

Perceived Difficulties in Managing Ethical Problems in Family Practice in Slovenia: Cross-sectional Study

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Aim To determine the prevalence of difficulties in managing ethical dilemmas in family practice.

Methods The study included a random sample of 259 family medicine physicians, representing 30% of the population of family physicians in Slovenia. Participants were given a self-administered questionnaire on perceived ethical dilemmas in their practice, with responses on a 5-point scale and a maximum score of 100. The main outcome measure was the percentage of family physicians reporting difficulties in solving perceived ethical dilemmas.

Results The response rate was 55%. Physicians reported having difficulties in solving ethical dilemmas often or very often (mean score \pm standard deviation, 56.1 ± 12.1). The most difficult ethical issue included abandoned and unattended patients and patients with insufficient means of support (48.6%), followed by suspicion of physical abuse, sexual abuse, or other criminal behavior (40.9%), and use of limited health care resources (21.1%). Female physicians reported greater difficulties in solving ethical dilemmas than male physicians (57.7 ± 10.6 vs 53.0 ± 14.1 , $P = 0.036$, t test). Older physicians solved ethical issues more easily than younger ones (53.9 ± 12.6 vs 58.2 ± 11.2 , $P = 0.043$, t test). Specialists and residents in family medicine considered solving ethical dilemmas to be more difficult than general practitioners without specialization (57.3 ± 11.6 vs 47.1 ± 11.8 , $P = 0.001$, t test). Multivariate regression analysis of physician and practice characteristics did not yield any significant model to explain the differences in the perceived level of difficulties in solving ethical dilemmas.

Conclusion Although managing ethical dilemmas is an important part of daily work of family physicians in Slovenia, it is perceived as a considerable burden in their work. Family physicians need more training in addressing and managing ethical issues.

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Family physician regularly encounter ethical dilemmas in their everyday practice (1-3). The dilemmas often consist of common and prosaic problems that are characteristic of the family medicine practice and require the physician to make prompt decisions during the ongoing consultation. In family practice, there is a diversity of values and a values-based approach is often used, challenging professional ethics (4).

Despite the great importance of this subject, not many studies have addressed the prevalence and difficulty of solving ethical dilemmas in family practice. The most frequent problems were found to be insufficient time for patients, lack of patient funds (5,6), relationships with colleagues, paternalism (7), contraception issues, informed consent (8), uncertain or impaired decision-making capacity, and disagreement among caregivers (9). The most difficult ethical dilemmas were a request for euthanasia or doctor-assisted suicide, disagreement among caregivers, impaired or uncertain decision-making capacity, and uncertainty about whether to disclose the diagnosis to the patient (9).

There are two main reasons behind the difficulties in managing ethical dilemmas. The first one is the growing importance of patient empowerment, which is nowadays one of the main issues in family medicine. Empowered patients become physicians' partners in the treatment process, which has raised many new medical-ethical dilemmas (2,9). The second one is a constant conflict between the patients' best interest (patient welfare) and the patients' moral and legal right to decide on his or her own life, health, and destiny (10-12). To date, only a few studies have focused on the latter (10,13-16). Physicians chose physician-centered course of action in a clinical situation and base their decisions on morally irrelevant and self-oriented reasons (17). Another reason for difficulties in solving ethical issues may

be patient's influence, which frequently leads to overtreatment (3,18). Physician's decisions seem to be influenced by their age, sex, certification in family medicine, church attendance, and region (15). A conflict between the complexity of family practice management and evidence-based medicine was also reported as one of the reasons for difficulties in solving ethical problems (11). Some authors suggest there is a lack of moral and ethical awareness among primary care physicians (19), while others emphasize the need for basic education of professionals and public in issues which deal with socioeconomic disparities arising from new technologies (20). These issues were proved to improve patient-centered communication skills in medical students (21).

Ethical and moral conduct is part of a family medicine specialization program in Slovenia (22,23). The main topics are confidentiality, truth-telling, communicating bad news to patients, team relationship, family abuse, relationship with the secondary health care, physicians' responsibility, the issues regarding death and dying, and medical errors. However, to establish and maintain a high-quality education program, we need to create an effective tool for its evaluation and detection of effect of educational interventions.

We could not find any studies on managing ethical dilemmas in family practice in Slovenia or other transitional countries in Eastern Europe. The aim of our study was to determine the prevalence of difficulties in solving ethical dilemmas among Slovenian family practitioners and to assess possible association with socio-professional characteristics of physicians. Our hypotheses were that physicians consider their ethical dilemmas to be quite difficult to solve, that the most difficult ethical questions were suspicion of abuse, abandoned patients, and breaking bad news to patients, and that physicians' age, working period, and specialization in family medicine were important

factors for successful management of ethical dilemmas.

