

## THIS WEEK'S RESEARCH QUESTIONS

- 856** How well are transitions to palliative care managed in English acute hospitals?
- 857** What are Dutch health professionals' experiences of and attitudes to providing chemotherapy to patients with end stage cancer?
- 858** Do antenatal corticosteroids reduce the incidence of neonatal respiratory disorders in late preterm infants?
- 859** How effective was a group therapy intervention for repeated self harm in young people?
- 860** Is country of medical qualification associated with outcome in the UK General Medical Council's "fitness to practise" process?

### Antenatal corticosteroids and respiratory disorder in preterm infants

It's well established that antenatal corticosteroids safely reduce the incidence of neonatal respiratory disorders in infants born before 34 weeks' gestation. But what about babies born a little later, for whom this intervention is not currently recommended? Subgroup analyses from meta-analyses have not yet answered the question, so Ana Maria Feitosa Porto and colleagues in Recife, Brazil conducted a new randomised controlled trial (p 858). Pregnant women at risk of imminent premature delivery between 34 and 36 weeks were allocated to receive either 12 mg betamethasone or placebo intramuscularly for two consecutive days. The intervention made no difference to the incidence of respiratory distress syndrome and transient tachypnoea in their babies.

The study had sufficient statistical power to show a real difference, but was this result clinically significant? In the full paper on [bmj.com](http://bmj.com) the authors acknowledge that "Powering a study to detect a 50% reduction always runs the risk of missing smaller but clinically important reductions in the primary outcome" (doi:10.1136/bmj.d1696).  
Editorialist Devender Roberts recommends that clinicians await incorporation of these results into the systematic review on antenatal corticosteroids before doing anything different (p 833).



### Discussing death without removing hope

Last year we published a collection of six articles on the difficulty of discussing death with patients ("Spotlight: Palliative Care Beyond Cancer" *BMJ* 2010;341:c5028, c4859-63) and this month we launched the journal *BMJ Supportive and Palliative Care*. In this week's *BMJ* we have two qualitative studies of health professionals' views on

palliative care. Merryn Gott and colleagues interviewed 58 health workers providing palliative care in either secondary or primary care in two different areas of England about how well the transition from potentially curative treatment to palliative care is managed (p 856). In the Netherlands, Hilde Buiting and colleagues interviewed 27 doctors and nurses from four oncology departments to gain insight into the trend towards increasing use of chemotherapy to treat end stage cancer (p 857).

In both studies the participants recognised the need for more rational care—whether a structured transition to palliative care starting early in the disease trajectory or avoidance of futile and debilitating treatment—and in both studies the barriers boiled down to a similar problem: how to tell patients that they are dying. Gott and colleagues found that uncertainties in prognosis would discourage physicians from discussing it with patients, delaying any transition to palliative care and sometime leading to "false hope" in patients. Buiting and colleagues found that physicians seemed inclined to try to preserve patients' wellbeing by adopting an attitude of "not giving up" and either offering further chemotherapy or, at least, a compromise such as by "trying out one dose." Discussing death or dying was considered contradictory with treatment as this could diminish the patients' hope.

A common theme in both studies was that junior doctors and nurses expressed awareness of the need to move to palliative care but felt unable to intervene in management decisions, suggesting that improved communication between health professionals may be a priority.



## LATEST RESEARCH: For this and other new research articles see [www.bmj.com/research](http://www.bmj.com/research)

**Alcohol attributable burden of incidence of cancer in eight European countries** An article published on [bmj.com](http://bmj.com) (doi:10.1136/bmj.d1584) reports that about one in ten cancers (10%) in men and one in 33 cancers (3%) in women in western Europe are caused by former and current alcohol consumption.

The study focuses on France, Italy, Spain, United Kingdom, The Netherlands, Greece, Germany, and Denmark. Madlen Schütze and colleagues argue that a substantial proportion (40-98%) of alcohol attributable cancers occurred in people who drank more than the maximum recommended by guidelines—two standard drinks a day in men and one standard drink a day in women. The results are based on risk estimates from the European Prospective Investigation into Cancer (EPIC) study—in which 363 988 men and women, mostly aged 35-70 years at recruitment, were followed for cancer since the mid-1990s—and data from the World Health Organization.

