs.
(Card, 2017)	2017	USA	Establish a better model for accessing the validity of claims to conscientious refusals.	To grant objector status, the moral reasons for the request must be accessed. Furthermore, these reasons should be considered under the prism of reasonability and, when considered unreasonable, accommodation should be denied.
(Clarke, 2017)	2017	Australia	Adjudicate between former proposals that sought to reduce claims of conscientious objection. To do this, two theoretical bases for conscientious objection: moral judgements and dictates of conscience.	After exploring both bases for conscientious objection, both are concluded to be legitimate and should be accommodated even in any principled scheme to limit the scope of conscientious refusals.
(Cummins, 2021)	2021	Netherlands	To motivate a reorientation of ethical analysis of conscientious objection by analyzing the standard approach to the debate from both pro and anti-CO views.	The importance to follow individual will is recognized, as is the notion that conscience should not be always above the expectations others. The acceptance or refusal requests to conscientious objection are context dependent. As physicians shift into physician-employees, they should accept that they might encounter repercussions when deciding to follow their conscience that conflict with their employers' expectations.

(Curlin & Tollefsen, 2019)	2019	USA	Compare two models: "the Way of Medicine" vs. "service provider".	The "service provider" model erodes the medical profession and removes the practice of conscience from medicine. There should be communication and negotiation between health professional and patient so that none must be forced into an act they might deem unethical. This enables accommodation of the objector's refusal while aiding patients in accessing the care they require. Refusal to treat based on the dictates of conscience should not be considered a violation of the professional's obligations.
(Fiala et al., 2016)	2016	Austria	Review the laws, policies, and experiences in three countries where conscientious objection is disallowed (Sweden, Finland, and Iceland).	After investigating the results in these countries, not only is it possible to disallow and ban conscientious objection in women's health, but it is also beneficial. The key to make this a reality is prior acceptance of women's rights at a social and governmental level. The example given by these countries should be followed in other countries and promoted by the medical community, so that conscientious objection might one day be disallowed, and the stigma associated with abortion eradicated.
(Fiala & Arthur, 2017)	2017	Austria	Demonstrate how conscientious objection in reproductive health should not be considered a right of the health professional, and that refusal to provide legally available treatment should be considered dishonorable disobedience.	Conscientious objection represents an abandonment of professional obligation to patients and should be recognized as fundamentally unethical. Countries should repeal policies and laws that recognize it as a right, and efforts should be made in order to reduce the number of objectors and eventually abolish conscientious objection.
(Gold, 2010)	2010	England	Discuss the right to conscience of the professional in the context of the patient-professional relationship.	The current transition into a law-based model focused on the patient, as opposed to a self-regulatory model. While the first "command-and-control" model enforces employee behavior, a self-regulatory model which operates by activating the employee's ethical values and sense of responsibility has a stronger influence in shaping behavior. Furthermore, it is shown that employee's ethical values are shaped by employee perception on how fairly they are treated. In a self-regulatory model, the physician is treated with more fairness, which in turn will shape the physician to voluntarily commit itself to the welfare of the public. For all these reasons, the professional's conscience is a resource that must not be lost.
(Goligher et al., 2017)	2017	Canada	Explore the ethical issues and points of tension related to medically assisted dying and euthanasia from the point of view	Four fundamental points of ethical tension were identified: 1) the benefit or harm in death itself; 2) the relationship between medically assisted dying and euthanasia with the withholding or withdrawing of treatment; 3) the morality of a physician causing deliberate death; and 4) the management of conscientious objection in this context. During discussion, differing opinions and positions were arrived regarding the first three points, but there was

