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Short report

Treatment of palliative care emergencies by prehospital emergency physicians in Germany: an interview based investigation

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Palliative care medical emergencies as a consequence of advanced cancer account for approximately 3% of all prehospital emergency cases. Therefore, prehospital emergency physicians (EP) are confronted with 'end of life decisions'. No educational content exists concerning palliative medicine in emergency medicine curricula. Over the course of 6 months, we interviewed 150 EPs about their experiences in 'end of life decisions' using a specific questionnaire. The total response rate was 69% ($n = 104$). Most of the interviewed EPs (89%, $n = 93$) had been confronted with palliative care medical emergencies and expressed uncertainties in dealing with these difficult situations, especially in the area of psychosocial care of the patients (50%). The emergency treatment of palliative care patients can become a particular challenge for any EP. A large percentage of interviewed EPs felt uncertain about aspects of social care and in the assessment of decisions at the end of life. Further information and training are necessary to amenable EPs to provide adequate patient-oriented care to palliative care patients and their relatives in emergency situations. *Palliative Medicine* (2009); 23: 369–373

Key words: emergency medicine; end of life decision; palliative care emergency; palliative care team; palliative medicine; prehospital emergency physician

Introduction

The purpose of any medical action is not only the successful engagement against life-threat and death, but also the respect of people's wishes and of the limits of human life.¹

The increased improvement in palliative home-care may give patients the possibility to spend the last part of their life at home.² However, as is expected at this stage acute symptoms are likely to increase both in frequency and severity.³ As a consequence, emergency medical services (EMS) are often

alerted, which leads to emergency medical treatment and hospitalisation, which may not be what the patient wants.^{4,5}

For this current investigation, prehospital emergency physicians (EP) were interviewed about their knowledge of palliative care, about their experiences in dealing with palliative care patients in out-of-hospital emergency situations and about their beliefs and interests in palliative care. The attitudes of EPs in regard to these issues were ascertained in the current study.

Methods

Over a time period of 6 months 150 EPs from three urban rescue service locations in Germany were interviewed with a standardised questionnaire created for this purpose.

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The following aspects of palliative medicine were taken into account:

- Evaluation of palliative care emergency situations
- Prior knowledge of palliative medical care
- Subjective confidence in medical/physical and psychosocial care offered to palliative care patients during emergency situations
- Fulfilment of therapeutic expectations
- Cooperation between EPs and professional out-of-hospital palliative care teams

Consent to participate in this investigation was assumed through the return of the questionnaire within a definite time period.

According to the declaration of Helsinki, data were made anonymous. The institutional review board approved the study, and approval was also granted by the local ethical commission.

For statistical analysis, responses from EPs were divided into three categories: Group 1 (EPs who had obtained additional qualification in palliative medical care according to the guidelines of the German Medical Association), Group 2 (EPs who had obtained advanced training in palliative medical care), and Group 3 (EPs who had no experience in palliative medical care).

The data were collected with the MS Excel 2003 table calculation programme (Microsoft®, Inc. 2003, Redmond, WA, USA). The statistical analyses were performed using SPSS for Windows, release 16.0 (SPSS, Chicago, Illinois). Differences between the three defined groups were investigated using the Kruskal–Wallis test for nonparametric samples. Within the three groups statistical differences were investigated using the Wilcoxon signed-rank test for nonparametric data. The significance level was designated as $P < 0.05$. The significance level for corrected P -value (where necessary) was designated as $P < 0.05$.

Results

One-hundred-four EPs responded to the distributed questionnaire (response rate: 69%).

Forty-nine EPs (47%) estimated the percentage of palliatively motivated emergency care in total EMS to be approximately 0–5%; 44 EPs (42%) estimated the percentage of palliative emergency care situations in total EMS to be approximately 6–10%, whereas 11 EPs (11%) estimated the percentage of palliatively motivated emergency care in total EMS to be greater than 10%. A subdivision of different palliative care diseases was not performed, nor was subdivision by geriatric patient status.

