Reviewer's report

Title: Multiple Causes for Delay in Arrival at Hospital in Acute Stroke Patients in Aydin, Turkey

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Reviewer: Julie J Zerwic

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General

This study was conducted in an area of rural Turkey and assessed the level of pre-hospital delay and reasons for delay in patients experiencing acute stroke symptoms. Although this problem has been investigated in the United States and other Western countries, this is the first study to examine the problem in Turkey.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

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1 The context of this article is Turkey which is the interesting feature of the manuscript. The authors should review literature that is relevant to this context. For example a description of the health care situation would be warranted. The authors should compare and contrast their findings in light of the location of this study. Where would the results be expected to differ from what is known in Western countries and where might findings be similar? A convincing case should be made as to the contribution that this study makes that is beyond that which is already known.

1 There is very little background provided about what is known about the factors that have been shown to impact patient delay. For example, the authors state socioeconomic status has been implicated but it is not clear what aspect of socioeconomic status is being considered or how this impacts delay (increase or decrease).

2 2 5 The reasons for the low participation rate (32%) have not been provided. What were inclusion/exclusion criteria?

3 2 How was validity and reliability of the measure assessed?

4 1 2 Why was 3 hours chosen? Given that patients need to be in the hospital and have the CT scan completed within three hours (for reperfusion therapy) it would seem more meaningful to choose a 2 hour timeframe.

4 1 3 In most other studies it has been impossible to obtain symptom onset time from all subjects. Usually some individuals (and family members) are not able to approximate this time. Generally they will fall into the long delay category. If this was the case this issue should be clearly described.
For the purpose of qualifying for therapy the last known time free of symptoms is used as onset time which would be when subject went to bed. What was the reason for choosing awakening time?

It is not clear why symptoms were grouped. Some have multiple symptoms and others are single symptoms so it is not possible to compare the % across these groups to determine the frequency of the most common symptoms.

This is a confusing sentence. Are the authors only referring to the >3 hour delay group? Or should the sentence be revised to indicate the most common reason patients stated for delay was…

…between length of time and what……

Actual % is not provided.

Use the label Discussion to separate from Results.

It is not clear the sentence about the AHA statement. What did they say did not have an ongoing study? Given this is a concensus statement focusing on both AMI and stroke a summary of relevant conclusions could be provided probably in the Background section.

Why do the authors believe that subjects over reported risk factors? Is there evidence to suggest this is not the level usually seen?. Generally researchers are concerned about under reporting.

The authors seem to imply that knowledge about stroke risk factors was assessed. However the authors just asked subjects if they had hypertension, diabetes, smoking etc. This does not mean that the subject knew that these were stroke risk factors. They might just know that they had hypertension for example.

The conclusion section was really not a conclusion but rather a summary.

Table 1. What is educated vs. uneducated? How was this assessed? What do the categories under occupation mean? Does social security equate to health insurance?

Table 3 It seems like the %s should total 100% in the vertical column as opposed to the horizontal column. For example, within < 3 hours what % were female and what % male?

There are a number of grammatical issues that should be corrected.

It was not clear who “these groups” refers to.

Provide percents wherever a n is listed, for example eight one (XX%)

Change all the references to Aydin study to this study.
Discretionary Revisions (which the author can choose to ignore)

**What next?:** Reject because too small an advance to publish

**Level of interest:** An article of limited interest

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare I have no competing interests.