Patient delay prior to care-seeking in acute myocardial infarction during the outbreak of the coronavirus SARS-CoV2 pandemic

Matthias Lidin¹,²*, Patrik Lyngå³, Annika Kinch-Westerdahl⁴, and Carolin Nymark⁵

¹Department of Medicine Solna, Karolinska Institutet, Stockholm, Sweden; ²Heart, Vascular and Neuro Theme, Department of Cardiology, Karolinska University Hospital, Stockholm, Sweden; ³Department of Clinical Science and Education and Department of Cardiology, Karolinska Institutet, Södersjukhuset, Stockholm, Sweden; ⁴Department of Clinical Science, Karolinska Institutet, Danderyd Hospital, Stockholm, Sweden; and ⁵Department of Neurobiology, Karolinska Institutet, Care sciences and Society, Division of Nursing Stockholm, Sweden

Aims
To examine patient delay in seeking medical care when afflicted by an acute myocardial infarction during March–June 2020.

Methods and results
This was a cross-sectional study in a region in Sweden during the first wave of the COVID-19 pandemic examining patients selected from the national registry (SWEDEHEART). Eligible patients were those with acute myocardial infarction, and a total of 602 patients were invited. A self-administered psychometric evaluated questionnaire, ‘Patients’ appraisal, emotions, and action tendencies preceding care-seeking in acute myocardial infarction’ (AMI), was sent to the patients, and questions regarding COVID-19 were added. A total of 326 patients answered the questionnaire. Of these, 19% hesitated to seek medical care because of the pandemic, which was related to a fear that the healthcare services were already overcrowded with patients with COVID-19, followed by a fear of becoming infected with COVID-19 in hospital. Characteristics of this cohort were significantly higher prevalences of women, immigrants, smokers, and patients with type 2 diabetes.

Conclusions
During the outbreak and first wave of the COVID-19 pandemic, women and immigrants delayed seeking medical care for AMI because of fears about overcrowded hospitals and about becoming infected themselves. Therefore, during the COVID-19 pandemic, it is especially important to convey information about how and when to seek medical care. A collaboration involving the healthcare professionals, patient organizations, and the media would be desirable.

Keywords
Acute myocardial infarction • Patient delay • COVID-19 • Symptoms

Implications for practice
• The general public must be encouraged to seek medical care when perceiving symptoms of an AMI, despite the ongoing COVID-19 pandemic.
• Health care professionals must be aware that fear of acquiring the COVID-19 virus in hospital may be the main reason for not seeking medical care in time, during the ongoing pandemic.
• There is a need for collaboration among healthcare professionals, media, and patient organizations to increase understanding of the need to seek medical care without delay when presenting with AMI symptoms during the ongoing pandemic.
### Introduction

Acute myocardial infarction (AMI) is the most common premature cause of death in the Western world. The majority of AMI-related deaths occur in the first hours after symptom debut and 80% of deaths outside hospital are related to a first cardiac event. Delay in seeking treatment for AMI reduces the success rate of reperfusion therapy and affects both morbidity and mortality. One reason could be patient delay i.e. the time between symptom onset and first medical contact, as patient delay still is protracted with a median delay of 2–4 h. The experience of symptoms is an important factor contributing to a prolonged delay, together with patients’ behaviour and coping strategies. Additionally, patients’ emotional response related to symptoms such as fear and anxiety, together with other processes such as a feeling of losing control over the situation and being unable to act on symptoms, contributes to the prolonged delay in seeking medical care when afflicted by an AMI.

During the first wave of the new coronavirus SARS-CoV2 (COVID-19) outbreak, there was a decline in admissions of patients with cardiovascular disease (CVD), as well as in patients suffering from stroke or cancer. A 25–48% reduction in the number of STEMI patients was reported in European and US registries. These results are in line with the perceptions of health professionals who reported a decrease in the number of STEMI patients as well as an increase in patient delay at hospitals across six continents during the pandemic. In Sweden as of 14th May 2020, more than 3300 people had died from COVID-19. Of these, 51% were diagnosed with CVD and 78% were diagnosed with hypertension, similar to other European countries.

