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The education of diabetic patients about their foot self-care : Our experiences in the Unit of Diabetic foot in the University of Malaga.

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Prof. University of Malaga

International Diabetes Colloquium Ghent 2018

Diabetes Mellitus

- Diabetes Mellitus (DM) is currently one of the most prevalent chronic diseases, with rising figures that reflect a pandemic scenario.
- The International Diabetes Federation (IDF) estimated that 366 million people worldwide have DM
- The foot is in the core of the problem in patients with DM

Diabetes and self-care foot

- Generally, education on foot care is directed mainly at patients with a history of complications, above all those with rising levels of HbA1c and those having had diabetes for several years
- Very few are aimed to determine the specific degree of foot self-care in the population having diabetes mellitus
- Furthermore, patients qualified as low-risk can develop complications relatively fast in the absence of good glycemia monitoring and adequate self-care practices

Lincoln NB, Radford KA, Game FL, Jeffcoate WJ. Education for secondary prevention of foot ulcers in people with diabetes: a randomised controlled trial. *Diabetologia* 2008; 51(11):1954e61. http://dx.doi.org/10.1007/s00125_008_1110-0.
McInnes A, Jeffcoate W, Vileikyte L, Game F, Lucas K, Higson N, et al. Foot care education in patients with diabetes at low risk of complications: a consensus statement. *Diabet Med* 2011;28(2):162e7. <http://dx.doi.org/10.1111/j.1464-5491.2010.03206.x>.



Clinical study

Development, validation and psychometric analysis of the diabetic foot self-care questionnaire of the University of Malaga, Spain (DFSQ-UMA)

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Unit of diabetic foot (by podiatrist)



⟨ **Review** ⟩

Assessment of Foot Self-Care in Patients With Diabetes

Retrospective Assessment (2008-2014)

Emmanuel Navarro-Flores, PhD, Gabriel Gijón-Noguerón, PhD, José Antonio Cervera-Marín, PhD, and María Teresa Labajos-Manzanares, PhD

Study	Sample	Design/Intervention	Results
Hinchliffe et al ¹⁵	Ischemic patients	Systematic review (6 RCTs)	Patient education on foot care decreases the number and frequency of ulcers
Vermiere et al ¹⁴	Type 1 and 2 diabetes	Systematic review (9 RCTs)	Patient education contributes to decrease in ulcers and amputations, especially in high-risk patients
Canavan et al ²	Amputee patients	Prospective study	Decrease of incidence of amputations in those patients who underwent education
Dorresteijn et al ¹⁶	Type 1 and 2 diabetes	Systematic review (19 studies; 5 RCTs)	Insufficient evidence for complex interventions in foot ulcers or complications
McInnes ⁹	Type 1 and 2 diabetes; low risk of complications	Prospective study	Complications improvement with patient education
Clark ⁷	Type 1 and 2 diabetes	Narrative review	Complications improvement with patient education
Deakin et al ¹⁷	Type 2 diabetes	Systematic review (11 studies)	Improvement in knowledge, weight, treatment adherence, and glycemic control
Lorig et al ¹⁸	Type 1 and 2 diabetes	Prospective study	Complications improvement with patient education

Why?????

- Diabetic foot self-care and Diabetic foot self-examination



- Reduction of amputations
- Educational interventions
- Measures of quality of life

Do you generally examine your foot yourself?

Do you inspect your nails?

Do you look for sores and examine the state of the skin of your feet by yourself?

Is it hard for you to dry your feet after showering?

How often do you cut or treat your toenails?

To dry your feet ...

To heat your feet ...

To treat skin sores, dry skin patches, and calluses ...

Regarding summer footwear, with excessive heat, ...

Regarding conventional footwear, before using it ...

Regarding socks ...

Regarding new shoes ...

Is it hard to find comfortable shoes for your feet?

Is it hard to find socks that are right for your feet?

How important do you consider personal care of your feet?

Regarding the recommendations on how to take care of your own feet ...

Type of answers

- Estado de la piel de sus pies:
- A. Una vez al día
 - B. 2 ó 3 veces por semana
 - C. Una vez a la semana
 - D. Algunas veces
 - E. No la examino