Participants and methods

Study design

We conducted a cross-sectional postal questionnaire survey of Slovenian family physicians. The questionnaire was sent to randomly selected Slovenian family practices in March 2008, with a reminder sent in April 2008. The study was a part of an international study that took place in several European countries (24). National Medical Ethics Committee approved the study.

Participants

The study included a random sample of 259 physicians in general practice or family medicine in Slovenia. The physicians were selected by using a random number seed from the membership list of the Slovenian Family Medicine Society, aiming at a sample of 30% of the total number of 854 physicians of general/family medicine.

Data collection

The data was obtained by a self-administered questionnaire in the Slovenian language. The original questionnaire was developed and validated by Altisent Trota et al (24) in Spanish and translated into English. It consists of questions on 14 most frequent ethical dilemmas in primary health care. The answers are offered on a 5-point scale, ranging from 1 – “very easy to solve” to 5 – “very difficult to solve”. English version of the questionnaire was translated into Slovenian according to the proposed guidelines (25).

The following socio-professional characteristics of the participants were collected on a separate form enclosed with the questionnaire, which included physicians' sex, age, duration of employment, specialization status (special-

ist in general practice/family medicine, resident, without specialization), private practice (yes/no), university of graduation (University of Ljubljana or other), optional activities (academic affiliation, leading staff, other), and the size of the community where the family practice is based. The materials, together with the introductory letter, were mailed to the physicians. The envelope also contained a prepaid and addressed return envelope. The physicians were asked to fill out the questionnaires on a voluntary and anonymous basis before returning them to the investigators.

Statistical analysis

Descriptive statistics were computed. We calculated the reliability coefficient, Cronbach α , for the questionnaire. Total scores (0-100 points) from 14 items in the questionnaire were calculated, using the following equation: $[(\sum \text{questions } 1-14) \times 100 / (5 \times 14)] \times 1.25-25$. To identify statistically significant differences between different variables, independent samples, we used *t* test and one-way ANOVA. In order to split the continuous variables into two groups, median was used. Linear correlation analysis was performed to reveal possible correlations between different variables and multivariate linear regression analysis to identify a possible model for explanation of differences. We used the Statistical Package for the Social Sciences, version 13.0 (SPSS Inc, Chicago, IL, USA). The limit of statistical significance was set at $P < 0.05$.

Results

A total of 142 questionnaires were returned (55.0% response rate) and all were included in the final analysis. The respondents represented 16.6% of the whole population of Slovenian family physicians (Table 1). Distribution of our sample according to age and sex did not differ substantially from the entire population

Table 1. Socio-professional characteristics of Slovenian physicians in general practice/family medicine

Characteristics	No (%) of physicians
Sex:	
male	46 (32.4)
female	96 (67.6)
Age group (years):	
<30	1 (0.7)
31-40	26 (18.3)
41-50	69 (48.6)
51-60	40 (28.2)
>60	6 (4.2)
Employment duration (years):	
≤5	5 (3.5)
6-10	17 (12.0)
11-15	18 (12.7)
16-20	36 (25.4)
21-25	26 (18.3)
26-30	26 (18.3)
31-35	10 (7.0)
>35	4 (2.8)
Specialist in general practice/family medicine:	
yes	109 (76.7)
resident	15 (10.6)
no	18 (12.7)
no	
Private practice:	
yes	42 (29.6)
no	99 (69.7)
no answer	1 (0.7)
Size of community served:	
≤4999	20 (14.1)
5000-24,999	73 (51.4)
25,000-99,999	25 (17.6)
100,000-249,000	7 (4.9)
≥250 000	11 (7.8)
no answer	6 (4.2)
University of graduation:	
Ljubljana	115 (81.0)
other	23 (16.2)
no answer	4 (2.8)
Optional activities:*	
academic affiliation	64 (45.1)
managing position (manager, chief of staff, quality manager)	27 (19.0)
other (appointed physician for National Insurance Company, member of Health Center board)	18 (12.7)
none	54 (38.0)
no answer	14 (9.9)

*Numbers do not add because some physicians have multiple optional activities/posts.

(26). Forty-six (32.4%) of the respondents were men. The age of the respondents ranged from 30 to 68 years (mean age, 47.5 ± 7.4 years). The employment duration ranged from 2 to 45 years, with a mean employment period of 20.3 ± 8.5 years. The distributions of age and employment period were normal. The size of population served by physician practice ranged from 1500 to 450 000 citizens (median 150 000).