The COVID-19 disease was the dominant news in media, such as television and newspapers but also in social medias. The media was playing an important role in the dissemination of information while at the same time being a major source of concern and stress in the population, partly due to many cases of COVID-19 deaths and overcrowded hospitals. One-third of the general public has reported increased psychological distress during the pandemic. Female gender, a history of stressful situations that previously caused anxiety and depression, previous medical problems, or having an infected family member or other acquaintances were associated with an increased risk of developing anxiety, depression, and stress.

Fear of the coronavirus in general and fear of acquiring the coronavirus have been suggested as reasons for not seeking medical care in patients with AMI. Previous studies have evaluated fear of the COVID-19 virus, and a study examining fear in patients with CVD compared to the general population, proposes higher scores for fear in patients with CVD.

There is a knowledge gap related to patient delay and its reasons during the outbreak and the first wave of the pandemic that needs to be investigated. Therefore, the aim of this study was to examine patient delay in seeking medical care when afflicted by an AMI during the outbreak and first wave of the ongoing COVID-19 pandemic.

### Methods

#### Study design and participants

This was a cross-sectional study examining patients selected from the Swedish national registry (SWEDEHEART). All patients hospitalized for acute coronary syndromes in the region of Stockholm, Sweden during the first wave of the COVID-19 pandemic (March–June 2020) were eligible. All patients identified with the diagnosis of an AMI were selected, with no exclusion criteria.

A psychometrically evaluated questionnaire entitled ‘Patients’ appraisal, emotions and action tendencies preceding care-seeking in acute myocardial infarction’ (PA-AMI) was sent to the patients by mail, along with additional questions regarding COVID-19. The patients were invited to participate between the 5th of October and the 29th of October 2020. Two weeks after the first invitation, a final reminder was sent by mail.

#### Questionnaire data

**Patients’ appraisal, emotions, and action tendencies preceding care-seeking in acute myocardial infarction (PA-AMI)**

This psychometrically evaluated questionnaire is self-administered. The questions target the specific situation of being afflicted by an AMI and more generic reflections. The first part includes 14 items regarding patients’ thoughts, feelings, and actions prior to care-seeking, and consists of two subscales: subscale 1 ‘symptom appraisal’, dealing with the perceived serious of the symptoms and the urgency of the need to seek medical care (10 items), and subscale 2 ‘perceived inability to act’, dealing with the perceived loss of control and ability to act (4 items). All items are answered on a Likert-type rating scale with six grades from 1 ‘do not agree at all’ to 6 ‘totally agree’. In addition, there are questions about age, sex, country of birth, cohabiting status, and educational level. Also, the PA-AMI includes questions about when symptoms started and when subjects decided to seek medical care, the reasons for seeking medical care (open question), if they contacted the healthcare service before seeking medical care and reasons for doing so.

**COVID-19 questions**

The questions were designed for the present study by the first and last authors. The main questions were: ‘Would you have sought medical care earlier if the COVID-19 pandemic had not occurred?’ The answering options were dichotomized to ‘yes’ or ‘no’. If answering ‘yes’ the subsequent question was ‘If yes, why did you not seek medical care?’, with four following queries about reasons for delay due to COVID-19, such as fear about becoming infected, as well as thoughts about an overcrowded health care system (Figure 1). The answers were dichotomized to ‘yes’ or ‘no’. In addition, there was an open question regarding other reasons for not seeking medical care.

During the development of the questions, they were discussed with other registered specialist nurses and medical doctors within cardiac care. The questions were then scrutinized until consensus was reached between the responsible authors.

#### Registry data—SWEDEHEART

SWEDEHEART has a median coverage of almost 96% in patients younger than 80 years. The following variables were obtained from SWEDEHEART for each participant: type of AMI, history of AMI, history of type 2 diabetes, hypertension, body mass index, smoking habits, history...
of percutaneous coronary intervention, date and time of first symptoms, and arrival at the hospital.

