Original article

Content validation of the ‘Mosaic of Opinions on Abortion’ (Mosai)☆

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ABSTRACT

Objective: This study is aimed to develop and validate the contents of the Mosaic of Opinions on Induced Abortion (Mosai), a structured questionnaire intended to be used as a tool to collect information about the views of health professionals about the morality of abortion.

Methods: The contents of the first version of the questionnaire was developed based on the technique of thematic content analysis of books, articles, films, websites and newspapers reporting cases of abortion and arguing about their practice. The Mosai was composed of 6 moral dilemmas (vignettes) related to induced abortion, of which outcomes should be chosen by the respondents and could be justified by the classification of 15 patterns of arguments about the morality of abortion. In order to validate its contents, the questionnaire was submitted to the scrutiny of a panel of 12 experts, an intentional sample consisted of doctors, lawyers, ethicists, sociologists, nurses and statisticians, who evaluated the criteria of clarity of writing, relevance, appropriateness to sample and suitability to the fields. These scores were analyzed by the method of concordance rate, while the free comments were analyzed using the analysis technique content.

Results: All the moral dilemmas and arguments were considered valid according to the rate of agreement, however, some comments led to the exclusion of a dilemma about emergency contraception, among other changes.

Conclusion: The content of Mosai was considered valid to serve as a tool to collect the opinions of healthcare professionals regarding the morality of abortion.

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Validação de conteúdo do Mosaico de Opiniões sobre o Aborto Induzido (Mosai)

RESUMO

Objetivo: Desenvolver e validar o conteúdo do Mosaico de Opiniões Sobre o Aborto Induzido (Mosai), um questionário estruturado que se pretende utilizar como instrumento para coletar informações sobre as opiniões de profissionais da saúde acerca da moralidade do aborto induzido.

Métodos: O conteúdo da primeira versão do questionário foi desenvolvido com base na técnica de análise temática de conteúdo de livros, artigos, filmes, sites e jornais relatando casos de abortamento e argumentando sobre sua prática. O Mosai ficou composto por 6 dilemas morais (vinhetas) relacionados a casos de abortamento, cujos desfechos devem ser escolhidos pelos respondentes e podem ser justificados mediante a classificação de 15 padrões de argumentos sobre o tema. A fim de validar seu conteúdo, o questionário foi submetido ao crivo de um painel de 12 especialistas, uma amostra intencional constituída de médicos, juristas, bioeticistas, sociólogos, enfermeiros e estatísticos, que avaliaram os critérios de clareza da redação, pertinência, adequação à amostra e aos domínios. As notas atribuídas pelos especialistas foram submetidas ao método da taxa de concordância. Os comentários livres foram analisados mediante a técnica de análise de conteúdo.

Resultados: Todos os dilemas e argumentos foram considerados válidos segundo a taxa de concordância, entretanto, alguns comentários motivaram a exclusão de um dilema sobre anticoncepção de emergência, dentre outras mudanças.

Conclusão: A validação do Mosai poderá contribuir para que as opiniões de profissionais da saúde com relação à moralidade do aborto possam ser avaliadas de maneira abrangente e com maior profundidade.

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Introduction

Considered natural advocates of women’s health, physicians play a central role in the daily lives of induced abortion. They induce abortion in the cases provided by law (pregnancy resulting from rape or when there is a risk to the woman’s life, as well as the situations of an anencephalic fetus) and will be the most affected professional category by a possible easing of legal restrictions against induced abortion (IA). Even if such change does not occur, doctors are already inserted in a society where IA is widely practiced, often illegally and using unsafe methods, which end up involving them in one way or another, at least when they treat women with complications of unsafe IA.

Not surprisingly, in recent years there have been a significant number of publications of opinion polls on abortion, especially studies carried out specifically with physicians and other health professionals, as they are the authorities on health issues and their attitudes can directly affect the access to healthcare. Among these studies, those of qualitative approach are the ones that have best produced in-depth knowledge on the theme. However, the comprehensiveness of such studies is known to be limited as, considering the in-depth analysis is performed, few individual cases are studied.

The situation seems to be reversed in the case of quantitative researches, which, even when they include hundreds of professionals, reveal little of the reasons explicit in their attitudes. For instance, a survey verified that 40% of the consulted doctors would help a patient who asked for help to abort in case of an unwanted pregnancy, but less than 2% of them would do the procedure.

