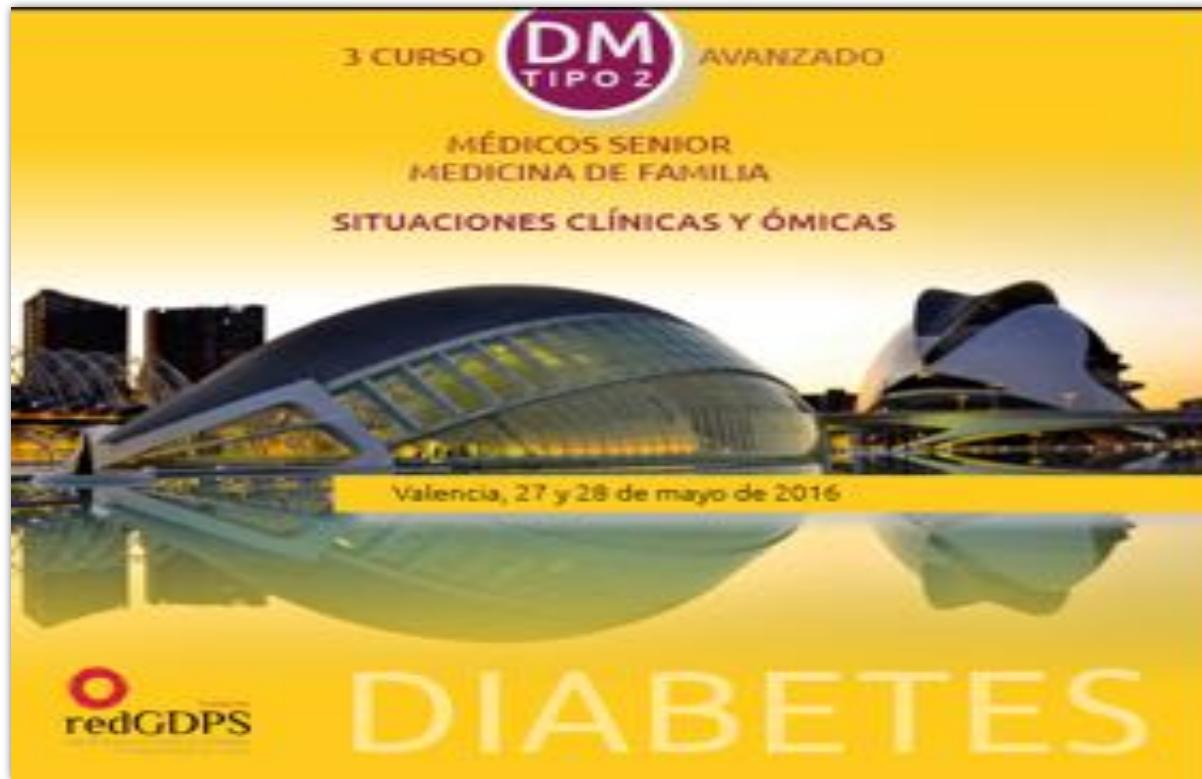


Mujer de 54 años con diabetes tipo 2, profesora de Historia en instituto de la ESO, madre de tres hijos de 18, 15 y 13 años ¿Cómo le afecta su condición de mujer?, ¿qué hacer para mejorar su autocuidado?



Jose Manuel Millaruelo Trillo
Centro de Salud Torrero La Paz
Zaragoza

¿Qué crees que le afecta por su condición de mujer en la evolución de la diabetes y sus complicaciones?



¿Qué crees que le afecta por su condición de mujer en la evolución de la diabetes y sus complicaciones?



¿Qué crees que le afecta mas por ser mujer en la evolución de la diabetes y sus complicaciones?

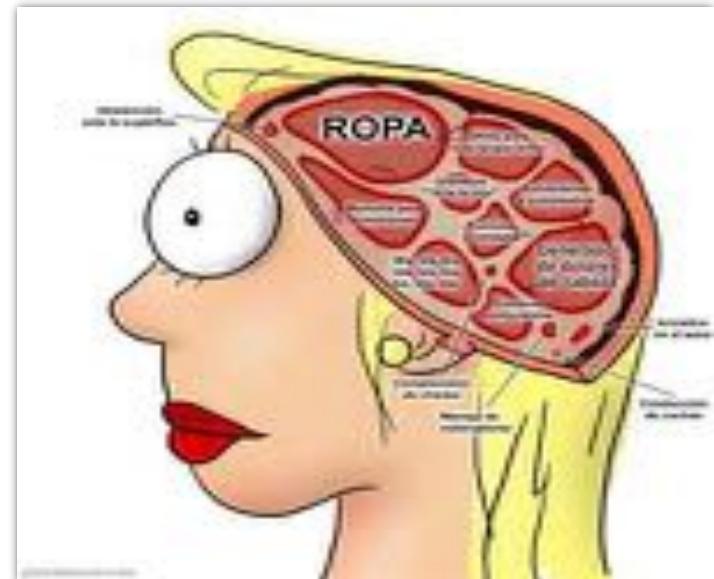
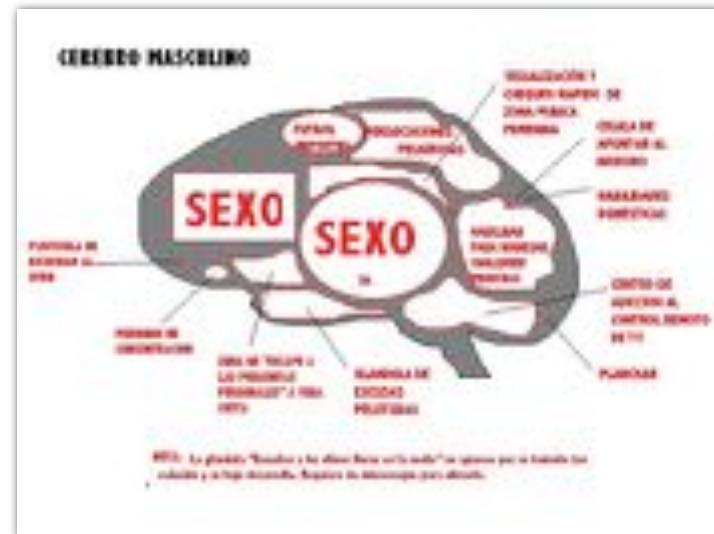
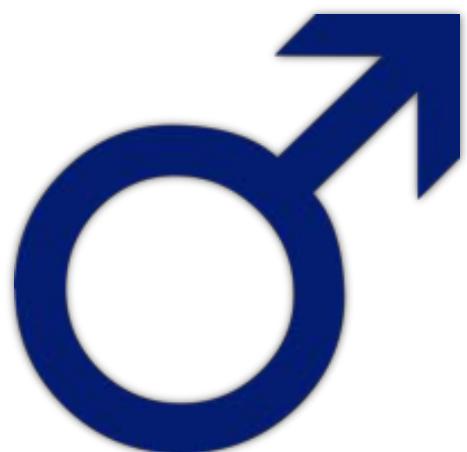
- Tiene menos riesgo de complicaciones macrovasculares (IAM, ictus) y mayor de microvasculares
- Tendrá distinta respuesta a algunos fármacos
- Será tratada con mayor atención por parte de los profesionales de la salud
- Tendrá menor ayuda familiar para el seguimiento de la enfermedad (dieta, pautas)
- **No es previsible que haya diferencias de ninguna clase**

Objetivo del taller

- Valorar la **importancia del sexo/género** para todas las facetas relacionadas con la atención a la diabetes
- **Despertar vuestro interés** por seguir leyendo sobre el tema cuando lleguéis a casa
- No leer ningún artículo sin **preguntaros en qué cambiaria el enfoque de genero**
- Espero que os ayude la ultima diapositiva...