**Ethical considerations**
The study followed the principles outlined in the 1964 Declaration of Helsinki and was approved by the Swedish Ethical Review Authority (2020-03785). The patients received written information about the study. A signed informed consent was obtained from each participant.

**Statistical analysis**
Categorical variables are presented as frequencies and percentages. Continuous variables are presented as medians and interquartile ranges (IQR). Pearson’s $\chi^2$ analysis was used to compare demographic and clinical characteristics in the total group and between groups answering yes or no to the COVID-19 question.

**Patient delay**
Patient delay was calculated on the patient-assessed delay times i.e. the time between the first symptom (date, hours, and minutes) and the decision to seek medical care (date, hours, and minutes). Delay times of 24 h or more were set as 24 h. The Wilcoxon signed ranks test was used to explore differences between patient-assessed delay times and delay times registered in SWEDEHEART, i.e., the date and time of the first medical symptom and of arrival at the hospital/ward/lab.

**Comparison between groups answering yes or no to the COVID-19 question**
Pearson’s $\chi^2$ test was used to examine differences between the groups answering yes or no to the question ‘Would you have sought medical care earlier if the COVID-19 pandemic had not occurred?’

An independent samples median test was used to explore differences between delay times.

There were patients who did not answer the question at all. These patients were treated as ‘missing data’ and were not included in the analysis.

**Logistic regression**
An unadjusted multivariate logistic regression analysis was used to verify associations between items in the PA-AMI and those who answered yes regarding seeking medical care earlier if the pandemic COVID-19 had not occurred. The answering options were classified dichotomously where the answering options 1 (‘Do not agree at all’), 2, and 3 were treated as ‘Do not agree’, and the answering options 4, 5, and 6 (‘Totally agree’) as ‘agree’. Results are reported as odds ratio (OR) and with 95% confidence intervals (CI).

As a second step, a multivariate regression adjusted for the baseline characteristics was performed.

A $P$-value <0.05 was considered statistically significant. The statistical software used was IBM SPSS Statistics version 25 (IBM, US, 2017).

**Results**
A total of 326 patients answered the questionnaire, yielding a response rate of 54%. Patients’ characteristics are shown in Table 1. There was no statistical significance between the patient-assessed delay times and the delay times registered in SWEDEHEART ($P = 0.113$).

The patient-assessed median delay time in the total group was 2.5 h (range 0–24 h) with a mean of 10.1 h. Patients with NSTEMI had a longer delay, with a median delay of 7.0 h vs. STEMI 1.5 h.

As the assessed median delay was 2.5 h, this was set as a cut-off in further analysis. Patients with a delay of 2.5 h or more were mostly afflicted by an NSTEMI (86%), with a median delay of 24 h.

**Comparison between groups answering yes or no to the COVID-19 question**
A total of 289 patients answered the question ‘Would you have sought medical care earlier if the COVID-19 pandemic had not occurred?’

There were 54 patients who answered yes, which represents 19% within the group. Patient characteristics are shown in Table 2.
Reasons for not seeking medical care when answering yes regarding the COVID-19 question are shown in Figure 1. The patients mainly hesitated due to a fear that the healthcare service was already overcrowded with patients with COVID-19 (59%), followed by fear of becoming infected by COVID-19 in the hospital (46%).

There were significantly more women answering yes, i.e. the ‘yes COVID group’ (yes-CQG) compared to the group answering no, i.e. the ‘no COVID group’ (no-CQG), 37% vs. 23% (P = 0.03), regarding seeking medical care earlier if the pandemic had not occurred. A higher prevalence of immigrants (43% vs. 25% P = 0.01) was found in the yes-CQG.

Patient-assessed delay
The median patient-assessed delay differed significantly between the group of patients answering yes-CQG or no-CQG, 22 vs. 3.0 h (P = 0.01).

Logistic regression
A logistic regression was performed to analyse associations between participants answering yes regarding seeking medical care earlier if the pandemic COVID-19 had not occurred (n = 54) and the PA-AMI questions, presented in Table 3.

