HOSTILITY AS A PREDICTOR OF HEALTH-RELATED QUALITY OF LIFE AMONG CORONARY HEART DISEASE PATIENTS: DOES ETHNICITY MATTER?

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BACKGROUND AND AIM

Ethnic inequalities in health and their reduction are among the continuing priorities in public health policy and research. Roma form the largest ethnic minority in the European Union (EU) [1]. Roma ethnicity may be associated with lower health-**related quality of life (HRQoL) in coronary heart disease (CHD) given the higher levels of hostility in Roma [2, 3], but evidence** is scarce. Thus, the aim of this study was to assess differences **in HRQoL between Roma and non-Roma CHD patients and** determine whether differences in hostility contribute to this association.

METHODS

Sample

543 pts (27.3% female; 57.7±7.4)
scheduled for coronary angiography

Measures

- **Gender**
- **Age: divided into 39-58 and 59-73 based on the median**
- **Ethnicity: Roma vs. non-Roma**
- **Hostility: 27-item Cook-Medley Hostility Scale [4] (α=0.71)**
- **HRQoL: Short Form Health Survey Questionnaire; SF-36 [5]**
  Mental Component Summary (MCS)
  and Physical Component Summary (PCS)

Statistical Analyses

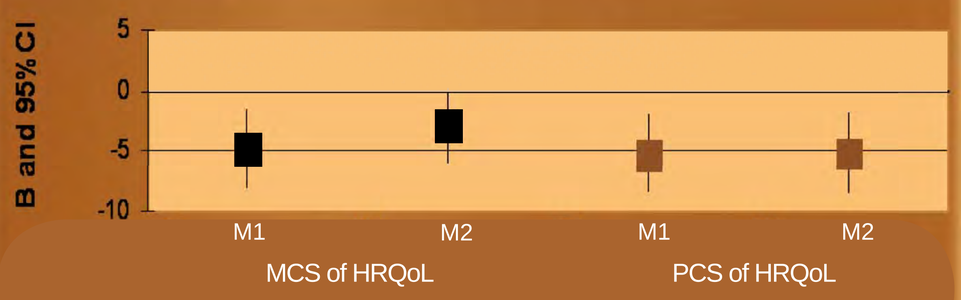
- **3 hierarchical linear regression models**
- **independent variable: Roma ethnicity**
- **mediator: hostility**
- **dependent variable: MCS and PCS**
- **controlled for: gender, age**

RESULTS

Figure 1 shows that Roma ethnicity was a significant predictor of lower MCS (B=-4.76; [95% confidence interval =-8.00; -1.51]) and lower PCS (B=-5.24; [-8.50;-1.98]) scores when adjusted for gender and age (M1) when compared with non-Roma.

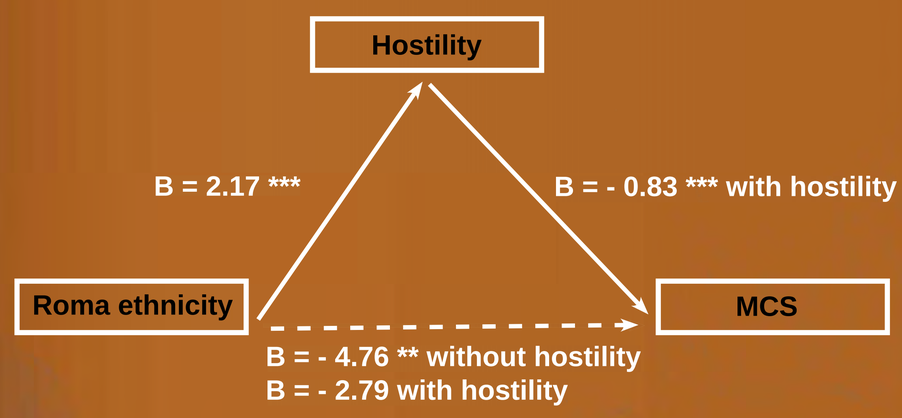
Figure 2 shows that Roma ethnicity was significantly associated with higher levels of hostility when adjusted for gender and age (B=2.17; [95%CI=1.03; 3.31) when compared with non-Roma. Additionally, hostility was a **significant predictor of lower MCS (Figure 2) and weakened** the relationship between Roma ethnicity and MCS (B=-2.79; [-5.94; 0.36]) (Figure 1, M2; Figure 2). A similar pattern was not present regarding Roma ethnicity, hostility and PCS (B=-5.06; [-8.39;-1.74]) (Figure 1, M2).