These data point to a complex relationship between doctors and abortion, without, however, presenting justifications for such apparently contradictory attitudes. That is, why is it acceptable to advise a patient to terminate a pregnancy safely, but not do it personally? Is there an ethical and legal difference between the two actions? What do health professionals have to say about them?

In Brazil, there are no publications of empirical research with in-depth answers and at the same time, comprehensive, for this type of question. The approach required to fill such gaps should employ a survey instrument that can be used in a comprehensive way, being self-applicable and feasible to be applied electronically or sent by post. Such a tool should allow the estimate of proportions, rates and percentages, without, however, neglecting the investigation of experiences and meanings implied by such elements as there is little point in saying that abortion – or any other controversial topic – is morally correct or incorrect if, in doing so, we do not present the criteria on which bases these perspectives are advocated.
The aim of this article is to describe the process of development and validation of content Mosaic of Opinions on Induced Abortion (Mosai), an instrument intended to be used to meet comprehensively and in-depth the views of health professionals on induced abortion.

Methods

The present study was a methodological research\textsuperscript{12-15} aimed at developing the Mosai questionnaire, as well as the validation of its content by a panel of experts. The Mosai consists of six vignettes about individuals considering the possibility to abort. Vignettes are compact narratives of real or fictitious situation, written to elicit information on the perceptions, opinions and knowledge of the respondents about a phenomenon to be studied.\textsuperscript{16}

In Mosai, all vignettes consist of moral dilemmas, i.e., circumstances in which moral obligations require a person to perform two or more mutually exclusive actions.\textsuperscript{17} These dilemmas were adapted from real cases reported in scientific publications or news about individuals who interrupted a pregnancy or considered doing so. Originally, the questionnaire had seven vignettes (not six), that focused on the key demands for abortion according to the official medical classification: eugenic, therapeutic, selective and voluntary.\textsuperscript{18} The original titles, type of demand according to official medical nomenclature, themes and sources used in each of these vignettes are summarized in Table 1.

After the outcome of each vignette, we inserted a series of statements that must be classified by a Likert scale with five levels, ranging from “strongly agree” to “strongly disagree.” These phrases represent some of the main arguments used for the debate on the theme.

They were identified by the technique of thematic content analysis of articles, books, websites, magazines, newspapers and films on the subject.\textsuperscript{26} To introduce these arguments, we used the “fragment strategy” technique, writing each sentence (hereafter called the “fragment”) as if it were the condensed form of an argument, rather than its complete logical structure.\textsuperscript{27-30} In all, we identified 14 patterns of arguments: seven supporting the right to abort and seven against it (Table 2). In addition to these 14 patterns of arguments, Mosai also uses a number of fragments with irrelevant content for the theme and these will only be scored for those individuals who answer the questions at random, thus allowing the elimination of poorly answered questionnaires.

After the development of the first version of the questionnaire, we performed its content validity, carried out by the analysis of experts on the subject, as recommended in the literature.\textsuperscript{13,31} Thus, we invited by e-mail or by telephone 24 researchers that were active in at least one of the following subject areas: ethics, bioethics, Law and abortion. It was an intentional sample,\textsuperscript{9,32} defined according to the logic of information-rich cases, consisting of specialists recognized for their expertise in the aforementioned areas and, therefore, able to contribute critically to the content validation of Mosai.

Of the 24 researchers invited, 12 expressed consent through the Term of Free and Informed Consent Form (FICF) and actively participated in the survey. For this, they were sent by mail an envelope containing: the original version of Mosai, a pre-stamped envelope, the FICF and a guide for validation. The vignettes had to be evaluated in two ways: through scores 0-5 for the criteria of “adequacy to sample”, “relevance to theme” and “clarity of writing,” and with freely written comments, criticisms and suggestions. The fragments should be evaluated with scores 0-5 for the criteria of “relevance to the domain”, “adequacy to sample”, “relevance to theme” and “clarity of writing,” and with freely written comments, criticisms and suggestions.