Items significantly associated with the yes-QCG were “taking a long time to realize the seriousness of the symptoms”; OR 3.43 (CI

| Table 1  | Patient characteristics |
|----------|-------------------------|
| **Characteristics** | **(n = 326)** |
| Demographics | |
| Age (years) | Median (IQR) 70 (62–77) |
| Range | 40–95 |
| Sex | Male 245 (75.2) |
| Female | 81 (24.8) |
| Immigrant | 96 (29.4) |
| Education (upper secondary school or higher) | 221 (67.8) |
| Cohabitant | 215 (66.0) |
| Risk factors | |
| Type 2 Diabetes | 66 (20.2) |
| Hypertension | 203 (62.3) |
| Body mass index (median IQR) | 26.0 (23.8–29.0) |
| Current smoker | 53 (16.3) |
| History of Previous AMI | 65 (19.9) |
| Type of AMI this admission | |
| STEMI | 108 (33.1) |
| NSTEMI | 214 (65.6) |
| Not infarction | 3 (0.9) |
| Missing | 1 (0.3) |
| Patient delay | NS |
| Patient-assessed delay (h; median (IQR)) | 2.5 (0.4–24) |
| Registry-assessed delay (SWEDEHEART) (h; median (IQR)) | 4.0 (1.7–16.0) |

| Table 2  | Patient responses to ‘Would you have sought medical care earlier if the COVID-19 pandemic had not occurred?’ by sample characteristics |
|----------|----------------------------------------------------------------------------------|
| Would you have sought medical care earlier if the COVID-19 pandemic had not occurred? | **Yes** (n = 54) | **No** (n = 236) | **P-value** |
| n | n (%) | n | n (%) |
| Demographics | |
| Age (years) | |
| Median (IQR) | 71 (62–75) | 69 (62–76) | 0.55 |
| Range | 49–90 | 40–95 |
| Sex | |
| Male | 34 (63) | 182 (77) | 0.03 |
| Female | 20 (37) | 53 (23) |
| Immigrant | 23 (43) | 59 (25) | 0.01 |
| Education (post-secondary school and higher) | 24 (44) | 103 (44) | 0.95 |
| Cohabitant | 35 (66) | 158 (70) | 0.61 |
| Risk factors | |
| Type 2 Diabetes | 17 (32) | 41 (17) | 0.03 |
| Hypertension | 33 (61) | 145 (62) | 0.94 |
| Body mass index (median IQR) | 27 (24–30) | 26 (24–29) | 0.08 |
| Current smoker | 17 (32) | 35 (15) | 0.03 |
| History of Previous AMI | 14 (26) | 42 (18) | 0.18 |
| Type of AMI this admission | |
| STEMI | 15 (28) | 81 (35) | 0.49 |
| NSTEMI | 39 (72) | 152 (65) |
| Missing | 1 (0.4) |
| Patient delay | |
| Patient-assessed delay (h; median (IQR)) | 22 (1.3–24.0) | 3.0 (0.5–24) | 0.01 |
| Registry-assessed delay (SWEDEHEART) (h; median (IQR)) | 4.5 (2.2–21.0) | 4.1 (1.6–15.4) | 0.86 |
The aim of the study was to examine delay in patients seeking medical care when afflicted by an AMI during the outbreak and the first wave of the ongoing COVID-19 pandemic. A total of 326 patients diagnosed with AMI in the period March–June 2020 answered the questionnaire, yielding a response rate of 54%. As many as 19% reported a delay because of the pandemic. The main reason for not seeking medical care was a belief that the health care system was already overloaded with patients with COVID-19 (59%) followed by a fear of becoming infected by COVID-19 at the hospital (46%). This result was in line with other studies and might be explained by patients underestimating their symptoms of AMI and not promptly seeking medical care. Moreover, this study showed a significantly higher prevalence in the yes-CQG regarding patients with the risk factors of being smokers and having type 2 diabetes. These risk factors are well-known in patients with CVD as well as in patients with a prolonged delay during the pandemic outbreak, when there was uncertainty about how to treat patients with COVID-19, there were daily reports that the elderly and those with risk factors should be careful and obey the restrictions. We can only speculate on the importance of this public information and the impact it had on the delay in seeking medical care for persons with these risk factors and afflicted by an AMI, and how it combined with fear of overcrowded hospitals and becoming infected themselves.