Nine EPs (9%) declared they had successfully attained the additional qualification in palliative medicine according to the advanced education recommendations of the German Medical Association. In Germany this additional qualification confers specialist status i, carrying with it the additional assumption of medical competence in palliative medicine. Twenty-four EPs (23%) declared they had successfully attained advanced training in palliative medicine (e.g., participation in conferences, lectures and literary studies). Seventy-one EPs (68%) declared themselves to be unskilled in palliative care and stated that they had not taken part in any specific advanced training on this topic.

Ninety-three EPs (89%) reported experience in treating palliative care patients in an advanced stage of their cancer disease. Experience in treating palliative care patients in emergency medical situations was related to the EP work duration and work frequency. Thus, palliative medical care experienced EPs declared themselves (Group 1 and Group 2) on the whole as more skilled in the care of palliative care patients than less palliative medical care experienced EPs (Group 3). A summary of the palliative medical care experience data (including the percentages per subgroups) is shown in Table 1.

Out of the 93 EPs who had treated palliative care patients at least once during an emergency situation, 33 EPs (36%) felt unskilled in this special medical care. Far more EPs (50%) felt unskilled in the psychosocial care of these patients ($P < 0.05$).

The data from responses on experience in palliative medical care and data from response in confidence in dealing with palliative care patients in emergency situations are shown in Table 2.

EPs who had attained the additional qualification in palliative medicine considered themselves to be skilled in

Table 1 Previous palliative medical care experiences of the interviewed prehospital emergency physicians (EPs)

Previous palliative medical care experience: 33 EPs (31.8% of the total group)	No previous palliative medical care experience: 71 EPs (68.2% of the total group)
Additional qualifications in palliative medical care: 9 (27% of the physicians with previous experiences)	Assistance of palliative care patients in emergency medical service: 60 (85% of the physicians with no previous experiences)
Special further training in palliative medical care (exc. the prehospital EPs with additional qualifications in palliative medical care): 24 (73% of the physicians with previous experiences)	
Assistance of palliative care patients in emergency medical service: 33 (100% of the physicians with previous experiences)	

Table 2 Relation between previous experience and self-assurance in the medical and psychosocial care of palliatively motivated emergencies and relation between therapies carried out according to the wish of the patients or their care giving relatives

N = 93	Additional qualifications in palliative medical care (specialist in palliative medicine) (N = 9)	Further knowledge in palliative medical care (N = 24)	No previous experience (N = 60)
Medical care			
Confident	8 (89%)	17 (71%)	35 (58%)
Less confident	1 (11%)	7 (29%)	25 (42%)
Coincidence of the match between therapy and the wish of the palliative care patients	8 (89%)	20 (83%)	19 (32%)
Coincidence of the match between therapy and the wish of the relatives	8 (89%)	21 (88%)	18 (30%)
Psychosocial care			
Confident	8 (89%)	13 (54%)	26 (43%)
Less confident	1 (11%)	11 (46%)	34 (57%)

physical and in psychosocial care. A review of the self-confidence responses from EPs skilled in palliative medical care showed a significant difference from the self-confidence responses from the EPs unskilled in palliative medical care ($P < 0.05$). However, in regard to psychosocial care of palliative care patients and their families different results were found: here, uncertainty was reported in the group of EPs with advanced training in palliative medical care that equalled the uncertainty reported in the group of EPs who had no previous experience in palliative medical care.

According to the subjective evaluations from EPs, the therapy carried out during the emergency situation coincided well with the wishes of the palliative care patients in 47 cases (51%; average reported value 2.3 ± 0.9), coincided well with the wishes of the palliative care patient's care givers in 46 cases (50%; average value 2.3 ± 0.9 ; Table 2). Across the three groups responses differed from one another: EPs of group 1 believed significantly more often that their therapy decisions agreed with the wishes of their palliative care patients than EPs of group 3 ($P < 0.05$).

Twenty-three EPs (25% of the subgroup) reported requesting assistance from a professional out-of-hospital palliative care team (PCT) as support in the further medical/physical and psychosocial care of the palliative care patient. The majority of EPs' requests for a PCT occurred mainly in the operational area of Göttingen (78%; Braunschweig: 13.1%, Kaiserslautern: 9%).