The study calculated that in 2008, current and former alcohol consumption by men was responsible for about 57 600 cases of cancer of the upper digestive tract, colorectum, and liver in six countries. Over half of these cases (33 000) were caused by drinking more than two alcoholic drinks per day. Alcohol consumption by women in all eight countries caused about 21 500 cases of upper digestive tract, liver, colorectum, and breast cancer, of which over 80% (17 400) was due to consumption of more than one drink per day.



# Transitions to palliative care in acute hospitals in England: qualitative study

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## SUMMARY QUESTION

How are transitions to a palliative approach to care managed in acute hospitals in England?

## SUMMARY ANSWER

A structured transition to palliative care of the type advocated in UK policy guidance is seldom evident in acute hospital settings in England.

## WHAT IS KNOWN AND WHAT THIS PAPER ADDS

Policy initiatives highlight the need for health professionals to manage the transition from curative care to palliative care appropriately, but empirical evidence relating to this transition is sparse. This study identified significant barriers to implementing transitions to palliative care within acute hospitals.

## Recruitment/sampling strategy

Purposive sampling.

## Participants and setting

Fifty eight health professionals providing palliative care in either secondary or primary care settings in two contrasting areas of England.

## Rationale, design, data collection method

We used focus groups and individual interviews to gather qualitative data.

## Data analysis method

The data from the interviews and focus groups were transcribed in full and a coding framework was developed. The guided analysis used a modified grounded theory approach.

## Main findings

Participants identified that a structured transition to palliative care was seldom evident in acute hospitals. In particular they reported that prognosis was not routinely discussed with inpatients. Achieving consensus among the clinical team about a transition to palliative care was seen as fundamental to the transition being effected. However, this was thought to be insufficiently achieved

in practice. Secondary care professionals reported that discussions about adopting a palliative care approach were not often held with patients. Primary care professionals confirmed that patients were often discharged from hospital with “false hope” of cure because this information had not been conveyed. Key barriers to ensuring a smooth transition to palliative care included limited opportunities to reflect on treatment goals within a hospital situation where the focus is on reactive acute care, professional hierarchies that limited the ability of junior medical and nursing staff to input into care management decisions, and poor communication.

## Implications

Our findings indicate that a greater level of support is needed if current UK policy directives for palliative care are to be implemented within acute hospitals. Such support needs to encompass not only education and training for generalist providers of palliative care but also a critical consideration of how to tackle the further significant barriers that this study reveals. Ensuring that structured transitions to palliative care do happen for patients, which is critical to enabling end of life care preferences to be elicited and enacted, requires significant research attention.

## Bias, limitations, generalisability

Participants reported on their practice and that of their colleagues. Individual interviews were carried out in cases where participants were unable to attend a focus group; these interviews lack the interaction of a group setting. As all data collection was carried out in England, findings may not be generalisable to other countries.

## Study funding/potential competing interests

This study was funded by the National Institute of Health Research under the Service Delivery and Organisation programme. The views and opinions expressed herein are those of the authors and do not necessarily reflect those of the Department of Health. All authors declare independence from the study funders. We have no competing interests.

## KEY FACTORS IN DECISION MAKING FOR TRANSITION TO PALLIATIVE CARE

### Recognising the point of transition

Sometimes I think that just standing back is difficult to do in acute medicine because you're so taken up with what's in front of you in terms of dealing with investigations and processing people through a conveyor belt . . . that you don't often get the opportunity to stand back and think about it (Primary care, location 1, general practitioner)

### Good communication

Participant: You have to communicate well to get across that this patient is palliative

Researcher: You mean communication to the patient?

Participant: To the patient, to the family, to colleagues, you've actually got to be able to communicate well (Primary care, location 1, general practitioner)

# Understanding provision of chemotherapy to patients with end stage cancer: qualitative interview study

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## STUDY QUESTION

What are health professionals' experiences of and attitudes towards the provision of chemotherapy to patients with end stage cancer?