There were lower rates of hospitalization for patients with AMI during the pandemic outbreak, yet the number of patients not seeking medical care for an AMI at all, and their reasons, are unknown. During the pandemic outbreak, the media in general reported daily about hospitals preparing for and taking care of patients with COVID-19, which might have contributed to the patients’ perception of an overcrowded ward situation. There were reports about the intensive care units being overloaded with patients and there was a public awareness of how hospitals were overburdened. But in fact, the decline in the number of patients with AMI led to empty beds in cardiac units during the outbreak of COVID-19 and the assessed nurse-to-patient ratio was reported to be the same as before the pandemic. Therefore, the general public must be informed that when seeking medical care for an AMI, the availability of in-hospital care is separate from the availability of care in intensive care units. The intensive coronary care units had more capacity during the outbreak and first wave of COVID-19 than the intensive care units. For the general public, it may have been difficult to differentiate between the two types of care units.

In Sweden, during the outbreak and first wave of the pandemic (March–June 2020), a higher trend of mortality due to the coronavirus was observed in immigrants and especially in elderly men. An important factor observed in the present study was the higher prevalence of immigrants in the yes-CQG, and this, to our knowledge, has not been shown in studies before. Also, women were more highly represented in this group, and when adjusting for immigrant status and sex in the regression analysis, the results of the PA-AMI questions regarding symptom perception, symptom appraisal, and ability to act on the symptoms due to seeking medical care were important. For immigrants, language barriers, and lack of information in the native language could be possible reasons for not seeking medical care.

### Table 3
Associations between participants answering yes regarding seeking medical care earlier if the pandemic COVID-19 had not occurred (n = 54) and PA-AMI questions

| Question                                                                 | OR (95% CI)     | P-value |
|-------------------------------------------------------------------------|-----------------|---------|
| It took me a long time to realize that the symptoms were serious         | 3.43 (1.77–6.64)| 0.00    |
| I thought the symptoms would pass                                       | 1.99 (1.10–3.78)| 0.04    |
| I tried to divert my thoughts from the symptoms/discomfort               | 2.11 (1.15–3.88)| 0.02    |
| I tried different ways to reduce my symptoms (e.g. medication, eating, resting) | 1.97 (1.08–3.62)| 0.03    |
| I thought the symptoms were caused by something else than a heart attack | 1.36 (0.72–2.56)| NS      |
| It felt as if I had lost control over myself when I got my symptoms     | 1.42 (0.75–2.69)| NS      |
| I did not know what to do when I got my symptoms                         | 1.65 (0.9–3.03) | NS      |
| My symptoms paralysed me                                                | 1.05 (0.53–2.08)| NS      |
| I lost all power to act when my symptoms began                           | 1.05 (0.57–1.93)| NS      |
| I did not think my symptoms were serious enough to seek emergency care   | 2.05 (1.12–3.75)| 0.02    |
| It was difficult to decide to seek care for my symptoms                  | 2.11 (1.45–3.86)| 0.02    |
| I felt unsure where to turn to about my symptoms                         | 1.82 (0.90–3.69)| 0.03    |
| At first, I did not want to seek care                                    | 1.46 (0.80–2.67)| NS      |
| It took time to decide what to do when I got ill                         | 1.60 (0.87–2.97)| NS      |

1.77–6.64%), duration of symptoms; OR 1.99 (CI 1.10–3.78%), symptom perception such as ‘interpreting symptoms as serious enough to seek emergency care’; OR 2.05 (CI 1.12–3.75%), ‘difficult to decide to seek medical care due to the symptoms’; OR 2.11 (CI 1.45–3.86%) and ‘uncertainty about where to turn about the AMI symptoms’; OR 1.82 (CI 0.90–3.69%). Furthermore, a multivariable logistic regression was performed adjusted for predictor variables, i.e. background characteristics. When adjusting for sex (women) and immigrants (yes), there was a significant association between all the PA-AMI questions and the yes-CQG (Appendix Table A1). All other predictor variables were non-significant.