			health professionals in both sides of the debate.	unanimous agreement that there is a need to accommodate conscientious objection in these contexts.
(Greenblum & Kasperbauer, 2018)	2018	Netherlands	Establish why physicians have a duty to refer after distinguishing traditional objection from non-traditional objection and using a traditional liberal understanding of autonomy, in opposition to another author's understanding.	While agreeing physicians have a duty to refer, they disagree this duty is based on the imposition of values from the physician's part, but rather that in doing so the physician is undermining societies' autonomy, as well as the physician-patient relationship.
(Harris et al., 2018)	2018	England	The paper explores how policies and debates around the world generally don't take into consideration the social, political, and economical pressures that health professionals are under when deciding whether to claim objector status or not.	Existing literature often forgets how health professionals are also social, economic, and political agents, responding and exerting social and political pressures. Misapplications of conscientious objection when refusing to treat are best understood not only by considering the individual behavior of the objector, but also by considering the social and political dynamics related to reproductive healthcare. These misapplications have significant consequences on the well-being of both patient and physician and undermine the legitimacy of conscience as worth protecting.
(Harter, 2015)	2015	USA	Defend how public disclosure of conscientious objection can be helpful in balancing the obligations of objectors with their right to conscience.	By disclosing publicly objector status, both the right to objection as well as the patient's access to required care can be protected. Public disclosure is the highest degree of advance notification, saving time and resources of both the patient and other physicians trying to refer a patient, while also being the easiest and least intrusive way to generate advance notice. Finally, public disclosure is already being used to manage physicians' financial relationships with industry partners.
(Harter, 2021)	2021	USA	Argues how some of the arguments favoring or disfavoring the accommodation of conscientious objection focus too narrowly on morally contentious treatments and religious claims of conscience, defending how some of these arguments do not apply in all cases and how institutions	While accepting that the arguments presented do not solve every issue surrounding conscientious objection (namely how to reduce harm to patients), they establish the importance of allowing health professionals moral autonomy without pushing the boundaries to the point of permitting overt harm to patients.

			should tolerate conscientious objection.	
(Heino et al., 2013)	2013	Finland	Demonstrate how conscientious objection mainly concerns women and has very real consequences to their reproductive health, putting women in unequal position depending on their residence, socio-economic status, and income, arguing as well that other European examples prove how CO prevent women from accessing health services.	Conscientious objection strengthens the stigma associated with abortion and aggravates socio-economic differences between women, which is most noticeable in countries with high prevalence of conscientious objection and entire regions lack abortion providers. This furthers the argument that governments should look to reduce the number of conscientious objections and, if not possible, guarantee equal access to abortion for all women regardless residence or financial situation.
(Huxtable & Mullock, 2015)	2015	England	Explores the nature and sources of conscience, arguing that conscience should be respected, while recognizing professionals are bound to serve their patients, even when they will make requests physicians will not be willing to provide. Reflecting on these issues, a principled compromise is suggested.	Recognizing that professionals are bound to serve their patients, some of whom will want treatments that physicians do not wish to provide, while also respecting professionals' conscience, a neutral stance should be adopted to allow a compromise that allows professionals limited right to conscientiously object, while also providing care to patients.
(Kantymir & McLeod, 2014)	2014	Canada	Present the two prevailing views in literature regarding the standards by which justifications provided by conscientious objectors should be judged. Deeming both views as either too restrictive or too permissive, a third middle ground position is developed and presented.	While admitting that no model for the judgement of justifications will be perfect, these imperfections can be minimized by beginning to understand that not all genuine refusals deserve exemption, nor does every refusal need to be reasonable to be accommodated. Rather, conscientious objections should either be reasonable, particularly by showing what grounds the objection is as likely or more to be true than what grounds the standard of care or be genuine and satisfy certain criteria: patients will still get the care they need in a timely fashion, any empirical beliefs on which the objection rests are not baseless, and the moral or religious beliefs on which it rests are not discriminatory.