Figure 1. Effect of Roma ethnicity on HRQoL



M1: effect of Roma ethnicity +gender, age on MCS/PCS, M2: M1 + hostility

Figure 2. Mediation model: Hostility as a mediator between Roma ethnicity and MCS



Note: all associations are adjusted for gender, age

CONCLUSION

The most important finding was that Roma CHD patients had a worse mental and physical HRQoL and higher **levels of hostility than non-Roma CHD patients even after** adjustment for sociodemographic characteristics. Additionally, hostility was associated with a worse MCS but not with PCS. Lastly, our results indicate that the association between Roma ethnicity and MCS is mediated **via hostility.**

IMPLICATIONS FOR PRACTICE

Regarding practice, more attention should be paid to HRQoL among Roma and on the potential role of hostility. Thus, clinical assessments might include a question about a patient's hostile feelings and may help to identify those **with an elevated risk of onset and recurrence of CHD [6]. Additionally, group-based hostility-control interventions, behavioral modifications as well as stress management programs, may be useful in decreasing risk factor levels of CHD in Roma patients and in increasing their HRQoL [6].**

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ABSTRACT SUPPLEMENT

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CONTENTS

This publication arises from the conference "5th European public health conference" which has received funding from the European Union in the framework of the Health Programme.

Beneficial effect of continuous subcutaneous insulin infusion on diabetes-specific quality of life in youths with type 1 diabetes mellitus

Andrea Lukács

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Background
The main aim in diabetes management is to achieve as normal as possible glycemic control. Patients should be treated with intensive insulin therapy either with continuous subcutaneous insulin infusion (CSII) or with multiple daily injections (MDI). Although the number of patients treated with CSII is growing rapidly there is an issue about the advantages of insulin pump therapy over the MDI. Objective: to compare diabetes-specific quality of life (QoL) and cardiorespiratory fitness in youths (aged 8–18 years) with T1DM treated with CSII to those being on MDI therapy. Furthermore, predictors of QoL and metabolic control were also evaluated.
Methods
112 patients treated with CSII (56 girls and 56 boys) and 169 subjects treated with MDI (78 girls and 91 boys) matched for age and diabetes duration were assessed with the Pediatric Quality of Life Inventory™ 3.0 Diabetes Module. As a measure of cardiorespiratory fitness, VO2max was evaluated from the 20 meter shuttle run test.
Results
Youth on CSII treatment had significantly higher QoL total score according to both child self-report (CSR) (73.06 ± 12.17 vs. 69.25 ± 12.66; $p = 0.020$) and parent proxy-report (PPR) (69.90 ± 11.95 vs. 66.54 ± 12.08; $p = 0.033$). Somatic symptoms are less problem in CSII group than in MDI group (CSR: 67.18 ± 12.55 vs. 61.36 ± 13.49; $p = 0.001$; PPR: 65.70 ± 11.93 vs. 60.01 ± 12.48; $p = 0.001$). We observed less diabetes-related worry in youth with CSII therapy than with MDI therapy (CSR: 71.43 ± 20.66 vs. 62.00 ± 19.13; $p = 0.000$; PPR: 66.89 ± 20.90 vs. 57.09 ± 21.70; $p = 0.001$). There were no significant differences between the two groups regarding HbA1c, insulin dose, BMI z-score and VO2max (comparing by gender). Both the diabetes-specific QoL ($\beta = 0.383$, $t = 6.388$; $p = 0.000$, $R2 = 0.147$) and the HbA1c ($\beta = -0.353$, $t = -5.813$; $p = 0.000$, $R2 = 0.125$) were significantly predicted only by the maximal oxygen consumption.
Conclusion
These findings suggest that intensive insulin therapy with either CSII or MDI is efficient, but CSII group had less diabetes-related fear and symptoms than the MDI group. Furthermore good cardiorespiratory fitness has an important role in achieving better metabolic control and favourable quality of life that should be taken into account in the diabetes treatment and care in childhood.