These scores were evaluated according to the agreement rate, a score that describes the mean score received by each content.\textsuperscript{33} Generally, the agreement rate uses a Likert scale with 4 possible answers (1-4), in a way that only scores “3” and “4” indicate that the content is valid. In our research, we used a scale with five levels (1 for “very poor”, 2 for “poor”, 3 for “regular”, 4 for “good” and 5 for “excellent”) and considered satisfactory contents with mean scores between “4” and “5”.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|}
\hline
Title & Nomenclature & Theme & Source \\
\hline
Jussara & Selective & Anencephalic fetus & “The abortion of others”\textsuperscript{19} \\
Tourmaline (Maria) & Eugenic & Fetus with Down syndrome & “Down Syndrome: feelings experienced by parents when facing the diagnosis”\textsuperscript{20} \\
Graziane & Therapeutic & Eisenmenger syndrome in pregnancy & Based on news published on Jornal de Londrina\textsuperscript{21} and data from scientific article\textsuperscript{22} \\
Angela & * & Emergency contraception & “Emergency contraception in Brazil: barriers and facilitator”\textsuperscript{23} \\
Marina & Voluntary & Sexual violence & *Stories of women in situations of violence and abortion established by law”\textsuperscript{24} \\
Rita & Voluntary & Social or economic abortion & “Unsafe Abortion: prevention and risk and damage reduction”\textsuperscript{25} \\
Mara & Voluntary & Sexual violence & Inspired by cases reported by a doctor \\
\hline
\end{tabular}
\caption{Themes addressed by vignette.}
\end{table}

*Note that the vignette 'Angela' does not provide an official medical nomenclature, because EC tends to be considered in the medical and scientific environment a method of contraception with no abortion implications, although this point is not, in fact, consensual, as discussed in the content validation phase.
In percentages, contents were considered valid with means between 60% and 100%.

The free comments written by the specialists were evaluated according to the content analysis technique. This resulted in the categorization of three types of comments on the vignettes: “clarity of writing”, “adequacy of the text to the sample” and “contextual corrections”. In the case of fragments, categorization resulted in five patterns of comments: “clarity of writing”, “adequacy of text to the sample”, “contextual corrections”, “adjustments to the domain” and “ideological adjustment”.

Table 2 – Arguments for and against abortion and their central ideas.

<table>
<thead>
<tr>
<th>Argument</th>
<th>Position</th>
<th>Central ideas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classic feminism</td>
<td>Favorable</td>
<td>Defense of autonomy over one’s own body; Criticism of traditional ethics; Criticism of the traditional role of women in society.</td>
</tr>
<tr>
<td>Utilitarianism of social scope</td>
<td>Favorable</td>
<td>Emphasis on the economic costs to SUS for treatment of abortion complications; The implication of social injustice due to criminalization; Ineffectiveness of criminalization; Maintenance of the abortion industry.</td>
</tr>
<tr>
<td>Emotional appeal</td>
<td>Favorable</td>
<td>Exaggerated emphasis with strong emotional appeal on the negative aspects of maintaining the pregnancy, or on the reasons to do so.</td>
</tr>
<tr>
<td>Moral Statute</td>
<td>Favorable</td>
<td>Philosophical arguments about the criteria to define a person, including the gradualist approach; Contesting of the sacredness of life.</td>
</tr>
<tr>
<td>Political argument</td>
<td>Favorable</td>
<td>Criticism of laws that violate the legal principle of secularism.</td>
</tr>
<tr>
<td>Utilitarianism of individual scope</td>
<td>Favorable</td>
<td>Emphasis on the potential benefits (or avoidance of losses) for the woman, the couple, health professionals or the fetus itself involved in an abortion case.</td>
</tr>
<tr>
<td>Sexual and reproductive rights</td>
<td>Favorable</td>
<td>Based on the idea of “right to health”, understanding that access to safe and legal abortion as required by the woman is a condition of possibility to achieve this right.</td>
</tr>
<tr>
<td>Feminist ethics</td>
<td>Against</td>
<td>Defense of a supposedly authentic feminism; Argument that women have abortions due to lack of social support; The abortion would be an abuse of power against the fetus, similar to that of men against women; Argument that abortion reinforces the view of women as sexual objects.</td>
</tr>
<tr>
<td>Utilitarianism of social scope</td>
<td>Against</td>
<td>Using arguments such as “slippery slope” and reference to the so-called “culture of death”; Argument that decriminalization would lead to increased promiscuity, followed by more abortions and SUS overload.</td>
</tr>
<tr>
<td>Emotional appeal</td>
<td>Against</td>
<td>Exaggerated emphasis with strong emotional appeal on the negative aspects of abortion, or about the reasons for doing so; Calling the embryo/fetus “baby”, “child” and “person”, regardless of the stage of development.</td>
</tr>
<tr>
<td>Moral Statute</td>
<td>Against</td>
<td>Affirmation of the sacredness and inviolability of human life; Reference to the argument of potentiality and the principle of reciprocity.</td>
</tr>
<tr>
<td>Political argument</td>
<td>Against</td>
<td>Argument that it is the State’s duty to protect human life, as stated in the Constitution and in certain international established agreements.</td>
</tr>
<tr>
<td>Implicit consent</td>
<td>Against</td>
<td>Argument that, in a consensual sex act, the couple tacitly accepted the risk that the intercourse could result in pregnancy, and should therefore be responsible for it; Claim of innocence of the fetus even in cases of pregnancy resulting from sexual violence or life-threatening to the mother.</td>
</tr>
<tr>
<td>Utilitarianism of individual scope</td>
<td>Against</td>
<td>Emphasis on the potential benefits (or avoidance of losses) for the woman, the couple, health professionals and the fetus if the pregnancy is maintained.</td>
</tr>
</tbody>
</table>