(Kennett, 2017)	2017	Australia	Argue on Kantian grounds that respect for conscience and protection of freedom of conscience is consistent with fairly stringent limitations and regulations governing refusal of service in healthcare settings, and that respect for conscience does not entail that refusal should be cost free to the objector.	Respect for conscience and protection of freedom of conscience is compatible and consistent with stringent limitations and regulations governing refusal of service. Treating conscientious objection in the same way as civil disobedience would require health professionals to elevate their concerns to a level at which they can receive serious and critical examination while affirming their epistemic humility and their allegiance to the guiding principles of their professions.
(Kolers, 2014)	2014	USA	Rejecting the Consent model, this paper defends the Professionalism model as a grounding of professional obligations, applying these results to problems in conscientious refusals in general and in reproductive health.	Professionalism explains professional obligations by appeal to the normative structure of professions and the confluence of morally valuable aims that professions normally achieve for practitioners, clients, and societies.
(Lafollette, 2017)	2017	USA	Identify conflations in three issues about the nature and role of conscience, specifying conditions in which a professional might reasonably refuse to do what they are required to do, as well as conditions in which the public should exempt the professional from their responsibilities.	People should still be allowed to refuse what they are expected to do. Probably more often than they do now, albeit not primarily in the cases when it now happens. There should be more professionals willing to suffer for what they deem right, but that is not what conscientious objection advocates want or expect. The answer to "what I should personally do?" has little or nothing to do with whether they should be exempt from doing it and does not give them the undeniable right to be exempt.
(Lawrence & Curlin, 2007)	2007	USA	Contrast definitions of conscience from Abrahamic religions and those stemming from secular moral tradition, identifying clear differences, and advising participants in ongoing debates to specify their definition of conscience.	While the two streams of thought presented do not cover all definitions of conscience, with more definitions comes more opportunities for disagreement. There are only three possible responses to solve this issue: to prove one moral tradition's ideas are superior to another, to remove the religious category from the class of reasons that might justify a public conscientious objection, and finally to pursue a more theologically and philosophically informed conversation about the means and ends of medicine.

(Lemmens, 2013)	2013	Belgium	The predominance of the physician's view in end-of-life cases is critically analyzed, resulting in a re-appraisal of the patient's will.	While the futility debate will remain a topic of discussion for quite some time, the majority opinion of the predominance of the physician's view and the explanation thereof shows loopholes which will continue heating the discussion. Given the less-than-optimal health of the patient and the fact the communication and deliberation process are stressed, it can be expected that the patient will only seldom keep insisting on treatment. The thesis of this article is necessary to fill in the patient's right to health in a more modern view on the subject.
(Lewis-Newby et al., 2015)	2015	USA	Provide clinicians, administrators, and policymakers with recommendations for managing conscientious objection in the critical care setting.	Accommodating COs should be considered a "shield" to protect individual clinicians' moral integrity rather than as a "sword" to impose clinicians' judgments on patients. The committee recommends that: (1) COs in ICUs be managed through institutional mechanisms, (2) institutions accommodate COs, provided doing so will not impede a patient's or surrogate's timely access to medical services or information or create excessive hardships for other clinicians or the institution, (3) a clinician's CO to providing potentially inappropriate or futile medical services should not be considered sufficient justification to forgo the treatment against the objections of the patient or surrogate, and (4) institutions promote open moral dialogue and foster a culture that respects diverse values in the critical care setting.
(Lyus, 2017a)	2017	England	Challenges bioethicists commenting on conscientious objection and abortion to consider the empirical data on abortion providers, claiming they do not fall into neat groups of providers and objectors, like many bioethicists seem to portray.	Contrary to the dichotomy of provider vs. objector portrayed by many bioethicists, empirical data on the experience of abortion providers shows a consistent thread of ambivalence. The author suggests that "engagement with the moral substance of one's actions is an essential element of how one builds value around, and comprehends, one's clinical practice".
(Maclure & Dumont, 2017)	2017	Canada	Discuss the main problem with the sincerity test and the rights of patients, defending that the problem with this position is that it is not derived from a broader reflection on the meaning and implications of freedom of conscience and reasonable accommodation.	Blind *a priori* restrictions to the freedom of health professionals are unacceptable. The authors endorse a "more generous conception of freedom of conscience and believe that a crucial aspect of moral agency is the capacity to set apart core values and commitments from other subjective preferences", arguing that a theory of rights needs to attempt to conciliate in the best way possible the rights of objectors, patients, and other professionals.

