

## BRIEF REPORT

# How Danes evaluate moral claims related to abortion: a questionnaire survey

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► Additional material is published online only. To view please visit the journal online (<http://dx.doi.org/10.1136/medethics-2014-102102>).

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Received 17 February 2014  
Revised 31 December 2014  
Accepted 20 March 2015

## ABSTRACT

**Objective** To investigate how Danish citizens evaluate four moral claims related to abortion issues, regarding the moral status of the fetus, autonomy, harm and possible negative consequences of allowing abortion and to explore the association between moral beliefs and attitudes towards abortion for different reasons and at different gestational weeks.

**Method** A questionnaire was mailed to 1000 Danish citizens aged 18–45 years randomly drawn from the Danish Central Personal Register. A significance level of 0.05 was used for statistical estimations.

**Results** Four hundred and sixty-two responded to at least one moral claim. Two hundred and fifty-eight responded to all four claims without using the option 'neither agree nor disagree' and were classified as 'morally engaged responders'. A majority of these had a pro-abortion moral. The general relationship between moral beliefs and attitudes towards abortion was morally sound. Being 'morally engaged' did not increase the likelihood of reaching moral judgement on whether requests for abortion should be permitted. Education, religion and parenthood were statistically associated with the investigated issues.

**Discussion** The direction of causality is discussed with reference to both moral reasoning and moral intuitions. The relationship between normative social behaviour and abortion attitudes is considered.

## INTRODUCTION

When scholars discuss the morality of abortion, they often consider the moral status of the fetus, the possibility of causing harm to the fetus, a woman's autonomy and potential negative consequences of allowing abortion.<sup>1–3</sup> In comparison, little research has attempted to uncover lay people's attitude towards such moral issues. Recently, a questionnaire survey addressing attitudes among Danish citizens towards various scenarios of maternal requests for abortion was reported.<sup>4,5</sup> The aim of the present study was to examine a part of the questionnaire that asked questions about moral claims pertinently related to abortion. The paper will investigate how such moral claims were evaluated and how they associated with attitudes towards abortion requests and sociodemographic factors.

## MATERIALS AND METHODS

Between December 2009 and March 2010, a questionnaire was mailed to 1000 Danish citizens (481 men and 519 women), randomly drawn from the Danish Central Personal Register. Persons between

18 and 44 years were included in the study because this group in particular was expected to be interested in issues related to reproduction. The sample size was not based on power calculations but chosen because a previous similar survey had proved such a sample feasible and statistically sufficient.<sup>6</sup> The gender and age distribution among those invited to participate differed from the national distribution by a maximum of 5%.

The questionnaire contained questions on maternal requests for abortion, the current abortion regulation and the Danish prenatal testing programme.<sup>4,5</sup> Sociodemographic variables were ascertained at the end of the questionnaire (table 1). Four moral claims (table 2), adapted from a paper by Jonathan Baron,<sup>7</sup> were also presented. Respondents who did not use the option 'neither agree nor disagree' and evaluated all four moral claims were labelled 'morally engaged responders' and classified as follows: respondents who disagreed/highly disagreed on claims 1 and 3 and highly agreed/agreed on 2 and 4 were categorised as having a pro-abortion moral. If they highly disagreed/highly agreed, they were categorised as having a strong pro-abortion moral. Respondents who agreed/highly agreed on claims 1 and 3 and highly disagreed/agreed on claims 2 and 4 were labelled as having an anti-abortion moral and a strong anti-abortion moral if they highly agreed/highly disagreed, respectively. The remaining were categorised as having a mixed moral (table 3).

Maternal requests for abortion were presented in vignettes and included a short description of the fetal condition/social situation (see online supplementary appendix 1). Based on responses (yes, no, uncertain) to the five vignettes, an acceptance score with the following categories was constructed: high acceptance (5 yes responses), moderate acceptance (2–4 yes responses) and low acceptance (0–1 yes response).

In accordance with Danish legislation on questionnaire surveys that do not involve human biological material, ethical permission was not applied for.

## DATA ANALYSIS

The data were entered into SPSS V17.00 (IBM, Chicago, Illinois, USA). Frequency tables were analysed using Pearson's  $\chi^2$  test. CIs were calculated using the modified Wald method. A two-tailed p value was used and significance levels were set at 0.05.

