

Postprint Version	1.0
Journal website	http://linkinghub.elsevier.com/retrieve/pii/S0738-3991(15)30121-X
Pubmed link	http://www.ncbi.nlm.nih.gov/pubmed/26613667
DOI	10.1016/j.pec.2015.11.008

This is a NIVEL certified Post Print, more info at <http://www.nivel.eu>

Nursing staff and euthanasia in the Netherlands. A nation-wide survey on attitudes and involvement in decision making and the performance of euthanasia

ANNEKE L. FRANCKE^{A, B, C, ,}, GWENDA ALBERS^D, JOHAN BILSEN^E, ANKE J.E. DE VEER^A, BREGJE D. ONWUTEAKA-PHILIPSEN^{B, C}

^aNIVEL—Netherlands Institute of Health Services Research, Utrecht, The Netherlands

^bDepartment of Public and Occupational Health, EMGO Institute for Health and Care Research, VU Medical Center, Amsterdam, The Netherlands

^cExpertise Center for Palliative Care Amsterdam, VU Medical Center, Amsterdam, The Netherlands

^dFederation Palliative Care Flanders, Vilvoorde, Belgium

^eMental Health and Wellbeing Research Group, Department of Public Health, Vrije Universiteit Brussel, Belgium

ABSTRACT

Objectives: To give insight into Dutch nursing staff's attitudes and involvement regarding euthanasia.

Methods: The sample was recruited from a nation-wide existent research panel of registered nurses and certified nursing assistants. Descriptive analyses and multivariate logistic regression analyses were performed.

Results: 587 respondents (response of 65%) completed the questionnaire. The majority (83%) state that physicians have to discuss the decision about euthanasia with the nurses involved. Besides, 69% state that a physician should discuss a euthanasia request with nurses who have regular contact with a patient. Nursing staff who have religious or other beliefs that they consider important for their attitude towards end-of-life decisions, and staff working in a hospital or home care, are most likely to have this opinion. Being present during the euthanasia is quite unusual: only a small group (7%) report that this has ever been the case in their entire working life. Seven% (incorrectly) think they are allowed to administer the lethal drugs.

Conclusion: The majority want to be involved in decision-making processes about euthanasia. Not all are aware that they are not legally allowed to administer the lethal drugs.

Practice implications: Nursing staff should be informed of relevant existing legislation and professional guidelines.

1. INTRODUCTION

As of 2002, euthanasia in the Netherlands has been regulated by the Termination of Life on Request and Assisted Suicide Act, often called the 'euthanasia act' [1]. In the '80s' and '90s' of the previous century, euthanasia practices were still a crime according to the Dutch Penal code. However, due to the development of jurisprudence, Dutch courts tolerated if a physician had performed the euthanasia in an unbearably suffering patient with a voluntary euthanasia request, and after consultation with an independent physician [2]. In the euthanasia act – and accordingly in this paper – euthanasia is defined as the administering of lethal drugs by a physician with the explicit intention to end a patient's life at the patient's explicit request. Comparable euthanasia acts exist in Belgium and Luxembourg.

The legal conditions and actual practice of euthanasia in the aforementioned countries have been the subject of much international debate [3]. Yet there are no indications that after euthanasia has been made legal, the number of euthanasia cases increased. In 2010, of all deaths in the Netherlands, 2.8% were the result of euthanasia. This rate is comparable with those in 2001 and 1995 [4]. Euthanasia is only possible in The Netherlands under very strict conditions. Only physicians are legally allowed to give lethal drugs to terminate the life of a patient, and only when criteria of due care are met [1]. In addition, only physicians have the legal authority to make the decision to perform euthanasia and they are also the only persons who are allowed to administer the lethal drugs. Nursing staff, or other non-doctors who administer lethal drugs, risk prosecution and disciplinary measures.