(Magelssen, 2017)	2017	Norway	By presenting a case story, two common presumptions in the debate on conscientious objection in healthcare are challenged.	When an ethical conflict arises, this should spur discussion between employees and leaders. Presents practices should be openly discussed, with a view to address problems and improve practices. It is a task for department leadership to facilitate free and debate of dilemmas in the intersection between clinical practice, organization, and ethics. The argument of this paper has been that moral conflicts based on professional norms or that are situation-based instead of principle-based have been overlooked in the debate on conscientious objection.
(Marsh, 2014)	2014	USA	While arguing that the common requirement of reason-giving for conscientious objection is either too easy or too difficult to satisfy, there is also an attempt to salvage this requirement despite this important flaw.	When presented with these issues regarding the reason-giving requirement, one might attempt to solve them by 1) finding some midway position that makes reason-giving neither too easy nor too hard; 2) disregard the issues by claiming the insights of consciences has incommunicable; 3) or simply jettison and forget the reason-giving requirement. This final one is to be taken seriously, but the attractiveness of the reason-giving requirement gives reason to reconsider why it should be kept. (1) reason-giving in front of a critical audience can be a helpful way of uncovering unjustified biases, and (2) if our main goal in wanting a reason-giving requirement is not to uncover the 'truth' about moral and meta- physical disputes, but to limit the number of refusals that go through, then the reason-giving requirement could have an important practical function
(McConnell & Card, 2019)	2019	USA	Provide critical support for objectors to be required to present their objections in the public sphere, arguing that this would neither be too demanding nor too permissive, while also responding to objections that this unfairly favors secular over religious objectors.	Only a moderate view can escape this all-or-nothing dilemma, and we maintain that this is best done by requiring objectors to offer public justifications of their objections, which are then assessed to determine if they warrant accommodation. A pro tanto public reason condition avoids the excessive demands of winning the de- bate in public reason and further conditions governing the relative weights of pro tanto public reasons can prevent it from being too permissive. The process of developing pro tanto public reasons from one's comprehensive conception is no different for religious or secular objectors and it is possible to hold pro tanto public reasons sincerely where those reasons are honestly connected to the objector's comprehensive conception
(Meyers, 2019)	2019	USA	Argue that the burden of proof falls upon the professionals to show that providing a required service represents a genuine threat to their moral integrity, as opposed to being merely offensive or disadvantageous. Additionally, suggest a mechanism for	In comparison with the current standard for exemption, the suggested process is clearly more onerous, potentially discouraging applicants (which is not necessarily undesirable). No version of this model can ensure that all and only those facing a genuine conscience crisis will be granted exemption. However, the current model, which only seeks to protect medical professionals' rights, is hardly a preferred alternative.

			determining if an exemption request is justified.	
(Parker, 2011)	2011	USA	Explore the question whether health professionals have a collective duty to ensure that their profession provides nondiscriminatory access to all medical services and argue an approach in dealing with moral disagreements between patients and physicians that gives both parties veto power regarding participation.	Physicians do not have a strong obligation to provide patients with all legally available medical services—either as an overriding moral obligation, which is argued to not exist, or as a prima facie moral obligation, which is argued as a very weak obligation if it does exist. When faced with intractable moral disagreement, it is advocated for a policy that allows both physician and patient veto power for moral reasons when determining whether to participate in the treatment.
(Schuklenk & Smalling, 2017)	2017	Canada	Analyze the conflict between patients' rights to legally available services within the scope of the profession's practice and the conscientious objection accommodation demanded by monopoly providers of such healthcare services	Medical professionals have no moral claim in liberal democratic societies to the accommodation of their individual conscientious objections. Accommodating such objections would subvert the very reason why the medical profession exists, as well as allow such professionals the monopoly privileges that society endowed their profession with. Health professionals chose their profession of their own accord and should not have a legal claim not to provide services within the scope of said chosen profession and that society expects them to provide.
(Schuklenk, 2018)	2018	Canada	The article focuses on the fundamental question of whether health care professionals have morally justifiable claims to see their conscience-based refusals to provide professional services accommodated by regulatory bodies or the state, if eligible patients are demanding those services of them and if those patients are entitled to receive those services.	No other profession that professionals voluntarily enter makes similar demands of the society it claims to serve. Health care systems need to consider carefully how reliable service delivery can be guaranteed so that patients, the most vulnerable parts of the system, and the reason for why both the system and the health care professions exist, will be able to receive the services they are entitled to receive in a timely fashion. Patients cannot rely on doctors, doctors' associations or even on statutory bodies, typically made up pre-dominantly of professionals, to take the public good and their rights sufficiently serious to ensure reliable access to care.
(Schuklenk, 2019)	2019	Canada	This article reviews standard ethical arguments in support of	Practicing medicine professionally is itself a moral act. It is a moral act insofar as it is a deliberate decision to act professionally rather than act randomly on whatever other private