## RESULTS

Thirty-five blank questionnaires and 487 (49%) fully or partly completed questionnaires were received. Response rates varied by strata: 59% women, 42%

**To cite:** Uldall SW. *J Med Ethics* Published Online First. [please include Day Month Year] doi:10.1136/medethics-2014-102102

**Table 1** Socio-demographic characteristics of 487 Danish respondents

Variable	Frequency	Per cent
Gender		
Male	183	38
Female	284	58 (50)
(No reply/invalid reply)	20	4
Age (years)		
18–25	95	20 (27)
26–35	134	27
36–45	209	43
(No reply/invalid reply)	49	10
Children		
Yes	289	59
No	178	37
(No reply/invalid reply)	20	4
Schooling		
10 or less years of school	157	32
Graduated from high school or an equivalent	269	55 (30)
Other, including foreign school education and students	34	7
(No reply/invalid reply)	27	6
Occupational education		
No education	84	17
Vocational training	97	20
Higher education (More than 2 years of studies at a higher learning facility)	262	54 (25)
(No reply/invalid reply)	44	9
Political affiliation		
Left-wing party	182	37
Right-wing party	193	40
Did not vote at the last election	35	7
(No reply/invalid reply)	77	16
The significance of religion		
Some or great significance	95	20
Little significance	249	51
No significance	120	24
(No reply/invalid reply)	23	5
Religious membership		
Protestants	238	49 (80)
Catholics	9	2
Other	12	3
No religious membership	193	39
(No reply/invalid reply)	35	7

Numbers in parenthesis indicate expected proportion based on national distribution (Statistics Denmark, 2013 (<http://www.dst.dk>, visited July 2013))

men, 51% aged  $\geq 36$  years and 42% aged  $\leq 25$  years. Compared with national distributions, our respondents deviated significantly on some sociodemographic characteristics as shown in **table 1**.

**Table 2** presents the total distribution of responses to the four claims. Contingency tables crossing each claim with each response towards each vignette showed increasing support for abortion as attitudes towards claims 1 and 3 went from highly agreeing to highly disagreeing and from highly disagreeing to highly agreeing towards claims 2 and 4 ( $p<0.001$ , tables not shown). Four hundred and sixty-two (95%) responded to all four claims and 258 (53%) did so without using the option ‘neither agree nor disagree’ (‘morally engaged responders’). The number of respondents in the latter group differed according to the significance of religion (62%, CI 53% to 70%, among respondents ascribing no significance to religion vs 50%, CI 45% to 56%,  $\chi^2 (1, N=464)=4.63$ ,  $p<0.05$ ) and level of education (58%, CI 52% to 64%, among

respondents with a high school examination or an equivalent compared with 47%, CI 40% to 54%,  $\chi^2 (1, N=460)=5.31$ ,  $p<0.05$ ), and were more likely to have a high (8%, CI 5% to 13% vs 1%, CI 0% to 5%) or moderate (78%, CI 72% to 83%, vs 68%, CI 61% to 75%) acceptance score ( $\chi^2 (2, N=383)=22.01$ ,  $p<0.001$ ). Smaller but significant differences were also found in all cells when the analysis was stratified according to the significance of religion and schooling. In evaluating the vignettes, ‘morally engaged responders’ did not use the option ‘uncertain’ significantly less (52%, CI 49% to 61%, compared with 55%, CI 46% to 59%,  $\chi^2 (1, N=487)=0.59$ ,  $p=0.44$ ).

Among ‘morally engaged respondents’ 19% (CI 14% to 24%) had a strong pro-abortion moral, one respondent a strong anti-abortion moral (this respondent was opposed to all suggested abortions), 56% (CI 51% to 63%) a pro-abortion moral, 23% (CI 18% to 28%) a mixed moral and 2% (CI 1% to 4%) an anti-abortion moral. Associations between these moral categories and attitudes on abortion for social reasons or fetal abnormality are shown in **table 3**. Fourteen per cent (CI 9% to 20%) of respondents for whom religion was significant had a strong pro-abortion moral, compared with 28% (CI 19% to 40%) of respondents who assigned no significance to religion ( $\chi^2 (3, N=247)=10.34$ ,  $p<0.05$ ). Fewer respondents with children had a strong pro-abortion moral (13%, CI 9% to 20% vs 26%, CI 18% to 36%,  $\chi^2 (3, N=248)=11.59$ ,  $p<0.05$ ).

## DISCUSSION

Women, older and well-educated respondents were overrepresented in our sample, which may be due to experience with and a greater interest in issues relating to reproduction. Well-educated respondents and non-religious respondents may have biased the overall results by increasing the proportion of ‘morally engaged responders’. Common sense and previous research support our finding that education and religion influence the ability to comprehend and develop an interest in evaluating moral claims.<sup>8</sup> Respondents ascribing significance to religion were not less educated, but religious people may be less compelled to engage in analytical thinking in order to justify their attitudes and instead make use of explanations with a more heuristic quality.<sup>9 10</sup>

The results suggest that every second Dane holds an opinion regarding the moral status of the fetus, the possibility of causing harm to the fetus, a woman’s autonomy and the potential negative consequences of allowing abortion. It also seems that doing so increases the likelihood of being supportive of maternal requests for abortion. A long history of feminist movements in Denmark, free abortion on maternal request until week 12 gestation since 1973 and a Danish Lutheran Church that does not hold an official opinion on abortion issues can explain why only 2% of morally engaged responders had an anti-abortion moral.