Nonetheless, nursing staff often have frequent and close contacts with patients at the end of life. They may therefore be confronted with patients with a euthanasia request and could be one of the first people with whom the patient discusses the euthanasia request [5]. Only the Belgian euthanasia act, however, pays attention to the nursing role in the decision-making process, stating that the physician has to discuss the euthanasia request with the nursing team involved in the care for the patient. Although the role of nursing staff is not described in the Dutch euthanasia act, this role is clarified and demarcated in the professional guidelines of the Dutch national nurses' and physicians' associations [6] and [7]. These guidelines also recommend that if nursing staff (registered nurses or certified nursing assistants) are involved in the daily care of a patient with a euthanasia request, they should also be involved in decision-making. In addition, the guidelines clearly state that nursing staff are not allowed to administer the lethal drugs. Nursing staff are advised that if they are present during the administration of euthanasia, they should only perform tasks whereby at least one other act must follow to end the life of the patient [7]. This means, for example, that a registered nurse or a certified nursing assistant may prepare the lethal drugs when a physician asks them to do so, but they should never turn on the drip valve or perform other actions directly resulting in the death of the patient.

Six relevant international literature reviews shed some light on nursing staff's attitudes and involvement regarding euthanasia [5], [8], [9], [10], [11] and [12]. Some of the international reviews focused on attitudes regarding euthanasia, and on

factors affecting these attitudes. For instance, the Gielen et al. review [10] found a relationship between staff's religious beliefs or world view and negative attitudes regarding euthanasia. The review of Verpoort et al. [11] also pointed to an influence of religion, besides other influential background characteristics: nursing staff with a strong religious faith, older nurses and those with many contacts with terminally ill patients appeared to be more likely to oppose euthanasia. The most recent review, the one by Vézina-Im et al. [12], however, found no significant relationship between having religious beliefs and attitudes regarding euthanasia in more than half of the studies included in their review, which contradicts the earlier reviews of Gielen et al. [10] and Verpoort et al. [11].

Hence the relationship between nurses' characteristics and attitudes is addressed, but the relationship between nurses' characteristics and actual euthanasia practices is absent in existent reviews. Nevertheless, the international review of De Beer et al. [5] revealed that nursing staff are often involved in decision making, but also on some occasions in the actual administration of the lethal drugs. Furthermore, the review of De Beer et al. included a Dutch study of Muller et al. published in 1997 [13], in which general practitioners and nursing-home physicians indicated that nursing staff administered the lethal drug(s) to the patients in 4% and 3% of the euthanasia cases respectively; the corresponding figure for medical specialists in hospitals was 21%.

The aforementioned six literature reviews included just a small number of research publications of Dutch origin, despite the fact that euthanasia policy and practices in the Netherlands have received much international attention. After going through all the reference lists in the reviews, we could identify only six underlying Dutch studies addressing nursing staff's attitudes or practices in relation to euthanasia [13], [14], [15], [16], [17] and [18]. However, data collection in all these studies was performed before or around the year 2002 (the year when the Dutch euthanasia act came into force). Hence these studies do not give a topical picture anymore. Therefore this paper addresses the following research questions:

1. What views and attitudes do Dutch nursing staff have regarding involvement in decision making about euthanasia and regarding involvement in the actual performance of euthanasia?
2. To what extent and in what way are Dutch nursing staff actually involved in decision making about euthanasia and the performance of euthanasia?
3. What is the relationship between the background characteristics of nursing staff on the one hand and attitudes and involvement in the performance of euthanasia on the other hand?

2. METHODS

2.1. Sample

The study sample was recruited from a pre-existing national research sample of nursing staff in the Netherlands, hereinafter referred to as the Nursing Staff Panel [19] and [20]. This panel consists of a permanent group of registered nurses (RNs) and certified nursing assistants (CNAs) who are prepared to fill in questionnaires on

current topics in nursing care. The age and gender distribution of the members of the Nursing Staff Panel corresponds to the age and gender distribution of the total Dutch nursing staff population. Participation is voluntary and anonymous.

RNs and CNAs are both nursing staff members. Compared to CNAs in most other countries, Dutch CNAs go through a rather lengthy vocational education programme lasting three years. Dutch RNs comprise nursing staff educated to associate degree level (3–3.5 years of basic nursing education) or bachelor's degree (4 years of basic nursing education).