Most Slovenian family physicians found the difficulty of solving the proposed ethical questions to be average (3.2 ± 0.9 , out of maximum 5). A composite score for the difficulty of solving ethical dilemmas was 56.1 ± 12.1 , out of maximum 100. Abandoned and unattended patients and patients with insufficient means of support were the most difficult ethical issue to solve, followed by suspicion of physical abuse, sexual abuse, or other criminal behavior, and use of limited resources (Table 2). Controversial situations related to pharmaceutical industry were found to be less difficult, followed by solving disputes within the clinic team and confidentiality issues (Table 2).

Mean scores of the individual items in the questionnaire ranged from 2.4 to 4.3. The reliability of the questionnaire was acceptable (Cronbach α , 0.77).

The total score on the scale did not differ according to physicians employment dura-

Table 2. Number of physicians in general practice/family medicine reporting having difficulties in solving ethical dilemmas in their practice

Ethical problem	No. (%) of physicians					
	very easy to solve	easy to solve	average difficulty	quite hard to solve	very hard to solve	no answer
1. Patients' temporary inability to work	2 (1.4)	20 (14.1)	80 (56.4)	28 (19.7)	7 (4.9)	5 (3.5)
2. Relationship with specialized health care	2 (1.4)	9 (6.3)	60 (42.3)	55 (38.7)	13 (9.2)	3 (2.1)
3. Usage of limited resources	2 (1.4)	7 (4.9)	40 (28.2)	60 (42.3)	30 (21.1)	3 (2.1)
4. Patients trying to abuse the health care services	0 (0)	8 (5.7)	55 (38.7)	50 (35.2)	25 (17.6)	4 (2.8)
5. Confidentiality	17 (11.9)	62 (43.7)	44 (31.0)	14 (9.9)	1 (0.7)	4 (2.8)
6. Abandoned and unattended patients or patients with insufficient means of support	1 (0.7)	4 (2.8)	12 (8.5)	52 (36.6)	69 (48.6)	4 (2.8)
7. Communication of bad news to patients	7 (4.9)	35 (24.6)	62 (43.7)	31 (21.9)	3 (2.1)	4 (2.8)
8. Disputes within the clinic team	18 (12.7)	35 (24.7)	44 (31.0)	29 (20.4)	11 (7.7)	5 (3.5)
9. Patients requesting prescription	12 (8.5)	40 (28.2)	67 (47.2)	13 (9.1)	4 (2.8)	6 (4.2)
10. Difficulties in updating physicians' education	16 (11.3)	31 (21.8)	52 (36.6)	25 (17.6)	15 (10.6)	3 (2.1)
11. Controversial situation regarding pharmaceutical industry	42 (29.6)	43 (30.3)	36 (25.3)	16 (11.3)	1 (0.7)	4 (2.8)
12. Suspicions of physical abuse, sexual abuse, or other criminal offense	6 (4.2)	1 (0.7)	18 (12.7)	53 (37.3)	58 (40.9)	6 (4.2)
13. Seeing adolescents	7 (4.9)	17 (12.0)	60 (42.3)	33 (23.2)	20 (14.1)	5 (3.5)
14. Seeing immigrants	11 (7.8)	23 (16.2)	68 (47.9)	26 (18.3)	10 (7.0)	4 (2.8)

tion, working in private practice, university of graduation, other activities (academic affiliation, managing position, other), and the size of the community. Female physicians found solving of ethical dilemmas more difficult than male physicians (57.7 ± 10.6 vs 53.0 ± 14.1 , $P=0.036$, t test). Physicians, 48-year-old or older, solved ethical issues more easily than younger ones (53.9 ± 12.6 vs 58.2 ± 11.2 , $P=0.043$, t test). Specialists and residents in family medicine considered solving of ethical questions to be more difficult than general practitioners without specialization did (57.3 ± 11.6 vs 47.1 ± 11.8 , $P=0.001$, t test). The same differences existed also between specialists in family medicine and general practitioners without specialization (56.7 ± 11.7 vs 47.1 ± 11.8 , $P=0.003$, t test) and between residents in family medicine and general practitioners without specialization (62.0 ± 10.0 vs 47.1 ± 11.8 , $P=0.001$, t test). No significant difference was found between specialists and residents in family medicine. Multivariate regression analysis of the physician and practice characteristics did not yield

any significant model to explain the differences in the perceived level of solving ethical issues.