### Patient delay prior to care-seeking

- OR (95% CI) | P-value
- 3.43 (1.77–6.64) | 0.00
- 1.99 (1.10–3.78) | 0.04
- 2.11 (1.15–3.88) | 0.02
- 1.97 (1.08–3.62) | 0.03
- 1.36 (0.72–2.56) | NS
- 1.42 (0.75–2.69) | NS
- 1.65 (0.9–3.03) | NS
- 1.05 (0.53–2.08) | NS
- 1.05 (0.57–1.93) | NS
- 2.05 (1.12–3.75) | 0.02
- 2.11 (1.45–3.86) | 0.02
- 1.82 (0.90–3.69) | 0.03
- 1.46 (0.80–2.67) | NS
- 1.60 (0.87–2.97) | NS
Studies have shown that lack of social support due to language barriers plays an important role in risk for AMI and survival.\textsuperscript{45}

Furthermore, the patients in the yes-CQG had a prolonged delay time for seeking medical care, which could be explained by the higher prevalence of NSTEMI in the yes-CQG. In a former study that used the PA-AMI questionnaire in patients afflicted by an AMI, low perceived symptom severity, the urgency of seeking medical care, and loss of control and ability to act, were reasons for the extended patient delay,\textsuperscript{8} and low perceived symptom severity is seen in other studies as well.\textsuperscript{46} The same observation was made in this study and was associated with the yes-CQG. Taking a long time to realize that the symptoms were serious, and thoughts that the symptoms would pass, could be explained by misinterpreting the symptoms as symptoms of COVID-19 where e.g. dyspnoea and fatigue have been reported as some of the main symptoms.\textsuperscript{37} However, further analysis regarding subgroups is needed to gain a deeper understanding of our findings. To probe more deeply into patients’ perceptions of medical care-seeking when afflicted by an AMI and the impact of COVID-19, a qualitative interview study is ongoing with patients selected from this cohort.

In the present study, the patient-assessed delay and the delay in SWEDHEART differ and there was a considerably longer patient-assessed delay in the yes-CQG compared to the registry-assessed delay. This could not be explained by the different measures between SWEDHEART and patient-assessed delay as SWEDHEART measures a longer patient delay, i.e. the time from first symptoms to arrival at the hospital, compared to the patient-assessed delay, which is the time from first symptoms to the decision to seek medical care. One reason could be that patients answered the questionnaire retrospectively and reconsidered when they became ill and the symptoms began. Hence, our data suggest that when interpreting the first patient-reported delay there should be a consideration that this delay might be underestimated by the health care professional and therefore, a careful assessment of patient delay should be made, as delay might matter when considering medical treatment in the acute phase in hospital.\textsuperscript{43}

**Limitation s**

The present study has several limitations; for example, it did not include patients who never sought medical care for their AMI or that died before reaching the hospital. It also did not take account of patients with language barriers and/or other reasons for not being able to answer the questionnaire, or those invited to take part in the study but chose not to reply. However, all patients within the study period of March–June 2020 who were hospitalized with a confirmed AMI were identified, and 54% of the total cohort chose to answer the questionnaire, which is considered a sufficient coverage of participants.\textsuperscript{46} Yet, an increase in response rate could further have determined our results.

There is a risk of recall bias when answering the PA-AMI questionnaire and the COVID-19 questions retrospectively. Still, for most of the patients, an AMI is a life-changing event, possibly increasing the chance of remembering. Moreover, there are no standardized methods for establishing symptom onset, so health care professionals may ask diverse questions and/or reach different conclusions after interviewing the patient. Yet there is a need for a consistent, reliable method to assess the time of symptom onset.\textsuperscript{49} However, in the PA-AMI questionnaire, all patients answered the same standardized questions about patient-assessed delay.

