

Gender differences in self-esteem and quality of life among patients with Type 2 diabetes

Ilda Massano-Cardoso^{1,2,4}, Ana Galhardo^{1,3}, Fernanda Daniel^{1,2}, & Vitor Rodrigues⁴

¹ Instituto Superior Miguel Torga
² Centre for Health Studies and Research of the University of Coimbra (CEISUC)
³ CINEICC – Faculty of de Psychology and Educational Sciences of the University of Coimbra
⁴ Faculty of Medicine of the University of Coimbra

Introduction: The prevalence as well as the incidence of type 2 diabetes are increasing worldwide, mostly in developing countries. In order to improve scientific quality and societal significance of knowledge several organizations now suggest the inclusion of the sex and gender dimension in biomedical research. Previous research has shown that there are gender differences concerning social support, acceptance of the disease, quality of life, and adherence behaviors in people facing type 2 diabetes but other psychological variables such as self-esteem have deserved less attention. The aim of this cross-sectional study was explore whether there were gender differences regarding self-esteem and quality of life in patients with type 2 diabetes.

Methods: A descriptive correlational study with cross-sectional design was carried out. Patients with a type 2 diabetes diagnosis attending endocrinology consultations participated in the study ($N = 175$). Participants completed the Rosenberg Self-esteem Scale (RSE) and Quality of Life Scale Abbreviated Version (WHOQOL-BREF).

Results: Mean score on RSE, for type 2 diabetes patients are different between males ($M = 32.50$; $SD = 4.42$) and females ($M = 30.46$; $SD = 4.08$). Women reported lower self-esteem when compared to male patients ($t = 3.09$; $p = 0.002$). Men reported higher quality of life in all the evaluated dimensions (physical, psychological and environment), except for the social dimension [$(t = 2.69$; $p = .008$); $(t = 4.34$; $p < .00$); $(t = 1.20$; $p = .231$); $(t = 3.34$; $p = .001$)].

Measures	Males	Females	t	df	p
RSE	$M = 32.50$; $SD = 4.42$	$M = 30.46$; $SD = 4.08$	3.09	175	.002
WHOQOL-BREF Physical	$M = 23.00$; $SD = 3.04$	$M = 21.73$; $SD = 3.17$	2.69	176	.008
WHOQOL-BREF Psychological	$M = 22.03$; $SD = 2.87$	$M = 19.98$; $SD = 3.36$	4.34	177	.000
WHOQOL-BREF Social	$M = 10.50$; $SD = 2.38$	$M = 10.07$; $SD = 2.29$	1.20	175	.231
WHOQOL-BREF Environment	$M = 28.17$; $SD = 5.11$	$M = 25.65$; $SD = 4.47$	3.34	174	.001

Conclusion: Quality of life (QoL) and self-esteem might be considered as important targets for prevention in type 2 diabetes patients. Therefore, identifying strategies to improve self-esteem and QoL in diabetic patients, in a solid, organized public health organization, involving health professionals and patients can be effective. In fact previous research has suggested an association between self-esteem and HbA1c, with subjects showing unsatisfactory metabolic control presenting lower scores of self-esteem (Nuccitelli, et al., 2017). Therefore, strategies aimed at improving patients self-esteem, particularly in female diabetes patients, may be implemented in the primary care system. Thus, medical monitoring should include not only combined diet and physical activity promotion programs but also address patients self-esteem and quality of life.

References

Kautzky-Willer, A., Harreiter, J., & Pacini, G. (2016). Sex and Gender Differences in Risk, Pathophysiology and Complications of Type 2 Diabetes Mellitus. *Endocrine Reviews*, 37(3), 278–316. <http://doi.org/10.1210/er.2015-1137>

Nuccitelli C, Valentini A, Caletti MT, Caselli C, Mazzella N, Forlani G, Marchesini G. Sense of coherence, self-esteem, and health locus of control in subjects with type 1 diabetes mellitus with/without satisfactory metabolic control. *Journal of Endocrinological Investigation* 2017.

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton: Princeton University Press.

WHOQOL Group. The development of the World Health Organization Quality of Life assessment instrument (the WHOQOL). (1994). In: OrleyJ, Kuyken W, editors. *Quality of life assessment: international perspectives*. Heidelberg: Springer Verlag. pp 41-60.