2.2. Data collection

In 2011, all 903 participants in the Nursing Staff Panel who worked in general or academic hospitals, home care, nursing homes or elderly care homes were sent a survey questionnaire by post. If no response was received within two weeks, a reminder was posted, and – if needed – two weeks later again. Besides some background characteristics (see Table 1), the questionnaire addressed attitudes regarding euthanasia. The statements about attitudes (see Table 2) were all derived from an existing survey questionnaire developed, tested and used in research in Flanders, the Dutch-language part of Belgium [21]. This existent questionnaire was based on literature study, consultation of experts, focus group discussions and pilot-testing [21]. The participants were asked to what extent they agreed with each statement about attitudes, by choosing between five response categories (1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree).

[TABLE 1][TABLE 2]

Another part of the questionnaire contained self-developed items regarding actual involvement in decision making and the performance of euthanasia (see Table 3). The content validity of these self-developed items was based on study of relevant literature (among which the professional guidelines on euthanasia [6] and [7]), and by discussing them within a group of experts (a lawyer, an ethicist, a nurse/nursing scientist and a health scientist).

[TABLE 3.]

2.3. ANALYSIS

Descriptive statistics were used to describe the background characteristics of respondents and to answer the research questions numbers 1 and 2. Prior to these descriptive analyses, the five response categories for the statements about attitudes were condensed into three categories (1 = agree or strongly agree; 2 = neutral; 3 = disagree or strongly disagree).

In order to answer research question number 3, a backward multiple logistic regression (with removal at $p < 0.05$) was performed and odds ratios and 95% confidence intervals were calculated. Three core items from the survey questionnaire

were used as dependent variables in these analyses; representing different important aspects of attitudes and experiences of nursing staff, namely attitudes regarding communication with doctors, professional boundaries, and actual involvement in euthanasia decision-making (see Table 4). No dependant variable regarding actual involvement in administration of euthanatics was chosen, since the number of nursing staff involved in this was too small. We used two response categories for each dependent variable, namely 'agree or strongly agree' or 'yes' versus the other categories 'neutral', 'disagree or strongly disagree' or 'no'.

[TABLE 4]

Background characteristics (see the top row in Table 4) were entered in the analysis as independent variables. Then separate logistic regression models were fitted for each dependent variable. All analyses were performed using SPSS 16.0.

2.4. Ethical aspects

All respondents received an information letter together with the survey questionnaire explaining the aim of the study. The responses were stored and analysed anonymously, in accordance with the Dutch act on the protection of personal data [22]. Formal ethical approval of this study was not required under the applicable Dutch legislation [23], since all respondents were competent individuals and this survey study did not involve any interventions or treatments.

3. RESULTS

3.1. Response rate and characteristics

A total of 587 of the 903 participants who were sent the questionnaire completed the questionnaire (response of 65%). Table 1 provides the participants' background characteristics.

3.2. Views and attitudes regarding involvement in decision making

The majority see a role for themselves in decision making about euthanasia: 69% agree with the statement that the physician should discuss a request for euthanasia with nurses who have regular contact with a patient (see Table 2). An even larger group (83%) agree with the statement that physicians have to discuss the decision to administer drugs in lethal doses with the nurses involved. Moreover, almost half (46%) state that a patient is more likely to address a request for euthanasia to a nurse than to a physician.

3.3. Views and attitudes regarding involvement in the performance of euthanasia

Not all respondents are convinced that their colleagues are familiar with the relevant legal rules: less than half (43%) agree with the statement that most nurses know which actions they are allowed to perform in the case of euthanasia. However, also

the respondents themselves do not all know that they are not legally allowed to administer the lethal drugs: 75% give the correct response to the relevant statement about whether administering drugs in case of euthanasia is a task that nurses are allowed to perform, while 7% think they are allowed to administer the lethal drugs, and another 18% give a 'neutral' answer, which might indicate that they are not quite sure about the proper response. Regarding the willingness to administer euthanatics, the answers vary: 33% agree with the statement that (s)he would in no case be prepared to administer the drugs in lethal doses, while the other respondents give a neutral answer (26%) or disagree with the statement (41%).