			conscientious refuser accommodation and finds them wanting. It discusses proposed compromise solutions involving efforts aimed at testing the genuineness and reasonability of refusals and rejects those solutions too.	values one might take a liking to. It is a moral act insofar as it deliberately prioritizes patient well-being and the public good over one's sectarian personal beliefs. The accommodation of conscientious objectors among monopoly provider doctors, who refuse to provide legal services to eligible patients requesting those services, is ethically indefensible.
(Smith, 2018)	2018	Netherlands	Explore types of conscience-based claims to refusal distinct from the more common objections to a treatment in general, but rather objection in individual cases. In other words, cases that involve practices the physician does not usually object but does so in this instance of facts.	While some writers argue that doctors ought not to be allowed to make decisions based on conscience and instead should only abide by their professional duties, this article defended that conscience ought not to be sidelined in this way. Decisions made by physicians are based on a multifaceted collection of reasons, including technical medical skill, professional codes of conduct, and the bests interests of the patient as well as the doctor's conscience. We need not protect conscience absolutely in medical cases, but we need to understand that it has a crucial part to play in a large collection of cases
(West-Oram & Buyx, 2016)	2016	Germany	Examine one of the most contentious points within this debate, the impact of granting conscience exemptions to healthcare providers on the ability of women to enjoy their rights to reproductive autonomy.	Exemptions demanded by objecting healthcare providers cannot be justified on the liberal, pluralist grounds on which they are based, and impose unjustifiable costs on both individual persons, and society.
(Wicclair, 2000)	2000	USA	Several possible ethical justifications for recognizing appeals to conscience in medicine are examined, and it is argued that the most promising one is respect for moral integrity. It is also argued that an appeal to conscience has significant moral weight only if the core ethical values on which it is based	Appeals to conscience can have significant moral weight even when physicians have conscience-based objections to practices which are endorsed by established norms of medical ethics. However, since other values and interests, such as patient autonomy, dignity, and wellbeing, are also at stake, it is unwarranted to give physicians blanket permission to withdraw from patient care in such cases. Instead, there is a need for a more nuanced understanding and analysis of the relevant moral interests and values.

			correspond to one or more core values in medicine.	
(Wicclair, 2008)	2008	USA	Examine the underlying assumption that conscientious objection is incompatible with a physician's professional obligations (the ''incompatibility thesis'').	Several accounts of the professional obligations of physicians are explored: general ethical theories (consequentialism, contractarianism, and rights-based theories), internal morality (essentialist and non-essentialist conceptions), reciprocal justice, social contract, and promising. It is argued that none of these accounts of a physician's professional obligations unequivocally supports the incompatibility thesis. If the incompatibility thesis lacks a sound basis, then a more nuanced response to conscientious objection in medicine is warranted—one that seeks to reasonably accommodate physicians' conscience-based objections to providing specific medical services without imposing undue burdens on patients.
(Wicclair, 2014)	2014	USA	Recommend the establishment of institutional policies that include four recommended requirements to promote fair, consistent, and transparent management of conscience-based refusals.	Fair, consistent, and transparent management of conscience-based refusals requires an institutional policy. Institutional policies can promote the goal of accommodating health professionals' conscientious objections and protecting their moral integrity without significantly compromising other important values and interests by incorporating the presented four requirements.

Table 2: Quality & Risk of Bias Assessment

	Score (0-3)									
Criteria	Ancell & Sinnott-Armstrong, 2017	Beal & Cappiello, 2008	Ben-Moshe, 2019	Ben-Moshe, 2021	Brudney, 2014	Buetow & Gauld, 2018	Byrnes, 2021	Card, 2017	Clarke, 2017	Cummins, 2021
Explicit theoretical framework	2	1	3	3	3	2	2	3	3	3
Statement of aims/objectives in main body of report	2	1	3	3	2	1	2	2	3	3
Clear description of research setting	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
The study design is appropriate to address the stated research aim(s)	2	2	3	3	3	2	3	3	3	3
Appropriate sampling to address the research aim(s)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Rationale for choice of data collection tool(s)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
The format and content of data collection tool is appropriate to address the stated research aim(s)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Description of data collection procedure	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Recruitment data provided	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Justification for analytic method selected	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
The method of analysis was appropriate to answer research aim(s)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Evidence that the research stakeholders have been considered in research design or conduct.	0	0	0	0	0	0	0	0	0	0
Strengths and limitations critically discussed	2	2	3	3	3	1	3	3	1	2