¿Como saber si hay diferencias entre mujeres y varones ?



Muchas dificultades

- Escasa representación de la mujer en los estudios cardiovasculares
- Falta de análisis por sexo en los RCT
- Escaso interés por los temas no biológicos
- “Masculinización” de la ciencia
- “Identificación” con los varones

Las mujeres son invisibles a la investigación



No se analizan los efectos por sexo

Annals of Internal Medicine RESEARCH AND REPORTING METHODS

Reporting of Sex Effects by Systematic Reviews on Interventions for Depression, Diabetes, and Chronic Pain

Figure 2. Proportion of eligible SRs reporting sex effects for depression and diabetes.

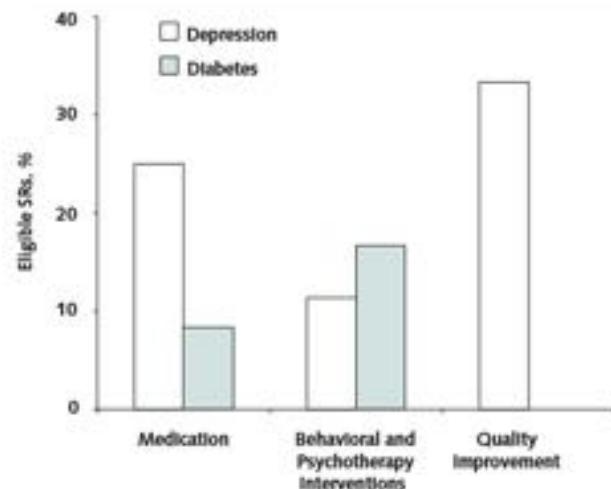
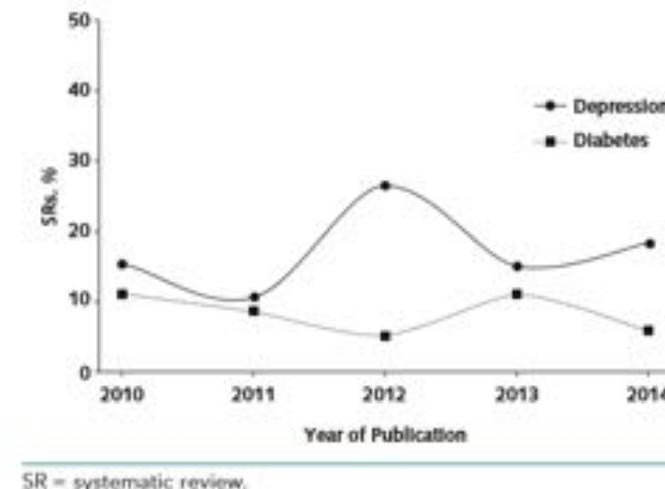
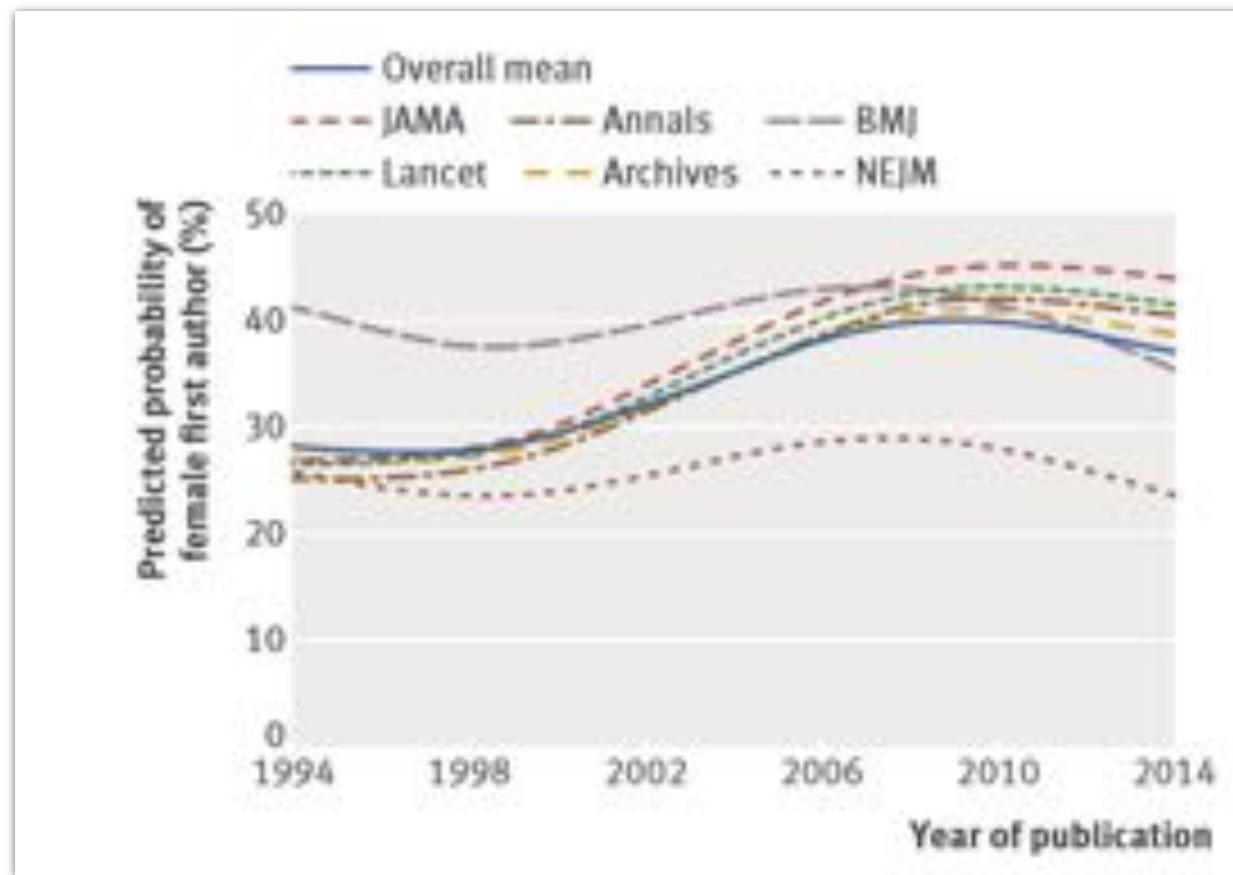


Figure 3. Proportion of eligible SRs reporting sex effects for depression and diabetes from 2010 to 2014.