7 Para secar los pies...

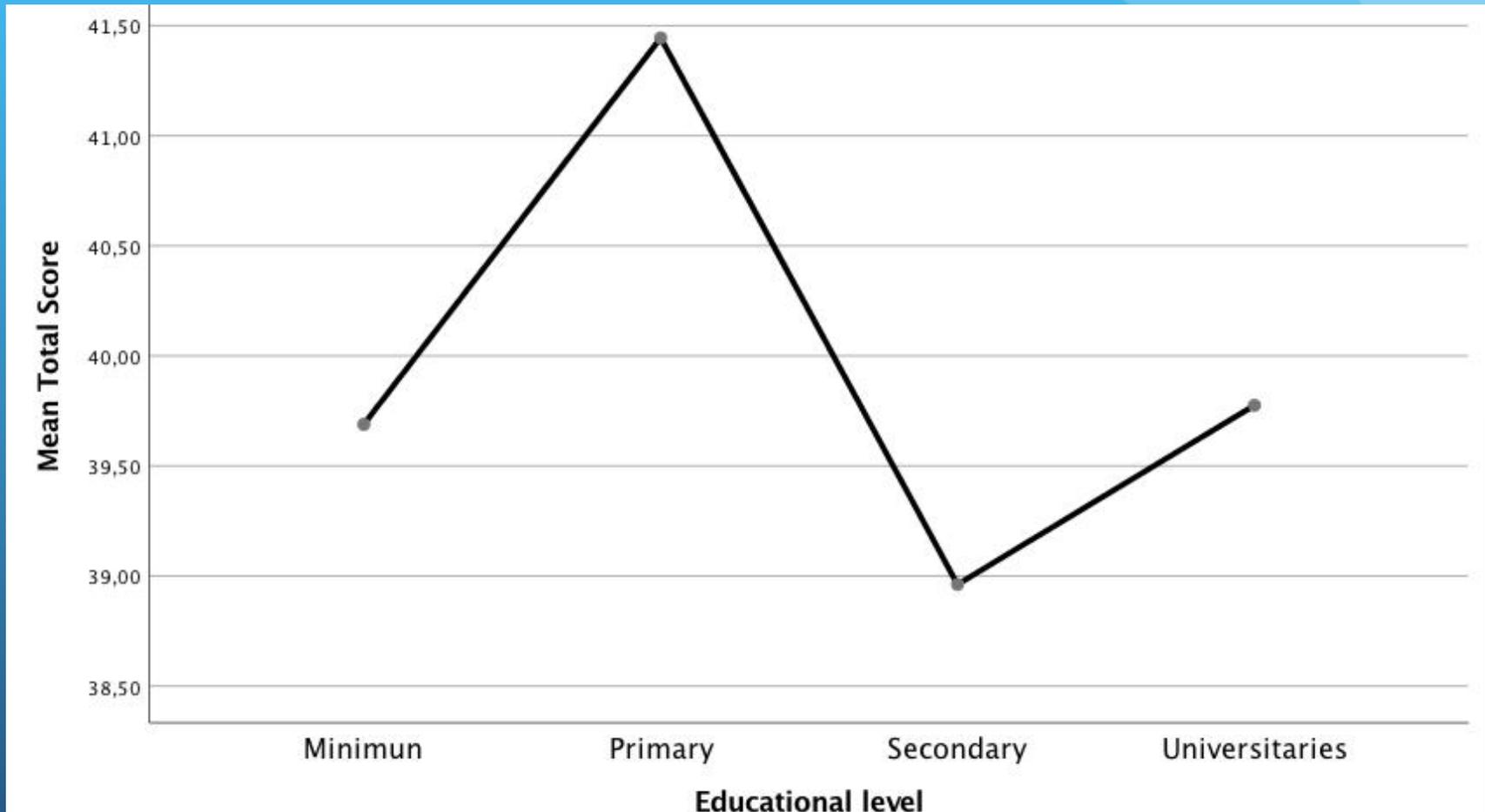
- A. Empleo una toalla sólo para los pies y seco la planta y entre los dedos
- B. Empleo una toalla sólo para los pies y seco la planta
- C. Empleo la misma toalla que para el cuerpo y seco la planta y entre los dedos
- D. Los deajo sacar al aire
- E. No los puedo secar