The correlation between moral beliefs and acceptance of abortion requests found both in the total sample and among ‘morally engaged respondents’ allows for the assumption that attitudes towards abortion requests were, to some extent, inferred from fundamental moral beliefs. However, the inherent limitations of the study design for inferences about causality make such an assumption contestable. Since the moral claims were presented after the vignettes, it may be that the respondents searched for arguments among the moral claims in order to justify their earlier stated attitudes in the vignettes. Such direction of causality is supported by studies of human emotions which suggest that moral judgement is guided by moral intuitions and work through a process akin to perception rather than reasoning.<sup>11</sup> In this regard, the design of the abortion vignette is pivotal insofar as it forms the contextual frame from which an

**Table 2** Attitudes towards four moral claims among 487 Danes

Claim	Highly agree	Agree	Neither agree nor disagree	Disagree	Highly disagree	Missing/invalid
Killing of human beings is wrong, and abortion is killing a human, even though the human is only a fetus	6 (CI 4 to 8)	12 (CI 9 to 15)	20 (CI 16 to 24)	34 (CI 30 to 38)	25 (CI 21 to 29)	3 (CI 2 to 5)
The fetus is not hurt by early abortion. It has no future plans, no knowledge of life, no pain, and no fear of death	27 (CI 23 to 31)	43 (CI 39 to 47)	18 (CI 15 to 21)	6 (CI 4 to 8)	3 (CI 1 to 3)	3 (CI 2 to 5)
Condoning abortion is likely to reduce respect for human life in general	4 (CI 2 to 6)	6 (CI 4 to 8)	11 (CI 8 to 14)	39 (CI 35 to 43)	37 (CI 33 to 41)	3 (CI 2 to 5)
Women should be able to decide whether they want to go through something that affects them as much as pregnancy and childbirth do	30 (CI 26 to 34)	44 (CI 40 to 48)	15 (CI 12 to 18)	6 (CI 4 to 8)	1 (CI 0 to 2)	4 (CI 4 to 6)

All numbers are given in percentage.

**Table 3** Association between different abortion morals and attitudes towards maternal request due to fetal abnormality and social reasons among Danes

Indication for request of abortion	Physical malformation week 26 of gestation		Social reasons week 24 of gestation		Down's syndrome week 21 of gestation		Cystic fibrosis <18 weeks of gestation		Social reasons <12 weeks of gestation	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Moral category										
Strong pro-abortion	12 (29)	24 (59)	14 (37)	16 (42)	34 (76)	7 (16)	42 (91)	3 (7)	48 (100)	0
Pro-abortion	10 (8)	108 (82)	20 (16)	87 (69)	94 (68)	35 (25)	126 (89)	10 (7)	144 (99)	1 (1)
Mixed	3 (6)	44 (85)	4 (8)	36 (75)	22 (45)	24 (49)	36 (64)	14 (25)	55 (93)	3 (5)
Anti-abortion*	0	5 (100)	0	5 (100)	1 (25)	2 (50)	1 (33)	2 (67)	0	5 (100)
$\chi^2$ test†	19.31, p=0.004 (N=229)		17.79, p=0.007 (N=218)		18.01, p=0.006 (N=236)		29.24, p<0.001 (N=246)		106.56, p<0.001 (N=257)	

The table gives the total number of respondents answering yes and no to the question 'should the woman be allowed an abortion?' The response category 'uncertain' is not shown. The parenthesis gives the percentage.

\*Due to small numbers, the categories strong anti-abortion and anti-abortion have been pooled.

†All statistics are calculated with six degrees of freedom. The row gives the Pearson  $\chi^2$  value and significance level.

emotional response is derived. The significance of the contextual information provided in questionnaires on abortion has been emphasised elsewhere.<sup>12</sup>

Morally engaged respondents were neither more nor less indecisive and the process of reaching judgement on the permissibility of abortion requests may instead depend more on intuitive mechanisms. For instance, it has been suggested that opposition to abortion can occur if the abortion request is seen as an act of atypical behaviour, which elicits an emotional response of disgust.<sup>13</sup> Such mechanism could explain why respondents who had a strong pro-abortion moral still were opposed to abortion for social reasons in gestational week 24. The influence of normative behaviour also coheres with a finding from another part of the questionnaire, that public support for abortion of Down's syndrome prior to week 18 gestations has increased in Denmark following the introduction of a prenatal testing programme which has made such abortions much more common.<sup>4</sup> Other theoretical works suggest, in line with our findings, that the qualitative difference in attitude depends on whether the attitude object is seen as a preference, convention or moral imperative.<sup>14</sup>

As prenatal testing possibilities and abortion tourism evolve so will moral dilemmas related to sexual and reproductive issues. It needs to be considered that moral beliefs otherwise pertinent to scholars may be useless when addressing these issues in a public context.

**Acknowledgement** The study was conceived, designed and launched with Md PhD Michael Slott Norup. Michael died on 31 December 2011. Associate professor

emeritus Peter Rossel, Professor Erik Lykke Mortensen, Md Mads Frederik Geisler and two anonymous reviewers revised the article critically for important intellectual content.

**Competing interests** None.

**Provenance and peer review** Not commissioned; externally peer reviewed.

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