Analysis of the individual items of the questionnaire showed some differences according to physicians' sex, age, working period, university of graduation, specialization status, and size of the community. Solving ethical problems, such as confidentiality issues (2.2 ± 0.9 vs 2.5 ± 0.8 , $P=0.017$, one-way ANOVA), situations with abandoned or unattended patients (4.1 ± 0.8 vs 4.4 ± 0.8 , $P=0.038$, one-way ANOVA), and suspicions of abuse (3.9 ± 1.1 vs 4.3 ± 0.9 , $P=0.019$, one-way ANOVA), was less difficult for male than female physicians. Older physicians solved issues regarding patients' temporary working inability (2.9 ± 0.8 vs 3.3 ± 0.7 , $P=0.015$, one-way ANOVA) and issues regarding updating their own education (2.7 ± 1.2 vs 3.2 ± 1.0 , $P=0.011$, one-way ANOVA) more easily than younger ones. Longer working experience resulted in easier solving of problems regarding updating of physicians' education (2.7 ± 1.1 vs 3.1 ± 1.1 , $P=0.047$, one-way ANOVA).

Table 3. Difficulty of ethical dilemmas according to the specialization status of physicians in general practice/family medicine

Item	Score (mean \pm standard deviation)					
	Specialists in family medicine (SFM)	Residents in family medicine (RFM)	Specialists + residents in family medicine (SFM+RFM)	Residents in family medicine + practitioners without specialist training (RFM+GP)	Practitioners without specialist training (GP)	
1. Patients' temporary inability to work*	3.1 \pm 0.8	3.5 \pm 0.5	3.2 \pm 0.8	3.2 \pm 0.8	2.8 \pm 0.9	
2. Relationship with specialized health care	3.5 \pm 0.8	3.7 \pm 0.6	3.5 \pm 0.8	2.5 \pm 0.8	3.3 \pm 0.9	
3. Use of limited resources	3.9 \pm 0.9	3.8 \pm 0.7	3.8 \pm 0.9	3.8 \pm 0.9	3.4 \pm 1.1	
4. Patients trying to abuse the health care services [†]	3.8 \pm 0.8	3.4 \pm 0.8	3.7 \pm 0.9	3.3 \pm 0.9	3.2 \pm 1.0	
5. Confidentiality	2.4 \pm 0.9	2.5 \pm 0.9	2.4 \pm 0.9	2.4 \pm 0.8	2.3 \pm 0.8	
6. Abandoned and unattended patients or patients with not enough means of support [‡]	4.4 \pm 0.8	4.5 \pm 0.5	4.4 \pm 0.7	4.2 \pm 1.0	3.9 \pm 1.2	
7. Communication of bad news to patients [§]	2.9 \pm 0.9	3.1 \pm 0.9	3.0 \pm 0.9	2.8 \pm 0.9	2.5 \pm 0.7	
8. Disputes within the clinic team	3.0 \pm 1.2	3.1 \pm 0.7	3.0 \pm 1.1	2.4 \pm 1.0	1.9 \pm 0.8	
9. Patients requesting prescription	2.7 \pm 0.9	2.8 \pm 1.0	2.7 \pm 0.9	2.7 \pm 0.9	2.7 \pm 1.0	
10. Difficulties in updating physicians' education	2.9 \pm 1.1	3.4 \pm 1.1	3.0 \pm 1.1	3.1 \pm 1.2	2.8 \pm 1.3	
11. Controversial situation regarding pharmaceutical industry [¶]	2.3 \pm 1.1	2.5 \pm 1.0	2.3 \pm 1.0	2.0 \pm 1.0	1.6 \pm 0.8	
12. Suspicions of physical abuse, sexual abuse, or other crime	4.1 \pm 1.0	4.4 \pm 0.6	4.2 \pm 1.0	4.2 \pm 0.9	4.0 \pm 1.0	
13. Seeing adolescents**	3.3 \pm 1.0	2.2 \pm 0.7	3.4 \pm 1.0	3.4 \pm 1.1	2.9 \pm 1.2	
14. Seeing immigrants ^{††}	3.0 \pm 0.9	3.4 \pm 0.9	3.1 \pm 0.9	3.0 \pm 1.1	2.4 \pm 1.2	

*Significant difference between SFM and RFM ($P=0.048$), RFM and GP ($P=0.011$), SFM+RFM and GP ($P=0.08$). One-way ANOVA.

†Statistically significant difference between SFM and GP ($P=0.013$), SFM and RFM+GP ($P=0.006$), SFM+RFM and GP ($P=0.023$). One-way ANOVA.