## SUMMARY ANSWER

Out of fear of negatively affecting the wellbeing of patients with end stage cancer, physicians seem inclined to offer further chemotherapy to strive for prolonging patients' life, whereas nurses seem inclined to express doubts about further treatment to allow patients to accept death and prepare for it.

## WHAT IS KNOWN AND WHAT THIS PAPER ADDS

Various studies have depicted a trend towards increasing use of chemotherapy at the end of life. Physicians' emphasis on treatment can be explained by patients' and physicians' mutually reinforcing attitudes of "not giving up" and by their broad interpretation of a patient's quality of life, in which taking away the patient's hope by withholding treatment is considered harmful. Physicians' emphasis on treatment and their feeling that speaking about death or dying while administering chemotherapy is contradictory makes withholding treatment in an earlier stage of the disease difficult.

## Rationale, design, and data collection method

The trend towards increasing use of chemotherapy for end stage cancer patients is widely debated. Yet, health professionals' thoughts about the benefits and burdens of such treatment are largely unknown. We conducted a semi-structured qualitative interview study to examine physicians' and nurses' views.

## Participants and setting

14 physicians and 13 nurses from oncology departments at university and general hospitals in the Netherlands.

## Recruitment and sampling strategy

Physicians and nurses were purposefully sampled. The primary researcher approached them by telephone or email and gave them an information sheet about the study.

## Data analysis method

Data were collected through face to face, semi-structured interviews. Topics for physicians and nurses included the decision making process, the distinction between curative and palliative care, the way treatment alternatives were brought up, and the perceived role of nurses in decision making about treatment.

## Main findings

Physicians and nurses seemed to find greatest difficulty with the "grey area" in which a patient's medical condition would theoretically permit another line of chemotherapy, and the patient wants the treatment, but they would, balancing the treatment benefits and burdens, advise against it. Physicians' and nurses' attitudes towards such situations are expressed differently: physicians seem inclined to offer chemotherapy to strive for prolonging the patient's life; nurses, on the other hand, seem inclined to express doubts about further chemotherapy to allow patients to make the best use of the time that is left. Physicians' emphasis on treatment can be explained by patients' and physicians' mutually reinforcing attitudes of "not giving up," and by their broad interpretation of patients' quality of life in which taking away patients' hope by withholding treatment is considered harmful. Speaking about death or dying while administering chemotherapy is considered contradictory as this could diminish patients' hope.

## Implications

Our findings suggest that there may be a role for health professionals (possibly nurses) other than the attending physician to interrupt patients' and physicians' shared intention of "not giving up." Furthermore, by improving communication between physicians and nurses, a mutual and more realistic understanding of a patient's medical condition could be attained, which may be helpful in rebalancing the ratio of quantity of life to quality of life also.

## Bias, limitations, and generalisability

Part of our study described the way nurses and physicians interacted with their patients; ideally this would have involved both interviews and an observational study. We further focused on "difficult" and "straightforward" cases rather than on different types of cancer; our study may therefore not be representative for the whole cancer population.

## Study funding/potential competing interests

The study was supported by a grant from ZonMw, the Netherlands Organization for Health Research and Development. The funder had no role in the conduct of the study or its publication.

## PARTICIPANTS' COMMENTS

### Physician 11 (university hospital)

"Yes, you know, you don't come out with 'It's going badly,' you just don't.... You certainly don't do that with patients, and especially not with such a young girl who is also extremely anxious and scared of suffocating. And that is a real prospect. The tumour is there, and it is a really enormous tumour and presses on everything. And after all, every time I came with some bad news, but even so a little bit of good news."

### Physician 8 (general hospital)

"And we certainly don't start [discussions about death, dying] at that point because you are indeed administering a course of chemotherapy. Yes. But that means, therefore, that if you keep going on in that way, ultimately someone will have a very short period of time to really say farewell."

### Nurse 2 (university hospital)

"If they say to the physician, 'Dear me, I really don't feel well and I don't know whether I can cope with this whole process,' then it seems that if they say the same thing to me they are much less non-committal than when they say that to a physician, or it's easier to say it to me because I'm not going to stop the course of treatment.... But with the physician, it would appear that they think that he can say, 'Oh, then we'll just stop' or something."