Results

The sample consisting of 12 subjects was predominantly female, with only two men. All participants were residents of the Southeast region (seven from Campinas, four from São Paulo and one from Rio de Janeiro). Four individuals classified their occupation as “teacher”, two as “researcher” and the others as “lawyer”, “nurse”, “statistician”, “administrative professional” and “psychologist”; one participant did not provide this information. The abortion issue was not part of the professional activity of three study subjects. As for the remaining, four had worked professionally with the subject for at least 20 years, three between 10 and 19 years, and two between 5 and 9 years.

The development of research instruments had been part of the professional activity of three subjects for a period of time between 21 and 30 years; for five subjects, between 11 and 20 years, and for two subjects, between 5 and 10 years. Only one participant did not develop survey instruments. The mean age of the sample was 52 years.

No vignette received a mean score less than or equal to 85 for any of the evaluated criteria and thus, all were considered valid (Table 3).
Regarding the specialists’ free comments, in the “clarity of writing” category, corrections, suggestions and questions related to the formal qualities of the text (such as spelling, syntax and clarity) were indicated. As for the “adequacy of text to the sample”, certain jargon recurrence was criticized, especially of the medical and bioethical context.

Finally, in the third category, “contextual corrections”, the most commented vignette was “Angela”, on emergency contraception (EC) use.

By including a vignette about EC in a questionnaire on abortion, we wanted to investigate how future study subjects would evaluate the morality of using this method, as some studies have shown technically wrong knowledge by professionals regarding their use and mechanisms of action. However, most of the specialists expressed concern about the relevance (and impact) of this objective. For one specialist, “the theme of EC is always wrongly associated to pregnancy termination, and that is why I do not recommend including this case, as it enables its correlation [with the abortive effect] instead of clarifying that its effects are similar to some contraception methods.”

In view of this and other considerations, we decided to exclude the vignette “Angela” from the questionnaire. We also excluded the vignette “Mara”, of which theme, sexual violence, was already addressed in the dilemma “Marina”. At the end of this process of incorporating the specialists’ criticisms and suggestions, the Mosai was reduced to five vignettes ("Jussara", “Tourmaline”, “Graziane”, “Marina” and “Rita”). Subsequently, we created and added a sixth vignette, “Paula”, which deals with an unwanted pregnancy resulting from contraceptive failure.

As for the fragments, none of them received a mean score less than or equal to 80 for any of the evaluated criteria, so that all were considered valid. However, the fragments were also assessed according to the free comments written by the specialists, who warned against the use of misstatements on the theme. For instance, one of the fragments stated that “Terminating the pregnancy in a case like this might be the best way to protect the unborn child from a future full of suffering” (vignette “Jussara” about a case of anencephalic fetus). One of the specialists questioned whether the suffering actually occurred. Regarding the fragments of the “emotional appeal” argument, there were recurring statements such as “I think the sentence is too emotional”. A specialist disagreed with the “disrespectful manner given to the embryo or fetus”, which did not seem like an “emotional appeal”, but the adjectives disqualify the contents of the argument without appealing to a relevant discussion.”

It so happens that avoiding discussion and rational argumentation is the essential characteristic of the emotional appeal. Therefore, we chose to use fragments with aggressive contents, not because we agreed with them or wanted to endorse them, but because they are effectively employed among abortion debaters. Regarding the fragments of the “political argument against abortion,” two specialists suggested mentioning the Pact of San José of Costa Rica, of November 22, 1969, an international treaty that protects the right to life from the moment of conception, as well as the recognition of the legal personality from the same moment on, so that, according to one specialist, “by legalizing abortion, the Brazilian government would be violating the Pact of San José.”