Trends and comparison of female first authorship in high impact medical journals: observational study (1994-2014)



Comparar para entender

Ella

- Fuma 12 cig/dia
- IMC: 26.8
- TA (AMPA): 131/84
- HbA1c 6.9% (previa 7.4)
- Colesterol total 207/ HDL 53 /LDL 116 TG 190
Pruebas hepáticas normales
- Menopausia a los 47 años

Un compañero de trabajo

- No es fumador
- IMC: 28.9
- TA (AMPA): 133/85
- HbA1c 7.1% (previa 7.6)
- Colesterol total 174/ HDL 38 /LDL 100 TG 180
Pruebas hepáticas normales
- Padre no diabético IAM 62 a

Completando el perfil

Ella

- Años de evolución: 6
- No complicaciones microvasculares
- Dudoso AIT hace un año
- Recursos económicos:2/5
- Capacitación: Alta
- Motivación: Escasa
- En trámites de separación
- Animo deprimido. Estresada
- Ciento aislamiento social

El

- Años de evolución: 6
- No complicaciones microvasculares
- Angor de esfuerzo (padel)
- Recursos económicos:3/5
- Capacitación: Alta
- Motivación: Alta
- Separado hace 3 años, nueva pareja
- Animo normal/positivo

Completando el perfil. Tratamiento actual

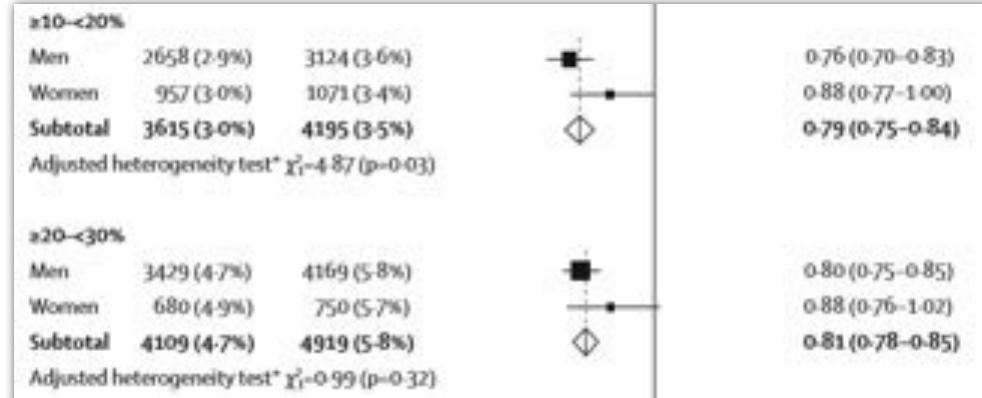
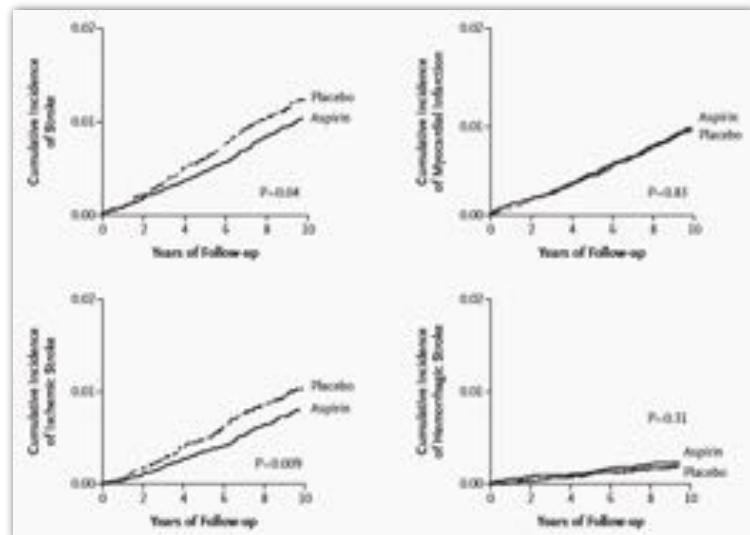
Ella

- Metformina 850/12 h
- Vildagliptina 50/12 h
- Enalapril/diu
- Lorazepan (a demanda)
- Venlafaxina 75
- Paracetamol (a demanda)

El

- Metformina 850/12 h
- Empagliflocina 10 mg/24 h
- Ramipril 10
- Adiro 100
- Atorvastatina 20

Evidencias de la diferencia



Lancet 2015; 385: 1397–405

N Engl J Med 2005;352:1293-304

Subgroup			Primary Outcome		Death from Cardiovascular Causes	
	Empagliflozin no. in subgroup	Placebo no. in subgroup	Hazard Ratio (95% CI)	P Value for Interaction	Hazard Ratio (95% CI)	P Value for Interaction
All patients	4687	2333				
Age						
<65 yr	2596	1297		0.01		0.21
≥ 65 yr	2091	1036		0.81		0.32
Sex						
Male	3336	1680				
Female	1351	653				

September 17, 2015, at NEJM.org

In men and women at an equivalent risk of cardiovascular disease, statin therapy is of similar effectiveness for the prevention of major vascular events