‡Significant difference from SFM and GP ($P=0.024$), SFM+RFM and GP ($P=0.014$). One-way ANOVA.

§Significant difference from RFM and GP ($P=0.045$). One-way ANOVA.

||Significant difference from SFM and GP ($P=0.001$), RFM and GP ($P<0.001$), SFM and RFM+GP ($P=0.025$), SFM+RFM and GP ($P<0.001$). One-way ANOVA.

¶Significant difference from SFM and GP ($P=0.022$), RFM and GP ($P=0.014$), SFM+RFM and GP ($P=0.015$). One-way ANOVA.

**Significant difference from SFM ($P=0.037$) and RFM, RFM and GP ($P=0.013$). One-way ANOVA.

††Significant difference from SFM and GP ($P=0.016$), RFM and GP ($P=0.014$), SFM+RFM and GP ($P=0.009$). One-way ANOVA.

Physicians working in smaller communities found solving of the issues regarding confidentiality (2.5 ± 0.9 vs 2.0 ± 0.7 , $P=0.012$, one-way ANOVA) and pharmaceutical industry (2.3 ± 1.0 vs 1.8 ± 0.9 , $P=0.024$, one-way ANOVA) more difficult than physicians working in large communities. Physicians graduated from University School of Medicine in Ljubljana found suspicions of abuse more difficult to report than those graduated from other universities (4.3 ± 0.8 vs 3.5 ± 1.4 , $P=0.025$, one-way ANOVA). There were also some differences in the specialization status. Specialists and residents in family medicine had more difficulties in managing some individual ethical problems than general practitioners without specialization (Table 3).

Discussion

Family physicians in Slovenia reported having average to considerably great difficulties in managing ethical dilemmas. This is mostly consistent with the findings of studies in other European Union countries (5,9). In contrast to the previous findings (9), abandoned or unattended patients and suspicions of patient abuse were perceived as the most difficult issues to solve. Some relatively new ethical issues, such as limited financial resources and patient abuse of the health care system, emerged among the most difficult issues to solve. This might be characteristics of a transitional country which still maintains a tradition of wide accessibility for the patients (27). Surprisingly, other presumably difficult ethical dilemmas, such as delivering bad news and confidentiality issues, were found to be easier to solve, which is different from the results of previous studies (9). Undergraduate education and continuous postgraduate professional development in communication skills, which is nowadays a part of the family medicine curriculum in Slovenia (23), might be an explana-

tion for better communication skills of Slovenian family physicians.

The perceived difficulty in managing ethical dilemmas seems to depend upon physicians' sex, age, and specialization status. Solving of ethical dilemmas causes greater stress for female than male physicians, which is consistent with the findings of Saarni et al (3). This is important to know in order to protect women physicians from a possible burn-out. It seems that senior physicians have more experience in managing ethical problems due to longer practice and thus find it easier to solve these issues than their younger colleagues, which is also consistent with the findings of Saarni et al (3). On the other hand, specialists and residents in family medicine found solving ethical problems' more difficult than their colleagues without specialization. Higher overall mean score of specialists and residents in family medicine might reflect the fact that, through postgraduate training, they became more aware of the ethical dilemmas than physicians without specialist training. This can also explain why specialists and residents of family medicine found the new ethical issues, such as the usage of limited resources and patients abusing the health care services, more difficult than physicians without postgraduate training. No clear pattern regarding the influence of different variables was found, which is also in accordance with previous research (8-10).

The main advantage of this study is a randomly selected study group. The characteristics of the respondents did not differ substantially from the characteristics of Slovenian family physicians (26). It allows us to generalize the results to the whole population of Slovenian family physicians. The questionnaire on measuring perceived difficulties in managing ethical problems proved to be a reliable instrument in daily practice. It could be used as an assessment tool for the detection of education efficiency and the effect of educational inter-

ventions. A potential limitation of the study may come from a selection bias of non-respondents. They could have had more difficulties in addressing potential ethical dilemmas or could have had different ethical dilemmas. Thus, the results of this study may underestimate the difficulty of solving ethical dilemmas in family practice. Possible limitations are also the cross-sectional design and relatively low response rate, which is expected for this type of a study. Because multivariate modeling did not provide any significant explanatory model of the variation in the answers, we can assume that ethical attitudes of the physicians and the perceived difficulty in solving ethical problems is relatively uniform across the spectrum of physicians working in family practice.

Some questions in managing ethical dilemmas in family practice remain to be answered by future studies, including dilemmas such as abortion and euthanasia. The qualitative approach could be used to identify the managing differences of family physicians in solving ethical issues.

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