# Effectiveness of antenatal corticosteroids in reducing respiratory disorders in late preterm infants: randomised clinical trial

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## EDITORIAL by Roberts

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## STUDY QUESTION

Are antenatal corticosteroids effective in reducing the incidence of neonatal respiratory disorders in infants born at 34-36 weeks' gestation?

## SUMMARY ANSWER

Antenatal corticosteroid treatment at 34-36 weeks' gestation does not reduce the incidence of respiratory disorders in newborn infants.

## WHAT IS KNOWN AND WHAT THIS PAPER ADDS

Antenatal corticosteroid treatment is safe and effective in reducing the incidence of respiratory distress syndrome and other morbidities in infants born before 34 weeks' gestation. In infants born after 34 weeks, however, the incidence of respiratory disorders (respiratory distress syndrome and transient tachypnoea) is not affected by antenatal administration of two doses of betamethasone.

## Design

This was a randomised triple blind clinical trial in which women were allocated to receive 12 mg betamethasone or placebo intramuscularly for two consecutive days in accordance with the computer generated table of random numbers.

## Participants and setting

320 pregnant women with gestational age between 34 and 36<sup>+6</sup> weeks and risk of imminent premature delivery (spontaneous or therapeutic) at the time of admission to hospital.

## Primary outcome

Occurrence of neonatal respiratory disorders: respiratory distress syndrome or transient tachypnoea of the newborn. Secondary outcomes included the need for ventilatory support, neonatal morbidity, and duration of stay in hospital.

## Main results and the role of chance

There were low rates of respiratory distress syndrome (two (1.4%) in the corticosteroid group and one (0.8%) in the

placebo group;  $P=0.54$ ) and high rates of transient tachypnoea (34 (25%) v 29 (22%);  $P=0.77$ ) in both groups. Treatment with corticosteroid failed to reduce the risk of any respiratory morbidity (risk ratio 1.09, 95% confidence interval 0.72 to 1.66).

## Harms

No harms were associated with treatment.

## Bias, confounding, and other reasons for caution

The number of neonates born at 34 weeks was low (30 cases), and, though stratified analysis failed to find any effect of corticosteroid in reducing respiratory morbidity at 34, 35, and 36 or more weeks, we cannot exclude the possibility of different effects according to gestational age.

## Generalisability to other populations

Our results, albeit robust, could reflect the situation adopted in this protocol of a single centre and healthcare system. A meta-analysis of various future randomised clinical trials could encompass more patients and therefore strengthen and give greater relevance to these findings. Until these studies become available, current evidence does not justify the routine use of corticosteroids to prevent respiratory morbidity in late preterm infants.

## Study funding/potential competing interests

This study was supported by the Instituto de Medicina Integral Prof Fernando Figueira-IMIP ([www.imip.org.br](http://www.imip.org.br)), a private, not for profit healthcare organisation based in Recife, Pernambuco, Brazil, where the study was carried out.

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### RESPIRATORY COMPLICATIONS IN INFANTS BORN AT 34-36 WEEKS' GESTATION ACCORDING TO ANTENATAL TREATMENT WITH CORTICOSTEROIDS OR PLACEBO. FIGURES ARE NUMBERS (PERCENTAGES) UNLESS STATED OTHERWISE

Variable	Corticosteroid (n=143)	Placebo (n=130)	Risk ratio (95% CI)	P value
Any respiratory morbidity	36 (25)	30 (23)	1.09 (0.72 to 1.66)	0.69
Respiratory distress syndrome	2 (1)	1 (1)	1.82 (0.17 to 19.8)	0.54*
Transient tachypnoea	34 (24)	29 (22)	1.07 (0.69 to 1.65)	0.77

\*Fisher's exact test.

# Group therapy for adolescents with repeated self harm: randomised controlled trial with economic evaluation

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## STUDY QUESTION

How effective and cost effective is a targeted group therapy intervention for repeated self harm in young people?

## SUMMARY ANSWER

This targeted group therapy programme did not significantly reduce the frequency or severity of self harm and was not cost effective compared with routine care.