The COVID-19 questions used for investigating fear of COVID-19 and seeking medical care due to an AMI have not been psychometrically evaluated. The study was conducted during the first outbreak of COVID-19 and no psychometrically evaluated questionnaires were available at the time. However, other registered nurses and medical doctors within the field were asked about the questions to reach face validity.

All the patients in this study were from the Stockholm area (Sweden), and at the time of the pandemic outbreak, Stockholm had the highest prevalence of infected persons as well as the highest decline in patients with an AMI.\textsuperscript{33} If the study had been done in another part of the country it could possibly have influenced the outcome. The study had a small sample in the yes-QCG and a power calculation was not conducted.

**Conclusion**

During the outbreak and first wave of the COVID-19 pandemic, women, immigrants, and patients with risk factors such as type 2 diabetes and smoking, delayed seeking medical care for AMI because of a fear about overcrowded hospitals and about becoming infected themselves. Therefore, during the COVID-19 pandemic, it is especially important to convey and provide information about how and when to seek medical care. A collaboration involving the healthcare system, patient organizations, and the media would be desirable.

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**Data availability**

Due to the study’s ethical consent data are not available for sharing.

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Appendix Table A1  Adjusted correlations between participants answering yes regarding seeking medical care earlier if the pandemic COVID-19 had not occurred (n = 54) and the PA-AMI questions

|                                | Sex (female) | Immigrant (yes) |
|--------------------------------|--------------|------------------|
|                                | OR (95% CI)  | P-value          | OR (95% CI)  | P-value          |
| It took me a long time to realize that the symptoms were serious | 2.43 (1.22–4.84) | 0.011           | 2.63 (1.34–5.16) | 0.005          |
| I thought the symptoms would pass | 2.56 (1.30–5.10) | 0.007           | 2.52 (1.30–4.88) | 0.006          |
| I tried to divert my thoughts from the symptoms/discomfort | 2.67 (1.35–5.36) | 0.005           | 2.93 (1.21–7.41) | 0.012          |
| I tried different ways to reduce my symptoms (e.g. medication, eating, resting) | 2.27 (1.13–4.54) | 0.021           | 2.53 (1.30–5.94) | 0.006          |
| I thought the symptoms were caused by something else than a heart attack | 2.80 (1.41–5.55) | 0.003           | 2.60 (1.34–5.05) | 0.005          |
| It felt as if I had lost control over myself when I got my symptoms | 2.87 (1.45–5.68) | 0.002           | 2.58 (1.31–5.09) | 0.006          |
| I did not know what to do when I got my symptoms | 2.75 (1.39–5.42) | 0.004           | 2.61 (1.34–5.06) | 0.005          |
| My symptoms paralyzed me | 2.73 (1.39–5.37) | 0.003           | 2.45 (1.26–4.77) | 0.008          |
| I lost all power to act when my symptoms began | 2.72 (1.38–5.39) | 0.004           | 2.72 (1.40–5.30) | 0.003          |
| I did not think my symptoms were serious enough to seek emergency care | 2.89 (1.45–5.76) | 0.003           | 2.71 (1.38–5.36) | 0.004          |
| It was difficult to decide to seek care for my symptoms | 2.82 (1.42–5.62) | 0.003           | 2.60 (1.32–5.10) | 0.006          |
| I felt unsure where to turn to about my symptoms | 2.56 (1.30–5.14) | 0.007           | 2.33 (1.19–4.58) | 0.014          |
| At first, I did not want to seek care | 2.77 (1.70–4.57) | 0.003           | 2.81 (1.44–5.48) | 0.003          |
| It took time to decide what to do when I got ill | 2.74 (1.39–5.41) | 0.004           | 2.45 (1.26–4.78) | 0.008          |