In addition, 18% agree with the statement that (s)he would be in no case prepared to participate in the termination of a patient's life, and 67% state that in the case of euthanasia the nurse's task is restricted to the care of the patient and his or her next of kin.

3.4. Involvement in decision making

Twenty-four percent say that a physician has on at least one occasion involved them in the decision making about a request for euthanasia, while a smaller group (12%) say that they have experienced a situation where a patient with whom they had regular contacts made a euthanasia request but the physician did not discuss this with them. Respondents were also asked whether they had ever been the first person with whom a patient discussed a request for euthanasia: about a third (38%) say that this has indeed occurred. Also about a third (35%) say that they have informed a physician about a patient's request for euthanasia on at least one occasion. Only 3% report that they have ever refused to participate in decision making regarding euthanasia (see Table 3).

3.5. Involvement in the performance of euthanasia

Respondents were also asked whether they have ever (in their entire working life) been present during the performance of euthanasia to assist the physician. A small group (7%) indicate that this has indeed been the case. A small group (10%) also say that they have been present to support the patient or relatives (see Table 3). In addition, respondents were asked about involvement in the preparations for euthanasia. Very few (3% or less) say that they have ever brought the lethal drugs from the pharmacy, connected the infusion line, dissolved the drugs and/or prepared the syringe. Finally, few respondents indicate that they have ever turned on the drip valve (2%) or administered the lethal drugs (1%).

3.6. Relations with background characteristics

Table 4 shows that nursing staff who have religious or other beliefs that they consider important for their attitude towards end-of-life decisions, and those who work in an academic or general hospital or in home care are most likely to agree that the physician has to discuss a patient's euthanasia request with the nursing staff involved in the care for the patient. In addition, those working in academic hospitals are most likely to think that a nurse is allowed to administer the lethal drugs.

Moreover, being a registered nurse, working in an academic or general hospital or in a nursing home, having cared for terminally ill patients in the previous two years, and working in a specialised palliative care team/department is associated with having been actually involved in decisions concerning euthanasia (see Table 4).

4. DISCUSSION AND CONCLUSION

4.1. Discussion

The majority of the respondents consider it important to be involved in decision making regarding euthanasia. Almost seven out of ten state that a physician should discuss a request for euthanasia with nurses who have regular contact with a patient, and even a larger group state that physicians have to discuss the decision to administer drugs in lethal doses with the nurses involved. Almost none report that they have ever refused to participate in decision making regarding euthanasia. The results also show that a substantial proportion of nursing staff were actually involved by a physician and/or by a patient in the decision-making process about euthanasia. Nursing staff are rather often the first persons with whom a patient discusses a request for euthanasia.

However, nursing staff's views regarding the legal boundaries are sometimes incorrect: 7% incorrectly think they are allowed to administer the lethal drugs. A smaller group (1–2 %) have ever been actually involved in the actual administration of euthanatics. Even though this concerns a small group, the latter finding is remarkable since the Dutch euthanasia act is clear that only doctors may administer euthanatics, under strict conditions of due care.

That nursing staff administer euthanatics in some cases is not new. In the introduction section we already mentioned the international literature review of De Beer et al. [5], indicating that nursing staff are on some occasions involved in the actual administration of the lethal drugs, and also previous Dutch studies [13] and [16] pointed into this direction. The Muller et al. study [13] published in 1997 showed that Dutch nursing staff administered the euthanatics in 3–21% of the euthanasia cases, depending on the setting, while the research by Van Bruchem-Van de Scheur published in 2004 [16], later also published in 2007 and 2008 [27], [28], [29] and [30] established that nurses in the Netherlands administered the lethal drugs in about 12% of the euthanasia cases (12.2%).

Our study was performed years after these previous Dutch studies, and about a decade after this law came into force. Whether nurses are involved less frequently in the administration of the lethal drugs now cannot be said with full certainty, since the earlier studies used different research samples. Nonetheless, the percentages that we found for the involvement of nurses in administering the medication are very low. That might be partially due to the professional guidelines that have been published in the last decade and which describe professional and legal boundaries [6] and [7]. However, we must take account of the fact that our results do not show whether the reported involvement in administering lethal drugs was before of after the introduction of these guidelines. Given the extended working experience of a

proportion of the respondents (see Table 1), the involvement may have been in some occasions longer ago, even before euthanasia has been regulated by the euthanasia act.