Our study

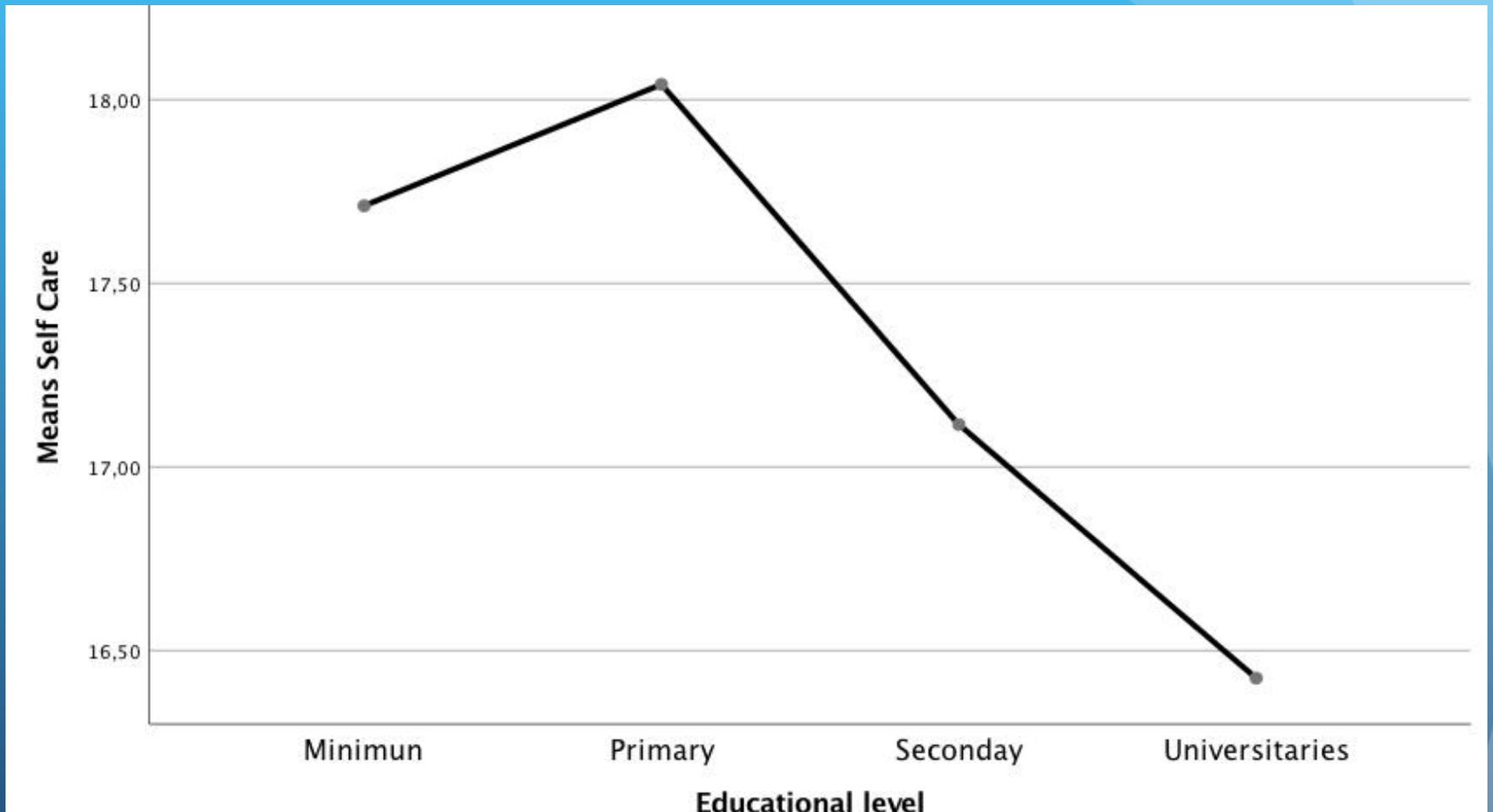
Table 1 Characteristics of the patients.

	Male (<i>n</i> = 101) \bar{X} (SD) or <i>n</i> (%)	Female (<i>n</i> = 108) \bar{X} (SD) or <i>n</i> (%)	Total (<i>n</i> = 209)	<i>p</i>
Age	57.78 (16.09)	64.66 (16.73)		0.03
Years with diabetes	12.16 (10.23)	14.63 (11.42)		0.101
Glucose	132.07 (40.30)	136.51 (40.17)		0.470
Hb1AC	7.02 (1.19)	7.32 (1.22)		0.167
BMI	27.88(4.43)	28.03 (5.89)		0.840
<i>Type of diabetes</i>				
Type I	29 (60.4)	19 (39.6)	48	
Type II non insulin-dependent	41 (43.6)	53 (56.4)	94	0.153
Type II insulin-dependent	31 (46.3)	36 (53.7)	67	
<i>Educational level</i>				
Minimum	18 (40.0)	27 (60.0)	45	
Primary	29 (40.3)	43 (59.7)	72	0.042
Secondary	28 (53.8)	24 (46.2)	52	
University	26 (65.0)	14 (35.0)	40	

Total score and educational level



Self-care and Educational level



Quality of studies of self-care in diabetic patients

The supervision of the feet of diabetic patients reduce the incident of ulcers *Salomé y Pinilla 2011*

Diabetic's patient with high risk of foot ulceration, should learn the self-care and foot's care principles.
Perrin 2009

Extend prevention's programmes to reduce complication derived from diabetes. *Lincoln and Lorig, 2008*

INFLUENCE OF DIABETIC FOOT IN THE QUALITY OF LIFE OF THE PATIENTS

The amputation has influence on the quality of life

The influence on the quality of life is especially in the mobility of the patient after the wound has healed

The complication related to ulcers or amputation have an economic cost.



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JOURNAL OF
Diabetes
AND ITS
Complications

Original articles

Health-related quality of life in patients with diabetes mellitus and foot ulcers

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Health Services Research

Impact of Diabetic Foot Related Complications on the Health Related Quality of Life (HRQoL) of Patients - A Regional Study in Spain

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QUALITY OF SELF-CARE STUDIES PERFORMED IN DIABETIC FOOT.

Compliance with treatment recommendations presents a high degree of methodological deficiency *(Vermiere 2005)*

It hasn't been proved clearly the education effectiveness in reducing incidence of ulcers. *(Dorresteijn 2012)*

Exist a high heterogeneity between self-care implements. The methodological quality of this implements it's of great variability. *(Harvey 2009)*

Thank you so much for your attention