	Score (0-3)									
Criteria	Curlin & Tollefsen, 2019	Fiala et al., 2016	Fiala & Arthur, 2017	Gold, 2010	Goligher et al., 2017	Greenblum & Kasperbauer, 2018	Harris et al., 2018	Harter, 2015	Harter, 2021	Heino et al., 2013
Explicit theoretical framework	3	2	2	3	3	3	3	3	3	2
Statement of aims/objectives in main body of report	1	3	3	0	3	1	3	3	3	3
Clear description of research setting	NA	2	2	NA	3	NA	NA	NA	NA	2
The study design is appropriate to address the stated research aim(s)	2	2	2	0	2	2	3	3	3	2
Appropriate sampling to address the research aim(s)	NA	0	0	NA	1	NA	NA	NA	NA	0
Rationale for choice of data collection tool(s)	NA	NA	NA	NA	0	NA	NA	NA	NA	0
The format and content of data collection tool is appropriate to address the stated research aim(s)	NA	NA	NA	NA	0	NA	NA	NA	NA	1
Description of data collection procedure	NA	NA	NA	NA	1	NA	NA	NA	NA	0
Recruitment data provided	NA	NA	NA	NA	0	NA	NA	NA	NA	0

Justification for analytic method selected	NA	NA	0	NA	NA	NA	NA	NA	NA	0
The method of analysis was appropriate to answer research aim(s)	NA	NA	1	NA	NA	NA	NA	NA	NA	1
Evidence that the research stakeholders have been considered in research design or conduct.	0	0	0	0	2	0	0	0	0	1
Strengths and limitations critically discussed	2	0	0	0	3	3	1	3	3	1

Criteria	**Score (0-3)**									
	Huxtable & Mullock, 2015	Kantymir & McLeod, 2014	Kennett, 2017	Kolers, 2014	Lafollette, 2017	Lawrence & Curlin, 2007	Lemmens, 2013	Lewis-Newby et al., 2015	Lyus, 2017	Maclure & Dumont, 2017
Explicit theoretical framework	3	3	3	3	3	3	2	3	2	3
Statement of aims/objectives in main body of report	3	2	3	3	3	3	3	3	1	3
Clear description of research setting	NA	NA	NA	NA	NA	NA	NA	3	NA	NA
The study design is appropriate to address the stated research aim(s)	3	3	3	3	3	3	2	3	1	2
Appropriate sampling to address the research aim(s)	NA	0	NA	NA	NA	NA	NA	3	NA	NA
Rationale for choice of data collection tool(s)	NA	NA	NA	NA	NA	NA	NA	3	NA	NA
The format and content of data collection tool is appropriate to address the stated research aim(s)	NA	NA	NA	NA	NA	NA	NA	3	NA	NA
Description of data collection procedure	NA	NA	NA	NA	NA	NA	NA	3	NA	NA
Recruitment data provided	NA	NA	NA	NA	NA	NA	NA	3	NA	NA

Justification for analytic method selected	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
The method of analysis was appropriate to answer research aim(s)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Evidence that the research stakeholders have been considered in research design or conduct.	0	0	0	0	0	0	0	3	1	0
Strengths and limitations critically discussed	3	3	3	3	3	3	2	3	1	3

	Score (0-3)								
Criteria	Magelssen, 2017	Marsh, 2014	McConnell & Card, 2019	Meyers, 2019	Parker, 2011	Schuklenk & Smalling, 2017	Schuklenk, 2018	Schuklenk, 2019	Smith, 2018
Explicit theoretical framework	2	2	2	3	3	3	3	3	3
Statement of aims/objectives in main body of report	1	2	2	2	3	2	1	1	2
Clear description of research setting	NA	NA	NA	NA	NA	NA	NA	NA	NA
The study design is appropriate to address the stated research aim(s)	1	3	3	3	3	3	2	3	3
Appropriate sampling to address the research aim(s)	NA	NA	NA	NA	NA	NA	0	NA	NA
Rationale for choice of data collection tool(s)	NA	NA	NA	NA	NA	NA	0	NA	NA
The format and content of data collection tool is appropriate to address the stated research aim(s)	NA	NA	NA	NA	NA	NA	0	NA	NA
Description of data collection procedure	NA	NA	NA	NA	NA	NA	0	NA	NA
Recruitment data provided	NA	NA	NA	NA	NA	NA	NA	NA	NA