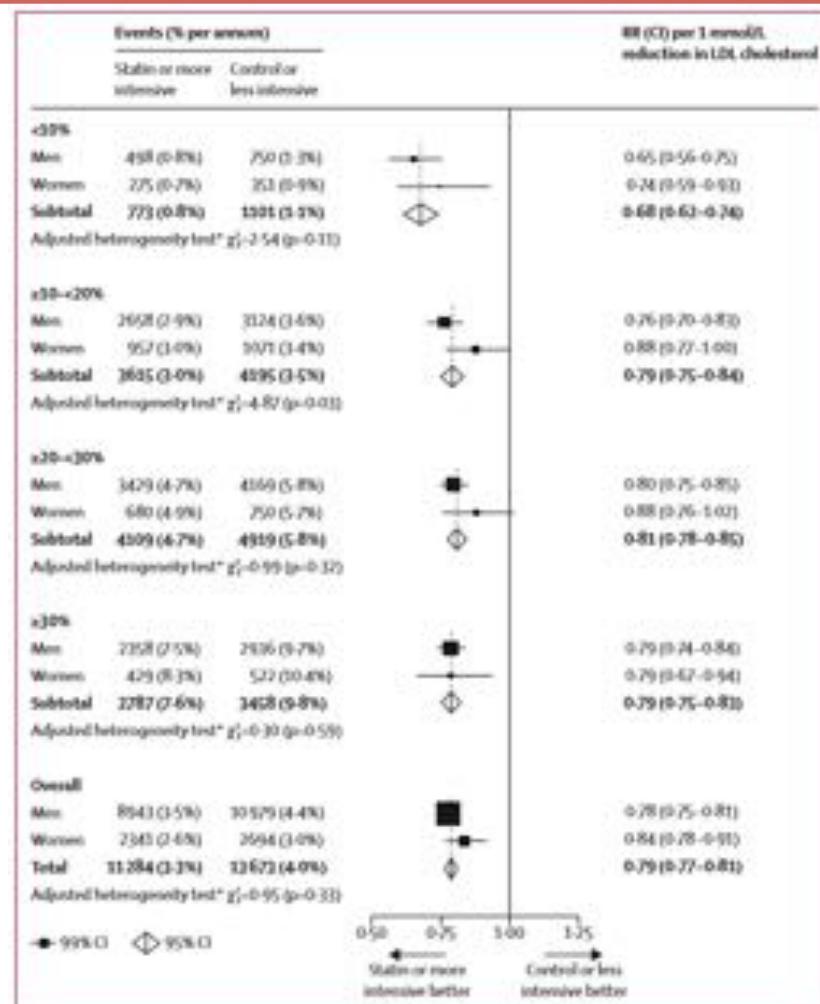


Figure 2: Effects on major vascular events per 1.0 mmol/L reduction in LDL cholesterol, subdivided by sex

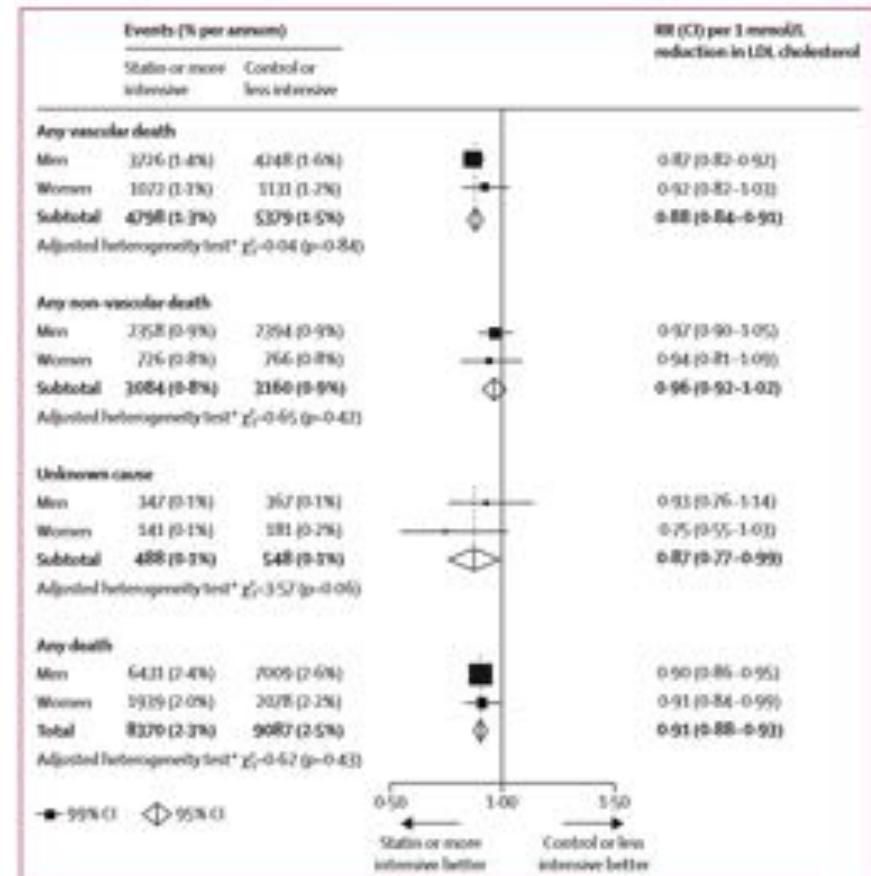


Figure 4: Effects on cause-specific mortality per 1.0 mmol/L reduction in LDL cholesterol, subdivided by sex

Lancet 2015; 385: 1397–405

El comentario que nadie comentará...

Sex, statins, and statistics

In clinical research, conclusions are not based on facts alone, but are also affected by the choice and interpretation of statistical analyses. The latest statistical ammunition for the battle of the sexes and statins is supplied by the Cholesterol Treatment Trialists' (CTT) Collaboration, published in *The Lancet*.¹ The researchers did meta-analyses on 27 trials of statin therapy and conclude that the proportional reduction in major vascular events per 10 mmol/L reduction in LDL cholesterol was the same for men and women (risk ratio [RR] for women 0.84; 95% CI 0.78–0.91; RR for men 0.78; 0.75–0.81), irrespective of the baseline level of cardiovascular risk or subtype of vascular outcome assessed.

The CTT Collaboration and other researchers have previously shown that statins reduce cardiovascular risk in men and women, but the effectiveness of statins among low-risk women continues to be debated.^{2,3} The issue remains untested because the number of women enrolled in statin trials has been small relative to men, constraining statistical inferences. The present study advances knowledge about sex-based differences in statin efficacy because it included individual-level data from nearly 50 000 women (27% of participants), and therefore could examine the efficacy of statins or more intensive statin therapy, versus control or less-intensive statin therapy, according to baseline level of cardiovascular disease risk.

So, is it time for a toast? Unfortunately, for some this study will not lay the argument to rest. Critics will argue that, among individuals with no known history of cardiovascular disease, the CTT investigators noted no significant difference between statin therapy and control interventions for major vascular events among women (OR 0.85; 95% CI 0.73–1.00) based on the statistical approach forced to adjust for multiple analyses, yet there was a statistically significant reduction in risk in men. The statistical test for sex differences in statin efficacy also suggested that sex does matter in primary prevention ($p=0.02$). The researchers demonstrate that, when projected 5-year vascular risk was low at baseline (<10%), men and women had much the same proportional reduction in risk (ie, 25% and 26%, respectively). However, the result was based on fairly small numbers of major vascular events and small absolute differences among low-risk women (1%) for

statins or more intensive therapy vs 3% for control or less intensive therapy. Moreover, the reduction in vascular deaths was not statistically different by treatment group in women, as it was in men; therefore more caution is needed.

Our conclusion from this study that is consistent with the ongoing debate is that statistics can be selectively chosen to support a particular viewpoint. I agree with the authors that the proportionate risk reduction with statins was similar for men and women, when other factors considered were equal. The challenge is that the factors not considered by the investigation—such as an absolute risk reduction and adverse outcomes by sex—might not be equal. The similar absolute effect the CTT researchers infer is a similar decrease in LDL cholesterol, which they extrapolate to a similar absolute reduction in vascular events. In primary prevention, the number of women needed to treat to prevent a major cardiovascular disease event is generally higher than for men, owing to a lower short-term risk of cardiovascular disease for women compared with men.