## WHAT IS KNOWN AND WHAT THIS PAPER ADDS

Self harm is a major public health problem in many countries but uncertainty remains about which forms of treatment are most effective. This study showed general improvement in symptoms for both arms of the trial over one year with normal treatment, but no substantive additional benefit from a targeted group therapy programme.

## Design

Single (assessor) blinded parallel group randomised trial comparing the effectiveness and cost effectiveness of a manual based developmental group psychotherapy programme plus routine care with that of routine care alone. Computer generated randomisation was by minimisation controlling for baseline self harm frequency, presence of conduct disorder, depressive disorder, and severity of psychosocial stress.

## Participants and setting

366 adolescents aged 12-17 years with at least two episodes of self harm within the previous 12 months who were referred to eight child and adolescent mental health services in the northwest of England.

## Primary outcome

Frequency of subsequent repeated episodes of self harm measured at 6 and 12 months after randomisation.

## Main results and the role of chance

After adjustment for relevant baseline variables, the frequency and severity of self harm did not differ between the group therapy and routine care groups at six months or at 12 months (figure). Total costs at one year were higher for the group therapy arm (£21 781) than for routine care (£15 372) but the difference was not significant (95% CI -1416 to 10 782, P=0.132).

## Harms

Significant adverse events were reported in three participants during the trial period (two in treatment as usual, one in the experimental group); all involved self harm resulting in severe physical injury. No completed suicide or other death occurred.

## Bias, confounding, and other reasons for caution

The large study size (one of the largest randomised trials undertaken internationally targeting self harm) and the low loss to follow-up were among the factors minimising bias. This sample of adolescents with repeated self harm was relatively severe and complex at presentation. The design of the trial did not allow us to explore the cause of the overall improvement in symptoms across the cohort.

## Generalisability to other populations

We found a high level of continuing use of child and adolescent mental health services in the year to follow-up (in 86% of the cohort, with relatively high frequency of appointments), as well as extensive use of general practitioner (in 77%) and voluntary sector services (in 20%). It is not possible to know whether this high level of service provision and use is generalisable to other contexts.

## Study funding/potential competing interests

The study was funded by the Health Foundation. All researchers in the study were independent of the funding body and declare no competing interests.

## Trial registration number

ISRCTN 20496110

## FREQUENCY AND SEVERITY OF SELF HARM OVER FOLLOW-UP PERIOD

	0-6 months		6-12 months	
	Routine care	Group therapy	Routine care	Group therapy
<b>Frequency</b>				
n	n=181	n=181	n=180	n=179
Approximate geometric mean number of self harm events	4.4	4.6	2.1	2.0
Proportional odds ratio* (95%CI), P	0.99 (0.68 to 1.44), P=0.95		0.88 (0.59 to 1.30), P=0.52	
Ratio of number of self harm events† (95% CI), P	1.01(0.80 to 1.29), P=0.91		0.94 (0.73 to 1.18), P= 0.60	
<b>Severity</b>				
n	n=181	n=181	n=180	n=178
Proportional odds ratio* (95%CI), P	0.81(0.54 to 1.20), P=0.29		0.94 (0.63 to 1.40), P=0.75	

\*Adjusted proportional odds ratio of group therapy compared with routine care. Values below 1 represent a less adverse outcome for group therapy compared with routine care.

†Adjusted ratio of geometric mean numbers of events for group therapy compared with routine care. Values below 1 represent a less adverse outcome for group therapy compared with routine care.

# Place of medical qualification and outcomes of UK General Medical Council “fitness to practise” process: cohort study

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## EDITORIAL by Nunez-Smith

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## STUDY QUESTION

Is country of medical qualification associated with “higher impact” decisions at different stages of the UK General Medical Council’s (GMC’s) “fitness to practise” process after allowance for other characteristics of doctors and inquiries.

## SUMMARY ANSWER

Inquiries to the GMC concerning doctors qualified outside the UK are more likely to be associated with higher impact decisions at each stage of the fitness to practise process.

## WHAT IS KNOWN AND WHAT THIS PAPER ADDS

Doctors who qualified outside the UK have been shown to be over-represented, compared with UK qualified doctors, at later stages of the fitness to practise process, but this might be explained by confounding. Non-UK qualified doctors are more likely to receive “high impact” decisions at each stage of the fitness to practise process, and this association is not explained by other measured complaint related and doctor related characteristics.

