PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	"Shouting from the roof tops": a qualitative study of how children with leukaemia are diagnosed in primary care
AUTHORS	Clarke, Rachel; Jones, Caroline; Mitchell, Christopher; Thompson, Matthew

VERSION 1 - REVIEW

REVIEWER	Sophie Wilne Nottingham Children's Hospital and University of Nottingham, UK
REVIEW RETURNED	31-Dec-2013

GENERAL COMMENTS	This is an a very well written paper which presents a new perspective on the challenges of diagnosing rare conditions in primary care. The flow chart in figure 1 provides an excellent summary and would be generalisable to many other conditions. The ethics reveiw is not detailed and should be added and there is an additional inverted comma on page 5 at line 24.

REVIEWER	Vishal Sondhi Armed Forces Medical College, Pune Maharashtra India
REVIEW RETURNED	08-Jan-2014

GENERAL COMMENTS	Firstly, I would like to congratulate the authors for choosing this research question. We usually are keener to discuss the things at a molecular level and miss the macroscopic view and the overall picture that can influence the outcome of the disease. The gap between the onset of the disease and the first medical contact for a leukemic symptom and the diagnosis of leukemia can have a significant impact on disease outcome. Hence, the research question is valid and pertinent. However, I have a few suggestions for the authors: **Introduction** 1. The Introduction is all important. You have to justify why this paper is needed. You have done that to some extent, but it would be better if you re-write the last paragraph of Introduction. For example, the sentences " Leukemia is the most common………represents a major…….. illnesses" can come at the start of paragraph and then in continuity you can explain that there is scope of

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	improvement……and hence we undertook this study. **Methodology** 2. Pg6 Line 19: Recruitment was stopped…. 'Was' is missing **Results** Though this is a qualitative study, but some quantification of following may be useful: 3. Was there any difference between the younger and older children. Example between those <2 years, 3-6 years, and so on. Because the GPs may find it more difficult to examine infants than an adolescent. 4. In table 2 if possible, the authors may include the percentages of pre-hospital signs and symptoms. This may help to relook at our so called red flags. **Discussion** 5. The discussion is too lengthy and repetitive at places.

VERSION 1 – AUTHOR RESPONSE

Reviewer 1: Sophie Wilne

This is an a very well written paper which presents a new perspective on the challenges of diagnosing rare conditions in primary care. The flow chart in figure 1 provides an excellent summary and would be generalisable to many other conditions. The ethics reveiw is not detailed and should be added and there is an additional inverted comma on page 5 at line 24.

• Ethics review now included in main body text

• Inverted comma now replaced with a comma

Reviewer 2: Vishal Sondhi

Firstly, I would like to congratulate the authors for choosing this research question. We usually are keener to discuss the things at a molecular level and miss the macroscopic view and the overall picture that can influence the outcome of the disease. The gap between the onset of the disease and the first medical contact for a leukemic symptom and the diagnosis of leukemia can have a significant impact on disease outcome. Hence, the research question is valid and pertinent. However, I have a few suggestions for the authors:

Introduction
1. The Introduction is all important. You have to justify why this paper is needed. You have done that to some extent, but it would be better if you re-write the last paragraph of Introduction. For example, the sentences " Leukemia is the most common………represents a major…….. illnesses" can come at the start of paragraph and then in continuity you can explain that there is scope of improvement……and hence we undertook this study.

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• Thank you for the suggestion to improve the final paragraph of the Introduction. We have edited it accordingly. We prefer not to open this paragraph with facts about leukaemia, however, because in its current structure the paragraph is a logical continuation of the preceding paragraph – i.e. we have just set out an important clinical problem, and now we are spelling out exactly how this paper aims to address this. We have therefore left the facts about leukaemia contextualised as was.

Methodology
2. Pg6 Line 19: Recruitment was stopped…. 'Was' is missing

• 'Was' now inserted

Results
Though this is a qualitative study, but some quantification of following may be useful:
3. Was there any difference between the younger and older children. Example between those <2 years, 3-6 years, and so on. Because the GPs may find it more difficult to examine infants than an adolescent.

• This is an important point. The small purposive sample prevents us from being able to draw direct comparisons between age groups, and participants themselves did not comment on differences between ages because the vast majority had experience of only 1 child being diagnosed with leukaemia.

• However, several GPs did mention the difficulties of palpating the abdomens of young children, as mentioned at the end of section 3 of the results "Doctors' assessment of children". No other age-related differences emerged during the analysis.

4. In table 2 if possible, the authors may include the percentages of pre-hospital signs and symptoms. This may help to relook at our so called red flags.

• It would be inappropriate to quantify qualitative data in this way because parents were not systematically asked to agree or disagree with the presence of a predefined list of signs and symptoms, and also this was a small scale, purposive sample, chseon to represent as broad a range of views and epxirences as possible (Re: Greenhalgh and Taylor. Papers that go beyond numbers. BMJ 1997.)

Discussion
5. The discussion is too lengthy and repetitive at places.

• Thank you for encouraging us to make the discussion more concise. We have trimmed the overall length of the discussion by ~100 words in order to tighten it up and eliminate any repetition.

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