Hostility as a predictor of health-related quality of life among coronary heart disease patients: does ethnicity matter?

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Background
Roma have been shown to have higher mortality and morbidity due to coronary heart disease (CHD) than the general population. The impact of CHD on health-related quality of life (HRQoL) is well-documented. Additionally, some studies indicate that low socioeconomic status could be related to lower HRQoL, with hostility playing an important mediating role. However, evidence on this topic is almost entirely lacking for Roma CHD patients. Thus, the aims of this study were to assess differences in HRQoL between Roma and non-Roma patients and to determine whether differences in hostility contribute to this association.
Methods
543 CHD patients (mean age 57.68 ± 7.38, 27.3% female) scheduled for coronary angiography, 79 (14.5%) of whom were Roma, were examined. Hostility was measured using the 27-item Cook-Medley Scale and HRQoL using the Short Form Health Survey 36 (SF-36), from which both a Mental and a Physical Component Summary (MCS, PCS) were calculated. The relationship between HRQoL, hostility and ethnicity was examined using regression analyses.
Results
Roma ethnicity was associated with higher hostility (17.07 vs. 14.68, $p < 0.001$), poorer MCS ($B = -4.76$; [95% confidence interval = -8.00;-1.51]) as well as poorer PCS ($B = -5.24$; [-8.50;-1.98]) when controlled for age and gender. Furthermore, a higher level of hostility was associated with poorer MCS when controlled for Roma ethnicity, age and gender ($B = -8.30$; [95% confidence interval = -1.09;-0.57]). Adding hostility into the model weakened the strength of the association between Roma ethnicity and MCS ($B = -2.79$; [-5.94; 0.36]). A similar pattern was not present regarding Roma ethnicity, hostility and PCS ($B = -5.06$; [-8.39;-1.74]).
Conclusion
Roma ethnicity is associated with poorer MCS and PCS of HRQoL. Furthermore, this study indicates that hostility could play an important mediating role in the association between Roma ethnicity and mental HRQoL; however, further confirmation is needed. Our findings show that the poorer HRQoL of Roma CHD patients requires attention in both care and research, with special attention on the role of hostility.

Type of treatment and quality of life in patients after acute myocardial infarction

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Background
The importance of Quality of Life (QL) has been increasing, following the change in the concept of Health. It no longer is considered the individual as a binomial health/disease and now it is approached in a holistic aspect. The relationship between health and QL has existed since the birth of social medicine in the 18th and 19th centuries. The discussion on QL, technological advances and the advent of Intensive Care Units has helped to extend the patients' lives, that before were unrecoverable. There is no doubt that exist a recognition, and an awareness, of the importance of acute myocardial infarction (AMI) in individuals' QL. We intend to relate the treatment of AMI with QL, bearing in mind that is a multidimensional, subjective and dynamic concept.
Methods
It is a quantitative and cross study. The sample was consisted of 131 subjects with a medical diagnosis of AMI for at least six months and whose last episode. We used a questionnaire (sociodemographic characterization and QL-NewMac QLMI) self-applied to patients in an outpatient setting who were attended at the outpatient Hospital Viseu.
They have ages between 41 and 86 years (average = 67.11 $\pm$ 11.78). 74.0% are men. The type of treatment made after the AMI, 45.8% was primary-Percutaneous Coronary Intervencion