## Participants and setting

Analyses included 7526 enquiries made to the GMC concerning 6954 doctors between 1 April 2006 and 31 March 2008.

## Design, size, and duration

We analysed the progression of enquiries through the GMC process as a cohort study. We analysed outcomes at three stages: initial triage, investigation, and adjudication. At each stage, we evaluated the proportion of enquiries resulting in “high impact” outcomes in relation to country of primary medical qualification.

## Main results and the role of chance

Among 7526 inquiries, 4702 doctors had qualified in the UK, 624 had qualified elsewhere in the European Union (EU), and 2190 had qualified outside the EU. At the initial triage, 30% of inquiries concerning UK qualified doctors had a high impact decision compared with 43% for doctors who qualified elsewhere in the EU and 46% for non-EU qualified doctors. The adjusted relative odds of an inquiry being referred for further investigation were 1.67 (95% confidence interval 1.28 to 2.17) for EU qualified doctors and 1.61 (1.38 to 1.88) for doctors qualified outside the EU, compared with UK qualified doctors. At the investigation stage, 5% of inquiries received concerning UK qualified doctors were referred for adjudication, compared with 10% for EU or non-EU qualified doctors. The adjusted relative odds of referral for adjudication were 2.14 (1.46 to 3.16) and 1.68 (1.31 to 2.16). At the adjudication stage, 1% of inquiries received concerning UK qualified doctors led to erasure or suspension, compared with 4% for EU qualified doctors and 3% for non-EU qualified doctors. The adjusted relative odds of erasure or suspension were 2.16 (1.22 to 3.80) and 1.48 (1.00 to 2.19).

## Bias, confounding, and other reasons for caution

The data were routinely collected by the GMC. Missing and misclassified values could generally result in bias towards a null result. However, unmeasured or misclassified confounders might explain residual bias towards a positive result. At the time of analysis, no final decision had been reached for 400 inquiries. The number of events available for analysis at the adjudication stage was small.

## Generalisability to other populations

The study was set in the UK in 2006-8, and the findings might not hold in other times and places.

## Study funding/potential competing interests

The study was funded by the Economic and Social Research Council (RES-153-25-0101) through the ESRC Public Services Programme Third Call.

## OUTCOME OF THREE STAGES OF FITNESS TO PRACTISE PROCESS BY PLACE OF QUALIFICATION

Stage of process	Total	Low impact outcome (%)	Intermediate impact outcome (%)	High impact outcome (%)	No decision yet	Adjusted odds ratio* (95% CI)	P value
Outcome of initial triage†:							
UK qualified	4702	1484 (32)	1820 (39)	1398 (30)		Reference	
Rest of EU qualified	624	180 (29)	177 (28)	267 (43)		1.67 (1.28 to 2.17)	<0.001
Outside EU qualified	2190	521 (24)	671 (31)	998 (46)		1.61 (1.38 to 1.88)	<0.001
Outcome of investigation†‡:							
UK qualified	4702	4174 (89)	219 (5)	228 (5)	81 (2)	Reference	
Rest of EU qualified	624	496 (79)	39 (6)	63 (10)	26 (4)	2.14 (1.46 to 3.16)	<0.001
Outside EU qualified	2190	1734 (79)	143 (7)	221 (10)	92 (4)	1.68 (1.31 to 2.16)	<0.001
Outcome of adjudication†§:							
UK qualified	4702	4522 (96)	29 (1)	69 (1)	82 (2)	Reference	
Rest of EU qualified	624	571 (92)	6 (1)	24 (4)	23 (4)	2.16 (1.22 to 3.80)	0.008
Outside EU qualified	2190	2007 (92)	16 (1)	71 (3)	96 (4)	1.48 (1.00 to 2.19)	0.049

\*Adjusted relative odds of high impact outcome rather than low impact outcome adjusted for sex, years since primary medical qualification, medical specialty, source of inquiry, type of inquiry, and content of allegations (allegation type was not included at triage stage).