When absolute benefit is low, the risk of adverse effects becomes more important. Myopathy and rhabdomyolysis are rare but established side-effects of statin therapy, and concern is growing that statins could increase the risk of development of diabetes mellitus. Findings from a 2012 Cochrane review of statins for the primary prevention of cardiovascular disease suggested that the totality of evidence supports use for both sexes; the conclusion was based on short-term results from clinical trials and limited long-term safety data. The present study, which did not assess sex-based differences in adverse outcomes, had an average duration of follow-up of about 5 years. For perspective, after nearly 1 million women years and up to 12 individual years of follow-up in the Women's Health Initiative, statin use was associated with almost a 50% increased risk of incident diabetes, even after adjustment.⁴ A meta-analysis of randomised trials also documented a significant 9% increased relative risk of incident diabetes with statin use.⁵ Although observational studies are subject to bias, clinical trials might underestimate risk of adverse effects owing to inclusion criteria and shorter follow-up. Clinical



In clinical research, conclusions are not based on facts alone, but are also affected by the choice and interpretation of statistical analyses

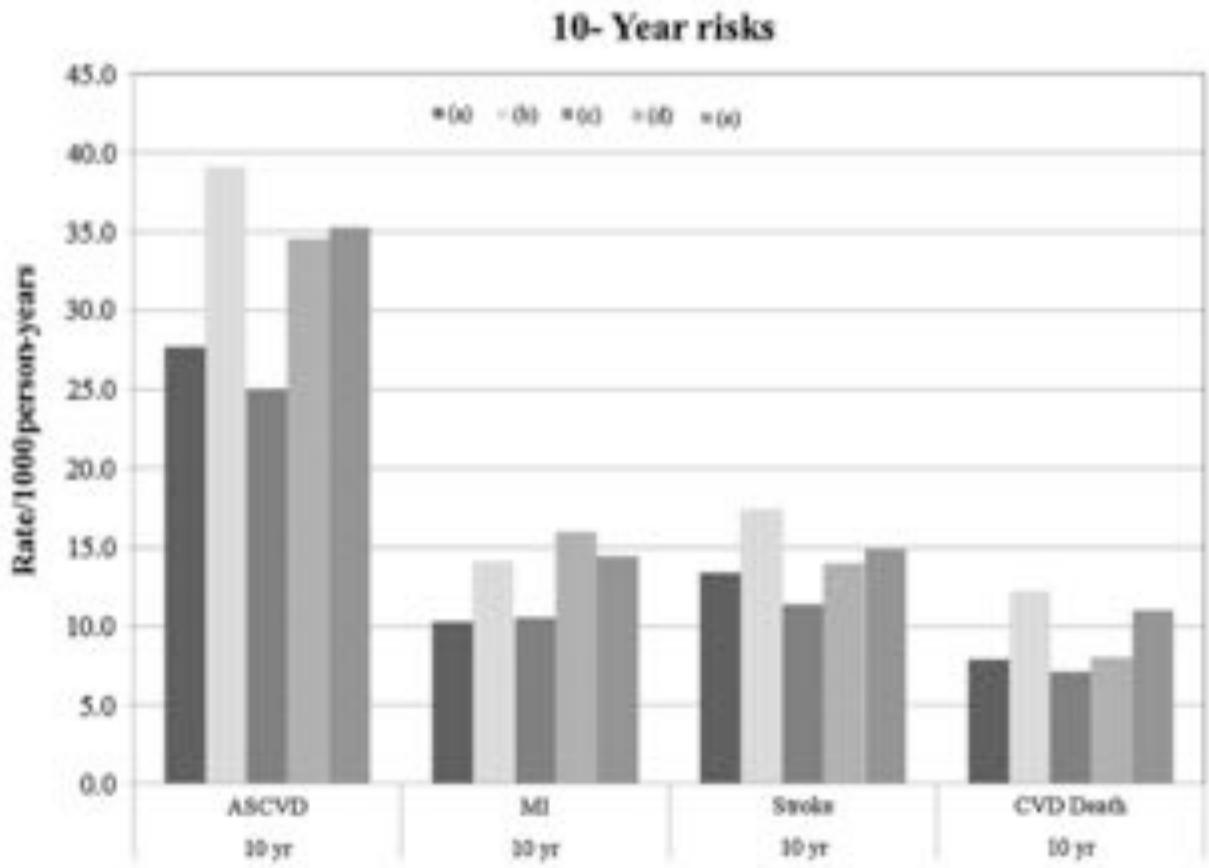
www.thelancet.com Published online
January 14, 2011



CARDIOVASCULAR DISEASE

Impact of incident diabetes on atherosclerotic cardiovascular disease according to statin use history among postmenopausal women

Fig. 3 Absolute 10-year risks of ASCVD, MI, stroke, and CVD death for five hypothetical women representing the five states (*a–e*). (*a*) Women without diabetes and not using a statin. (*b*) Woman with diabetes and not using a statin. (*c*) Woman without diabetes and used a statin. (*d*) Woman who had a diabetes diagnosis after initiating a statin. (*e*) Woman who had diabetes onset before initiating a statin