Justification for analytic method selected	NA	NA	NA	NA	NA	NA	0	NA	NA
The method of analysis was appropriate to answer research aim(s)	NA	NA	NA	NA	NA	NA	1	NA	NA
Evidence that the research stakeholders have been considered in research design or conduct.	0	0	1	1	0	0	0	0	0
Strengths and limitations critically discussed	3	2	3	2	3	2	2	2	2

	Score (0-3)			
Criteria	West-Oram & Buyx, 2016	Wicclair, 2000	Wicclair, 2008	Wicclair, 2014
Explicit theoretical framework	3	3	3	3
Statement of aims/objectives in main body of report	3	3	3	3
Clear description of research setting	NA	NA	NA	NA
The study design is appropriate to address the stated research aim(s)	3	3	3	3
Appropriate sampling to address the research aim(s)	NA	NA	NA	NA
Rationale for choice of data collection tool(s)	NA	NA	NA	NA
The format and content of data collection tool is appropriate to address the stated research aim(s)	NA	NA	NA	NA
Description of data collection procedure	NA	NA	NA	NA
Recruitment data provided	NA	NA	NA	NA

Justification for analytic method selected	NA	NA	NA	NA
The method of analysis was appropriate to answer research aim(s)	NA	NA	NA	NA
Evidence that the research stakeholders have been considered in research design or conduct.	0	1	1	1
Strengths and limitations critically discussed	3	3	3	3

Reporting Guidelines

Section/topic	#	Checklist item	Reported on page and paragraph/ table #
TITLE			
Title	1	Identify the report as a systematic review, meta-analysis, or both.	Page 1
ABSTRACT			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	Page 2
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known.	Page 8 (Paragraph 5)
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	Page 8 (Paragraph 6
METHODS			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	Page 9 (Paragraph 7)
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	Page 9 (Paragraphs 2 & 3)
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	Page 9 (Paragraph 2)
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	Page 9 (Paragraph 2)
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	Page 9 (Paragraphs 4, 5 & 6)

Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	Page 9 (Paragraph 7)
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	Page 10 (Paragraph 1)
Risk of bias in individual studies / Risk of bias across studies	12/ 15	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	Appendix (Pages 34 to 43)
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	Not applicable, as this systematic review was not accompanied by meta-analysis.
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I^2) for each meta-analysis.	Not applicable, as this systematic review was not accompanied by meta-analysis.
Additional analyses	16	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	Not applicable, as this systematic review was not accompanied by meta-analysis.
RESULTS			
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.	Page 10
Study characteristics	18	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.	Appendix (Pages 23 to 33)
Risk of bias within and across studies	19/ 22	Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12).	Appendix (Pages 34 to 43)
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.	Not applicable, as this systematic review was not accompanied by meta-analysis.
Synthesis of results	21	Present results of each meta-analysis done, including confidence intervals and measures of consistency.	Not applicable, as

			this systematic review was not accompanied by meta-analysis.
Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).	Not applicable, as this systematic review was not accompanied by meta-analysis.
DISCUSSION			
Summary of evidence	24	Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers).	Page 11 (Paragraph 1)
Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias).	Page 11 (Paragraph 2)
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	Page 11 (Paragraph 2)
FUNDING			
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review.	Not applicable

From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(7): e1000097. doi:10.1371/journal.pmed1000097

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**Usage in 2018-2020 for articles published in 2016-2020.

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Preparing Your Paper

Structure

Your paper should be compiled in the following order: title page; abstract; keywords; main text introduction, materials and methods, results, discussion; acknowledgments; declaration of interest statement; references; appendices (as appropriate); table(s) with caption(s) (on individual pages); figures; figure captions (as a list).

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Please refer to these quick style guidelines when preparing your paper, rather than any published articles or a sample copy.

Please use American spelling style consistently throughout your manuscript.

Please use double quotation marks, except where "a quotation is 'within' a quotation".

Please note that long quotations should be indented without quotation marks.

Submissions to Ethics & Behavior should follow the style guidelines described in the Publication Manual of the American Psychological Association (7th ed.). Merriam-Webster's Collegiate Dictionary (11th ed.) should be consulted for spelling.

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