Due to cooperation between EPs and PCTs prior to hospitalisation, 20 of the interviewed EPs reported that they were able to keep their palliative care patient at home and thus, avoid hospitalisation. Responses in this regard did not differ by palliative medical care expertise of the interviewed EPs ($P > 0.05$).

Discussion

Out-of-hospital emergencies with palliative care patients in an advanced stage of their cancer amount to about 3% of all emergency calls.^{5,6}

Basic principles of palliative medical care should also be followed by EPs in palliative emergency care, to comply with the ethical principles of medical treatment at the end of life.^{5,7-9} Most (89%) of the EPs interviewed in this study were confronted at least once in the course of their emergency medical activities with caring for palliative care patients because of an acute out-of-hospital situation. However, only 32% of the interviewed EPs were well grounded in palliative medical care; only 9% had attained the additional qualification offered in palliative medical care in Germany (German Medical Association¹⁰). The self-reported deficits were a concern to not only EPs with less emergency medical experience. Significantly fewer uncertainties were reported by EPs with experience in palliative medical care: The fact that psychosocial issues in the care of emergency palliative care patients create challenges is not surprising. It is suggested that the ability of EPs to treat the physical symptoms of palliative care patients has apparently improved; however, the knowledge and skills necessary to deal with the psychosocial and spiritual challenges of palliatively motivated emergencies are still inadequate.¹¹ Therefore, it would be useful in basic and advanced training in emergency medicine to specifically discuss psychosocial issues, and in this way allow physicians to acquire competence in this context.

The therapeutic aims of emergency medical treatment do not always coincide with the wishes and aims of palliative care patients at the end of their life. Therefore, the concept 'Dying with dignity' as a very heterogeneous theoretical construct to which a great deal of attention is paid seems to be helpful in emergency situations concerning

palliative care patients.¹² The factors of this concept (e.g. dependence, quality of life, limited medical interventions, self-determination, and acceptance of one's will) should be taken into account in palliatively motivated emergency situations.^{11,13}

Twenty-three interviewed EPs (25%), from EMSs in Göttingen, reported requesting the assistance of a PCT in the prehospital care of a palliative care patient. Therefore, such assistance is not only important and requested by EPs to avoid emergency situations and hospitalisations, but is also used for support and responsibility sharing in palliatively motivated emergency medical decision-making.^{5,14} The special use of out-of-hospital palliative medical services (e.g., PCTs) was revealed in the responses of interviewed EPs: 20 EPs (19%) reported that involving PCTs led, at least once, to enabling the palliative care patient to remain at home. A stronger integration between professional PCTs and EPs in the emergency medical care of palliative care patients is desirable.^{5,15}

In addition, more than 75% of the interviewed EPs (80%) reported an interest in further training in palliative medical care, especially in regard to out-of-hospital and in-hospital care and especially in the area of psychosocial issues.

Limitations

This study carries one major limitation, namely the lack of a patient's assessment of their care by the prehospital EPs.

In Germany and some other European countries specially trained prehospital EPs are responsible for the treatment of acute emergency situations. The Anglo-American concept is to provide special trained paramedics to treat out-of-hospital emergency situations.

The authors mention that there is a lack of education concerning palliative decisions in the Curricula for paramedics as well as in the Curricula for prehospital EPs. One advantage concerning a prehospital EP-based emergency medical system is the possibility for the prehospital EP to treat the patient (e.g. palliative care patients in an advanced stage of their cancer disease) at home adequately.

However, as a retrospective study it is more difficult to draw hard conclusions as our data relies on prehospital EPs memories which are unreliable and potentially biased.

Conclusion

Prehospital EPs who are expert in the field of palliative medicine clearly feel more confident in the medical care and in the psychosocial care of palliative care patients. Therefore, advanced training in palliative care should be better integrated into emergency medical training, and the use of PCT in support of palliatively motivated emergency situations should be encouraged.

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Competing interests

None declared. The current data are a part of a MD dissertation by David Ruppert.

Authors' contributions

CHRW, GGH, and DR participated in designing the study. CHRW; HM, TL, and DR participated in collecting and entering the data. UEB supported in editing the manuscript. BMG and GGH co-wrote the manuscript and added important comments to the paper. All authors read and approved the final manuscript.

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