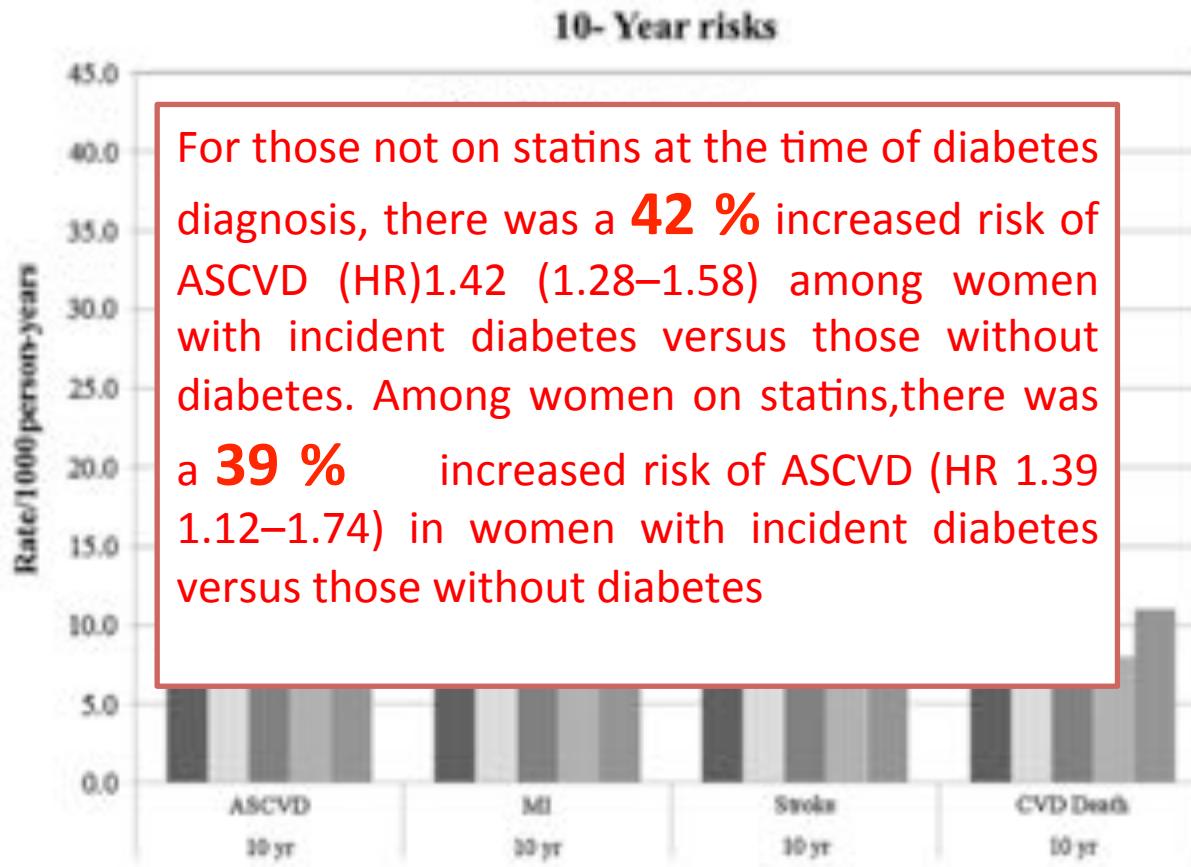




CARDIOVASCULAR DISEASE

Impact of incident diabetes on atherosclerotic cardiovascular disease according to statin use history among postmenopausal women

Fig. 3 Absolute 10-year risks of ASCVD, MI, stroke, and CVD death for five hypothetical women representing the five states (*a–e*). (*a*) Women without diabetes and not using a statin. (*b*) Woman with diabetes and not using a statin. (*c*) Woman without diabetes and used a statin. (*d*) Woman who had a diabetes diagnosis after initiating a statin. (*e*) Woman who had diabetes onset before initiating a statin



Aspirin Use for the Primary Prevention of Cardiovascular Disease and Colorectal Cancer: U.S. Preventive Services Task Force Recommendation Statement

Table 1. Lifetime Events in 10 000 Men Taking Aspirin*

CVD Risk	Nonfatal MIs Prevented	Nonfatal Ischemic Strokes Prevented	CRC Cases Prevented	Serious GI Bleeding Events Caused	Hemorrhagic Strokes Caused	Net Life-Years Gained	QALYs Gained
Aged 50-59 y							
10%	225	84	139	284	23	333	588
15%	267	86	121	260	28	395	644
20%	296	92	122	248	21	405	634
Aged 60-69 y							
10%	159	66	112	314	31	-20	180
15%	186	80	104	298	28	96	309
20%	201	84	91	267	27	116	318

CRC = colorectal cancer; CVD = cardiovascular disease; GI = gastrointestinal; MI = myocardial infarction; QALY = quality-adjusted life-year.

* A complete set of results are available in the decision analysis report (28).

Table 2. Lifetime Events in 10 000 Women Taking Aspirin*

CVD Risk	Nonfatal MIs Prevented	Nonfatal Ischemic Strokes Prevented	CRC Cases Prevented	Serious GI Bleeding Events Caused	Hemorrhagic Strokes Caused	Net Life-Years Gained	QALYs Gained
Aged 50-59 y							
10%	148	137	139	209	35	219	621
15%	150	143	135	200	34	334	716
20%	152	144	132	184	29	463	833
Aged 60-69 y							
10%	101	116	105	230	32	-12	284
15%	110	129	93	216	34	17	324
20%	111	130	97	217	33	48	360

CRC = colorectal cancer; CVD = cardiovascular disease; GI = gastrointestinal; MI = myocardial infarction; QALY = quality-adjusted life-year.

* A complete set of results are available in the decision analysis report (28).

AHA Scientific Statement

Sex Differences in the Cardiovascular Consequences of Diabetes Mellitus

A Scientific Statement From the American Heart Association

Judith G. Regensteiner, PhD, FAHA, Co-Chair; Sherita Golden, MD, MHS, FAHA, Co-Chair;
Amy G. Huebschmann, MD, MSc; Elizabeth Barrett Connor, MD, FAHA;
Alice Y. Chang, MD, MSc; Deborah Chyun, PhD, RN, FAHA; Caroline S. Fox,* MD, FAHA;
Catherine Kim, MD, MPH; Nehal Mehta, MD, MSCE; Jane F. Reckelhoff, PhD, FAHA;
Jane E.B. Reusch, MD; Kathryn M. Rexrode, MD, MPH; Anne E. Sumner, MD, FAHA;
Francine K. Welty, MD, FAHA; Nanette K. Wenger, MD, FAHA; Blair Anton, MLIS, MS, AHIP;
on behalf of the American Heart Association Diabetes Committee of the Council on Lifestyle and
Cardiometabolic Health, Council on Epidemiology and Prevention, Council on Functional Genomics
and Translational Biology, and Council on Hypertension