This paper also addresses the relationship between background characteristics and relevant attitudes. In the introduction section we already referred to the recent international literature review by Vézina-Im et al. [12] showing that religious beliefs were not significantly related to attitudes regarding euthanasia in more than half of the studies they included in their review, while in contrast studies included in the international reviews of Gielen et al. [10] and Verpoort et al. [11] pointed fairly unanimously to such an association. We also did find that nursing staff having religious or other beliefs that they considered important for their attitudes towards end-of-life decisions, were more likely to agree with the statement that a physician should discuss euthanasia requests with them. In addition, nursing staff working in academic hospitals were more often in agreement with the statement that administering lethal drugs in the case of euthanasia is a task that nurses are allowed to perform. This finding is probably connected to the fact that nurses working in academic settings are very used to giving all kinds of medication by means of infusions.

The study has methodological strengths as the use of a nation-wide research sample of nursing staff and the relatively high response rate of 65%. Nevertheless we must keep in mind that particularly in research on a sensitive topic such as euthanasia, non-response can lead to bias. For example, it could be that nursing staff who have administered euthanatics, which is a criminal offense, are more represented in the non-response group.

Our quantitative approach also involves limitations, because we do not always know how nursing staff interpreted some terms used. For instance, the finding that 18% agree with the statement that (s)he would be in no case prepared to participate in the termination of a patient's life can be interpreted in different ways, since we cannot be sure what respondents would regard as falling under 'participation': Another limitation is that the survey results do not provide clear insights into the personal reasons and moral considerations behind certain answers. To better interpret the survey results, and to spread more light on the reasons why and circumstances in which some nursing staff members are prepared to participate in euthanasia practices, we recommend additional qualitative interviews. It is possible that the reasons why nursing staff occasionally administer lethal drugs to patients with a euthanasia request, not only concern a lack of knowledge about the legal limits. Another possible reason may be that nurses find it difficult to refuse requests from doctors to administer the lethal drugs.

4.2. Conclusion

The majority of Dutch nursing staff find that a physician should discuss a request for euthanasia with nurses who have regular contact with the patient. Nursing staff who have religious or other beliefs that they consider important for their attitudes towards end-of-life decisions, or who are working in a hospital or home care setting are most

likely to have this opinion. In practice, nursing staff are often actually involved in decision making. In contrast, being involved in the actual performance of euthanasia is quite unusual, although not all nursing staff members are aware that they are not legally allowed to administer the lethal drugs.

4.3. Practice implications

Nursing staff can make a significant contribution to the decision-making process, by functioning as a communication partner of the patient and the doctor. Involvement in euthanasia decision-making can be important to support patient and family. However, nursing staff must also be aware that they are not allowed to administer the lethal medication. All nursing staff must be acquainted with relevant existing legislation and professional guidelines on euthanasia decision making and practices. We recommend to address these issues in vocational training and continuing education for RNs and CNAs, so that nursing staff take account of their professional roles and boundaries in the care for people with a euthanasia request.

CONFLICTS OF INTEREST

None.

CONTRIBUTIONS OF THE AUTHOR

All authors have made substantial contributions to this paper.

- ALF contributed to: (1) the conception and design of the study, (2) analysis and interpretation of data, (3) drafting the article; (4) final approval of the paper.
- GA contributed to: (1) the conception and design of the study, (2) analysis and interpretation of data, (2) co-drafting the article, (3) final approval of the paper.
- JB contributed to: (1) the conception and design of the study, (2) revising the manuscript critically, (3) final approval of the paper.
- AJEdeV contributed to (1) the conception and design of the study, (2) acquisition of data, (3) analysis and interpretation of data, (3) revising the manuscript critically, (4) final approval of the paper.
- BO-P contributed to (1) the conception and design of the study, (2) revising the manuscript critically, (3) final approval of the paper.