Mosai also underwent a lot of changes due to discussions among the authors of the research. That was the case, for instance, of changing the name of the protagonist of the second vignette, i.e., “Tourmaline”, to “Maria”. A more structural change was the reformulation of the questions subsequent to the vignettes. Originally, after each vignette, the questionnaire asked the respondent if he was in favor of abortion in that case. It so happens that, as Faúndes warns, “virtually no one is pro-abortion ‘per se’ or against abortion, without exception,” in fact, “The real dilemma is to condemn or not to condemn the woman who aborts”, so that “some believe that the solution to the problem of abortion is to condemn, while others think that condemning the woman who aborts is no solution”.

Given these considerations, we are convinced of the need to rewrite that question, this time no longer seeking to know whether the respondents are in favor or opposed to abortion, but whether or not they agree with the legal configuration of abortion for each of the cases discussed in the vignettes. In addition to rephrasing the question of the right to abort, we added a question about what should be the role of the Brazilian Public Health System – SUS – in each of the circumstances shown by the questionnaire. For instance, in the dilemma “Jussara”, which discusses the gestation of a fetus with Down syndrome, we asked: “If Jussara could legally terminate a pregnancy, would you be in favor of the procedure being performed by SUS?”

Another important change occurred in view of the ruling of the Brazilian Supreme Court (STF) on the possibility of terminating a pregnancy in cases of anencephalic fetus. After the Supreme Court decision, the questionnaire had to be changed and started to refer to the possibility of the...
procedure in a lawful and safe manner, being no longer necessary to file a legal petition to obtain authorization to do so.

Discussion

Mosai is an original questionnaire set in the Brazilian scenario and its creation and content validation were based on methodological parameters recommended for this type of study. Its development was aimed at contributing to the increased amplitude and depth of data on the opinions of health care professionals on the issue of abortion, including physicians, nurses, social workers and psychologists, among others. This type of information is essential for the making of laws that are more adequate to the perspectives of society, to improve the working conditions of health professionals and to improve the quality of care that these workers offer to women having an abortion.

It is expected that the Mosai can also contribute with a greater variety of professional categories included in opinion surveys on abortion. Although the technical standards of humanized care for abortion stipulate the need of multidisciplinary care for women, very few publications have shown data on social workers and psychologists, and even so, very modest ones. The Mosai can facilitate the inclusion of a greater variety of professionals, given the possibility that the tool can be answered electronically, objectively and at the same time, in depth. One possible merit of Mosai for the in-depth study of opinions on abortion is the use of vignettes. The gain of using this strategy is that the participants’ answers tend to be closer to what they would do in real-life situations, whereas, when a simple hypothetical situation is used, the participants’ answers do not usually reflect the decisions they would make in everyday life.

It is also expected that the Mosai can contribute to the collection of data on the allocation of public resources to assist patients who wish to perform the abortion, a subject rarely discussed in the scientific literature. Among the few studies on the subject, there was a 95.3% rate of approval for the allocation of public resources to assist patients seeking abortion. Similar data were found in the United States and Argentina.

We recognize that a possible limitation of the process of content validation of the tool is the lack of specialists from other Brazilian regions in addition to the southeast. It should be emphasized, however, that subjects were invited from other states (Bahia, Rio Grande do Sul and Distrito Federal), but could not participate. Another possible limitation is the unbalanced ratio between men and women in the composition of the expert panel. It should be stressed, however, that the composition of the panel was scheduled for a more even number of men and women. However, of the eight men invited to join the study, only two were able to participate.

Conclusion

The objective of this research was to develop and validate the contents of Mosai. We considered we have achieved this goal satisfactorily. The interventions of specialists allowed us to correct conceptual and contextual misconceptions, as well as to identify ambiguities in the writing of the questionnaire. Following the validation process, Mosai will continue. The next steps will consist of its pre-test on a sample of 10 specialists in gynecology and obstetrics in order to verify its applicability. The psychometric properties of the questionnaire also need to be evaluated in future studies, including the construct validity, internal consistency and reliability.

Conflicts of interest

The authors declare no conflicts of interest.

REFERENCES