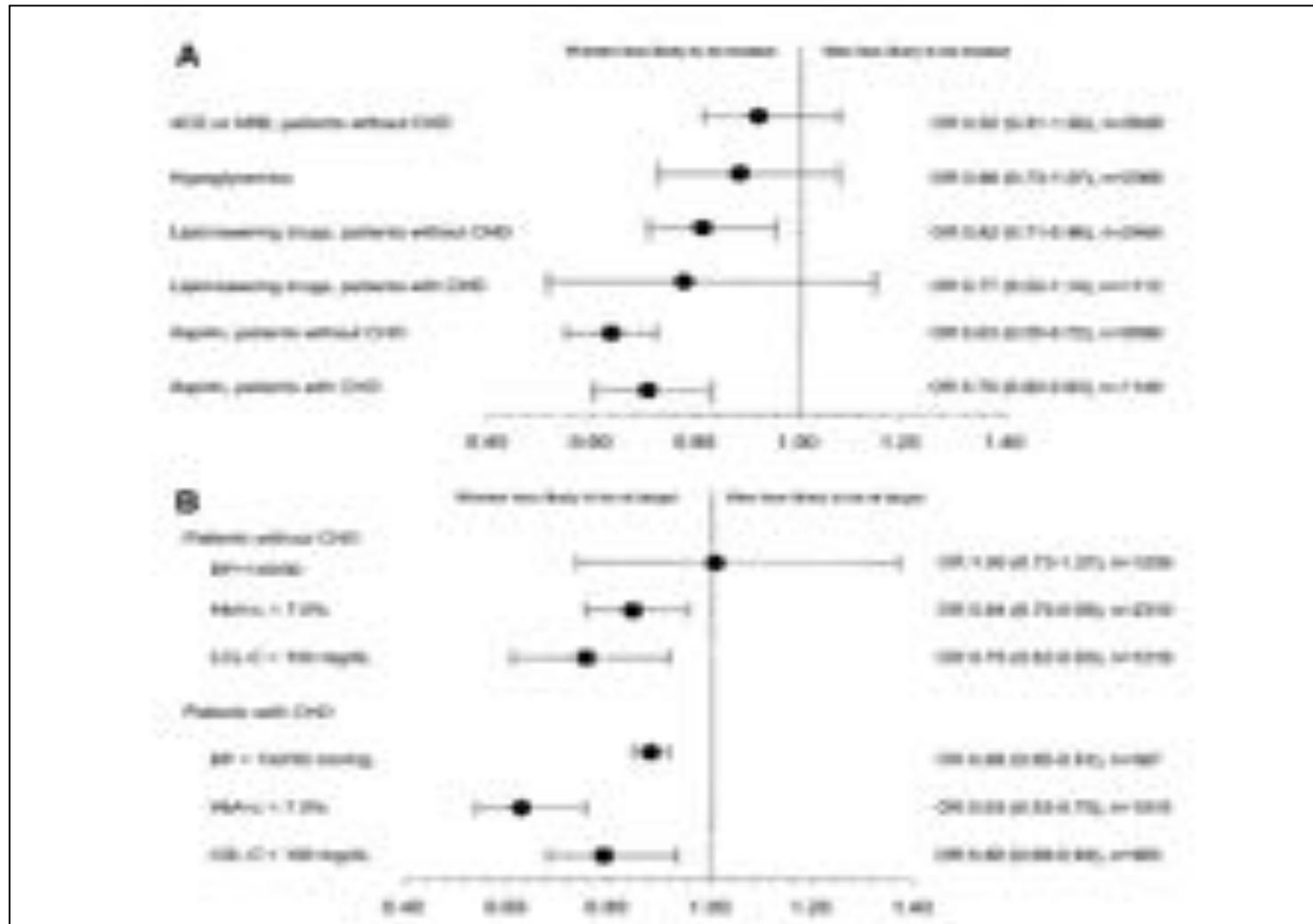
The prevalence of diabetes mellitus (DM) is increasing at a rapid rate. In the United States in 2012, 29.1 million Americans, or 9.3% of the population, had DM.¹ Currently, \approx 1 in 13 people living in the United States has DM, and 90% to 95% of these individuals have type 2 DM (T2DM).² Overall, the prevalence of T2DM is similar in women and men. In the United States, \approx 12.6 million women (30.8%) and 13 million men (11.8%) \geq 20 years of age are currently estimated to have T2DM.³

Among individuals with T2DM, cardiovascular disease (CVD) is the leading cause of morbidity and mortality and accounts for \approx 75% of hospitalizations and \approx 50% of all deaths.⁴ Although nondiabetic women have fewer cardiovascular events than nondiabetic men of the same age, this advantage appears to be lost in the context of T2DM.^{5,6} The reasons for this advantage are not entirely clear but are likely multifactorial with contributions from inherent physiological differences, including the impact of the sex hormones, differences in cardiovascular risk factors, and differences between the sexes in the diagnosis and treatment of DM and CVD.^{7,8} In addition, there are racial and ethnic factors to consider because women of ethnic minority backgrounds have a

higher prevalence of DM than non-Hispanic white (NHW) women.

This scientific statement was designed to provide the current state of knowledge about sex differences in the cardiovascular consequences of DM, and it will identify areas that would benefit from further research because much is still unknown about sex differences in DM and CVD. Areas that are discussed include hormonal differences between the sexes and their possible effects on the interaction between DM and CVD, sex differences in epidemiology, ethnic and racial differences and risk factors for CVD in DM across the life span, sex differences in various types of CVD and heart failure, and sex differences in the effects of treatments for DM, including both medications and lifestyle. In addition, there is discussion about risk factors that are specific to women, including gestational diabetes mellitus (GDM) and polycystic ovarian syndrome (PCOS), which affect CVD risk. Table 1 focuses on sex differences in CVD risk factors and outcomes in DM, and Table 2 provides information about sex differences in CVD treatments and interventions in DM. Table 3 contains some of the important ideas for research in sex differences in the cardiovascular consequences of DM.

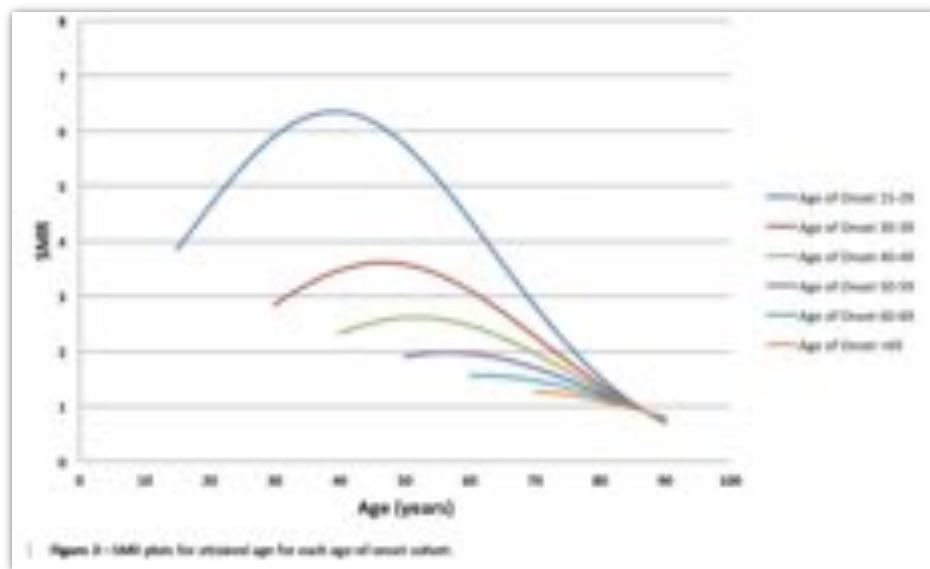
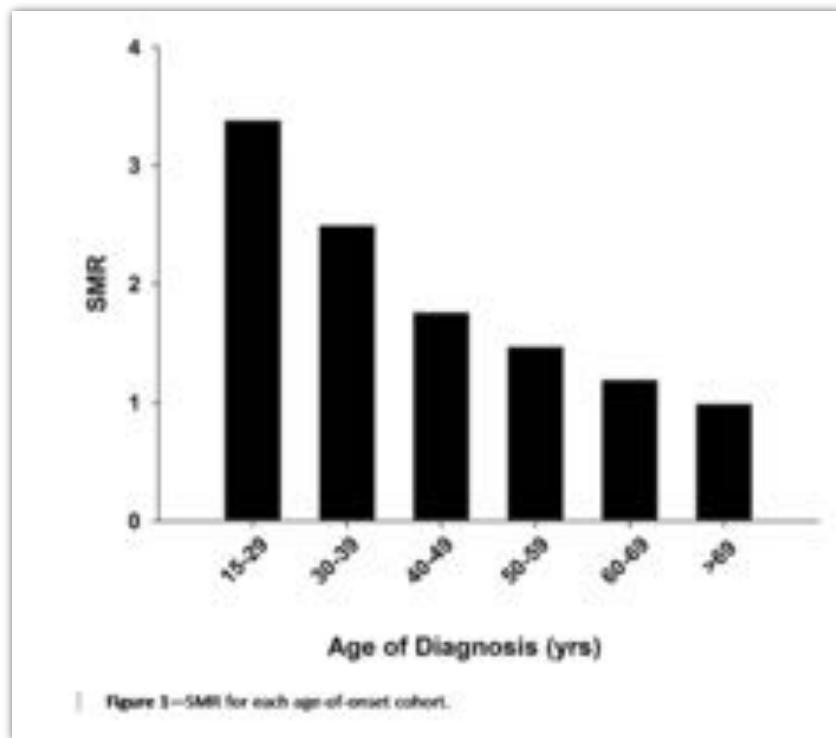
Sex Disparities in Treatment of Cardiac Risk Factors in Patients With Type 2 Diabetes