REMOVAL OF PERSONAL IDENTIFIERS

I confirm all personal identifiers have been removed or disguised so the persons described are not identifiable and cannot be identified through the details of the story.



FUNDING

This paper was written within the framework of a study funded by the Dutch Ministry of Health who had no other involvement in the study than being the source of funding.

REFERENCES

- [1] http://wetten.overheid.nl/BWBR0012410/geldigheidsdatum_23-10-2015 [Termination of Life on Request and Assisted Suicide Act].
- [2] S. Gevers Euthanasia law and practice in The Netherlands *Br. Med. Bull.*, 52 (2) (1996), pp. 326–333
- [3] M.J. Shariff Assisted death and the slippery slope-finding clarity amid advocacy, convergence, and complexity *Curr. Oncol.*, 19 (June (3)) (2012), pp. 143–154
- [4] B.D. Onwuteaka-Philipsen, A. Brinkman-Stoppelenburg, C. Penning, G.J. de Jong-Krul, J.J. van Delden, A. van der Heide Trends in end-of-life practices before and after the enactment of the euthanasia law in the Netherlands from 1990 to 2010: a repeated cross-sectional survey *Lancet*, 380 (September (9845)) (2012), pp. 908–915
- [5] T. De Beer, C. Gastmans, B. Dierckx de Casterlé Involvement of nurses in euthanasia: a review of the literature *J. Med. Ethics.*, 30 (October (5)) (2004), pp. 494–498
- [6] AVVV, NU'91, KNMG, Handreiking voor samenwerking artsen, verpleegkundigen en verzorgenden bij euthanasie. [Guide for collaboration between doctors, nurses and nursing assistants regarding euthanasia] Utrecht: 2006.
- [7] C. Vossen, Hoe handel je zorgvuldig bij euthanasie. Handreiking voor een goede samenwerking tussen arts, verpleegkundige en verzorgende. [How you can act carefully regarding euthanasia. Guide to good collaboration between doctor, nurse and nurse assistant]. (V and VN). Van der Weij BV, Hilversum, 2007.
- [8] M. Berghs, B. Dierckx De Casterlé, C. Gastmans The complexity of nurses' attitudes toward euthanasia: a review of the literature *J. Med. Ethics*, 31 (8) (2005), pp. 441–446
- [9] N. De Bal, C. Gastmans, B. Dierckx De Casterlé Nurses' involvement in the care of patients requesting euthanasia: a review of the literature *Int. J. Nur. Stud.*, 45 (4) (2008), pp. 626–644
- [10] J. Gielen, S. van den Branden, B. Broeckeaert Religion and nurses' attitudes to euthanasia and physician assisted suicide *Nurs. Ethics*, 16 (May (3)) (2009), pp. 303–318
- [11] C. Verpoort, C. Gastmans, N. De Bal, B. Dierckx de Casterlé Nurses' attitudes to euthanasia: a review of the literature *Nurs. Ethics*, 11 (4) (2004), pp. 349–365 Review
- [12] L.A. Vézina-Im, M. Lavoie, P. Krol, M. Olivier-D'Avignon Motivations of physicians and nurses to practice voluntary euthanasia: a systematic review *BMC Palliat Care*, 13 (April 10 (1)) (2014), p. 20
- [13] M.T. Muller, L. Pijnenborg, B.D. Onwuteaka-Philipsen, G. van der Wal, J.T. van Eijk The role of the nurse in active euthanasia and physician-assisted suicide *J. Adv. Nurs.*, 26 (1997), pp. 424–430
- [14] M.L. Rurup, B.D. Onwuteaka-Philipsen, H.R. Pasman, M.W. Ribbe, G. van der Wal Attitudes of physicians, nurses and relatives towards end-of-life decisions concerning nursing home patients with dementia *Patient Educ. Couns.*, 61 (2006), pp. 372–380
- [15] A.M. The 'Vanavond om 8 uur.' Verpleegkundige dilemma's bij euthanasie en andere beslissingen rond het levenseinde. [Tonight at 8 o'clock.. Nursing dilemmas in euthanasia and other decisions at the end of life.] Houten: Bohn Stafleu Van Loghum, 1997.
- [16] G.G. van Bruchem-van de Scheur, A.J. van der Arend, C., Spreeuwenberg, F. van Wijmen, R.H. ter Meulen, De rol van verpleegkundigen bij medische beslissingen rond het levenseinde. Verslag van een landelijk onderzoek naar betrokkenheid en praktijken [The role of nurses in decision making at the end of life. Report of a national study about involvement and practices], Utrecht: Uitgeverij De Tijdstroom 2004.
- [17] A. van de Scheur, A. van der Arend The role of the nurse in euthanasia: a Dutch study *Nurs. Ethics*, 5 (1998), pp. 497–508
- [18] Y.M. van der Brug, J. de Lange, H. Philipsen Ervaringen van verpleegkundigen met euthanasie bij aids-patienten: [Experiences of nurses with euthanasia in AIDS patients] *Verpleegkunde*, 11 (1996), pp. 143–155
- [19] G. Albers, A.L. Francke, A.J. de Veer, J. Bilsen, B.D. Onwuteaka-Philipsen Attitudes of nursing staff towards involvement in medical end-of-life decisions: a national survey study *Patient Educ. Couns.*, 94 (January (1)) (2014), pp. 4–9
- [20] A.J. de Veer, A.L. Francke, E.P. Poortvliet Nurses' involvement in end-of-life decisions *Cancer Nurs.* May-Jun, 31 (May–June (3)) (2008), pp. 222–228

- [21] E. Inghelbrecht, J. Bilsen, F. Mortier, L. Deliens Attitudes of nurses towards euthanasia and towards their role in euthanasia: a nationwide study in Flanders, Belgium *Int. J. Nurs. Stud.*, 46 (September (9)) (2009), pp. 1209–1218
- [22] www.privacy.nl/uploads/guide_for_controller_ministry_justice.pdf (accessed 30.04.15).
- [23] www.ccmo.nl/en/ (accessed 30.04.15).
- [27] G.G. van Bruchem-van de Scheur, A.J. van der Arend, C. Spreeuwenberg, H.H. Abu-Saad, R.H. ter Meulen Euthanasia and physician-assisted suicide in the Dutch homecare sector: the role of the district nurse *J. Adv. Nurs.*, 58 (April (1)) (2007), pp. 44–52 Review
- [28] G.G. Van Bruchem-van de Scheur, A.J. van der Arend, H.H. Abu-Saad, C. Spreeuwenberg, F.C. van Wijmen, R.H. ter Meulen The role of nurses in euthanasia and physician-assisted suicide in The Netherlands *J. Med. Ethics*, 34 (April (4)) (2008), pp. 254–258
- [29] G.G. Van Bruchem-van de Scheur, A. van der Arend, F. van Wijmen, H.H. Abu-Saad, R. ter Meulen R Dutch nurses' attitudes towards euthanasia and physician-assisted suicide *Nurs. Ethics*, 15 (March (2)) (2008), pp. 186–198
- [30] G.G. van Bruchem-van de Scheur, A.J. van der Arend, H. Huijer Abu-Saad, F.C. van Wijmen, C. Spreeuwenberg, R.H. ter Meulen Euthanasia and assisted suicide in Dutch hospitals: the role of nurses *J. Clin. Nurs.*, 17 (June (12)) (2008), pp. 1618–1626

TABLES

Table 1
Characteristics of the respondents (n=587).

Socio demographics	n	%
Sex, female (%)	553	94
Age in years		
Mean (SD):47 (10)		
Median and range: 49 [20–65]		
Age <40	129	22
Age 41>	458	78
Education level		
Certified nursing assistant (3 years)	310	53
Registered nurse (associate degree level)	181	31
Registered nurse (bachelor level)	96	16
Having belief/religion that is important for attitude towards end-of-life decisions (%)	162	28
Work related characteristics		
Years of nursing experience, mean(SD):22 (10)		
Median and range: 22 [0–46]		
Part-time work status	507	90
Work setting		
General hospital	122	21
Academic hospital	36	6
Homecare	211	36
Elderly care home	115	20
Nursing home	103	18
Working in a team or at a department specialized in palliative care ^a (yes)	77	14
Cared for terminally ill patients in the last 2 years (yes)	491	84
Received training in end-of-life decisions and/or palliative care (yes)	301	55

^a In The Netherlands, specialized palliative care departments are relatively often part of nursing homes, while specialized palliative care teams are often working in hospitals.

Table 2
Attitudes of respondents (*n* = 587) regarding euthanasia.^a

	Disagree (%)	Neutral (%)	Agree (%)
Statements about involvement in decision making			
The physician should discuss the patient's request for euthanasia with nurses who have regular contact with the patient.	10	21	69
Whenever it is decided to administer drugs in lethal doses, this has to be discussed with the nurses involved.	6	11	83
The patient is more likely to address his or her request for euthanasia to a nurse than to a physician.	14	40	46
Statements about involvement in performance of euthanasia			
Most nurses know which actions they are allowed to perform in the case of euthanasia.	20	37	43
Administering the lethal drugs is a task that nurses are allowed to perform	75	18	7
I would in no case be prepared to administer the drugs in lethal doses with the explicit intention of ending the patient's life.	41	26	33
I would in no case participate in the termination of a patient's life.	53	29	18
In case of euthanasia, the nurse's task is restricted to the care of the patient and relatives	13	20	67

^a Percentages are counted on the basis of the number of respondents who have answered to a specific item. Missing data range from 27 to 32.

Table 3
Actual involvement in decision making and performance of euthanasia (*n* = 587).^a

Involvement in decision making	Yes (n)	(%) ^a
Ever been involved by a physician in decision making about a patient's request for euthanasia?	139	(24)
Ever experienced a situation where a patient with whom (s) he had regular contacts made a euthanasia request but the physician did not discuss this with the respondent	71	(12)
Ever been first person with whom a patient discussed request for euthanasia	219	(38)
Ever informed the physician about a patients' request for euthanasia?	204	(35)
Ever refused to participate in decision making regarding euthanasia	19	(3)
Involvement in performance of euthanasia		
Involvement by giving support		
Ever been present during the euthanasia to assist the physician	41	(7)
Ever been present during the euthanasia to support the patient or relatives	54	(10)
Preparations		
Ever brought the lethal drugs from the pharmacy	11	(2)
Ever dissolved the lethal drugs	9	(2)
Ever connected the infusion line for the administration of the euthanasia	17	(3)
Ever prepared the syringe	11	(2)
Actual administration of the lethal drugs		
Ever administered the lethal drugs in the presence of a physician	3	(1)
Ever opened the infusion drip	10	(2)

^aPercentages are counted on the basis of the number of respondents who have answered to a specific item. Missing data range from 27 to 32, except for one item: there were 42 missings for the item: Have you been involved in decisions concerning euthanasia?

Table 4

Relationship between background characteristics and attitudes/views and actual involvement regarding decision making expressed in odds ratio's and 95% confidence intervals.^a

	Age 41>	Female	Belief/religion important for attitude on end- of- life decisions	RN	Work status	Work setting					Cared for terminally ill patients in previous 2 years	Working in team or department specialized in palliative care	Training in end-of-life decisions or palliative care
						General hospital versus other	Academic hospital versus other	Nursing home versus other	Home for the elderly versus other	Home care versus other			
Physician has to discuss euthanasia request with nurses	-	-	1.85 (1.18-2.90)	-	-	3.85 (2.16- 6.85)	2.29 (1.01- 5.21)	-	-	2.36 (1.03- 5.43)	-	-	-
Nurse allowed to administer lethal drugs	-	-	-	-	-	-	6.99 (2.86- 17.07)	-	-	-	-	-	-
Have you ever been involved in decisions about euthanasia?				2.74 (1.64- 4.57)	0.37 (0.20- 0.69)	0.27 (0.09- 0.80)	0.47 (0.24- 0.93)			3.57 (1.55-8.25)	2.86 (1.61-5.08)		

^a Separate logistic regression models were fitted for each statement. Odds ratios and 95% confidence intervals are presented in the table where significantly different (α 0.05) from the null hypothesis.