¿Qué posibles complicaciones te preocupan mas en ella/el?

- Ninguna
- Cardiopatía isquémica
- Ictus
- Retinopatía
- Enfermedad renal
- Muerte prematura/súbita

An Inverse Relationship Between Age of Type 2 Diabetes Onset and Complication Risk and Mortality: The Impact of Youth-Onset Type 2 Diabetes



En ella me preocupa...

Diabetes as a risk factor for stroke in women compared with men: a systematic review and meta-analysis of 64 cohorts, including 775 385 individuals and 12 539 strokes



Sanne A J Peters, Rachel E Huskisson, Mark Woodward

Summary

Background Diabetes mellitus is a major cause of death and disability worldwide and is a strong risk factor for stroke. Whether and to what extent the excess risk of stroke conferred by diabetes differs between the sexes is unknown. We did a systematic review and meta-analysis to estimate the relative effect of diabetes on stroke risk in women compared with men.

Lancet 2014; 383: 1873–80

Published online

March 2, 2014

<http://dx.doi.org/10.1016/j.lane.2014.01.043>

Curr Diab Rep (2015) 15: 85
DOI 10.1007/s11892-015-0662-x

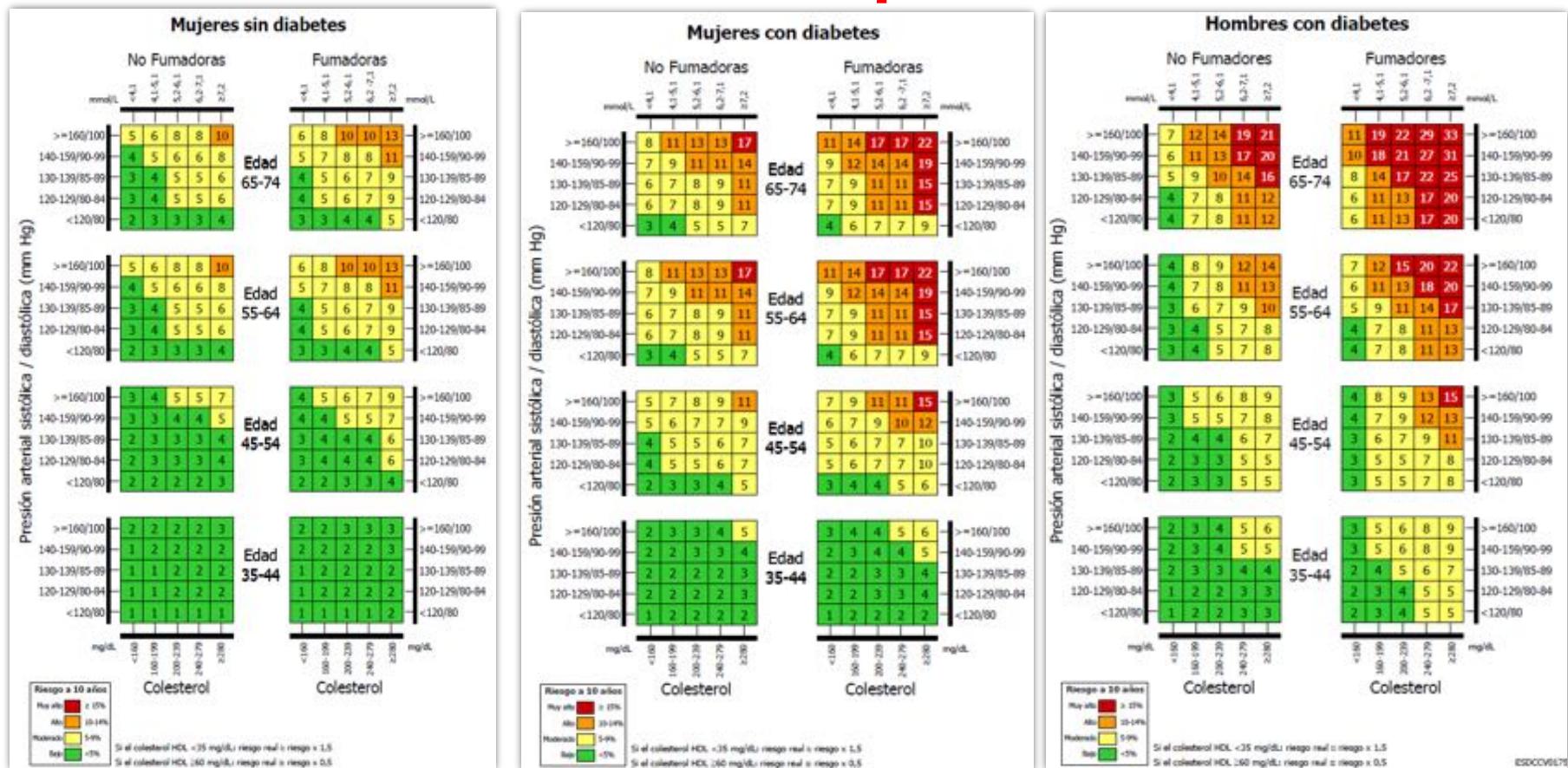


MACROVASCULAR COMPLICATIONS IN DIABETES (VR ARODA AND A GETANEH, SECTION EDITORS)

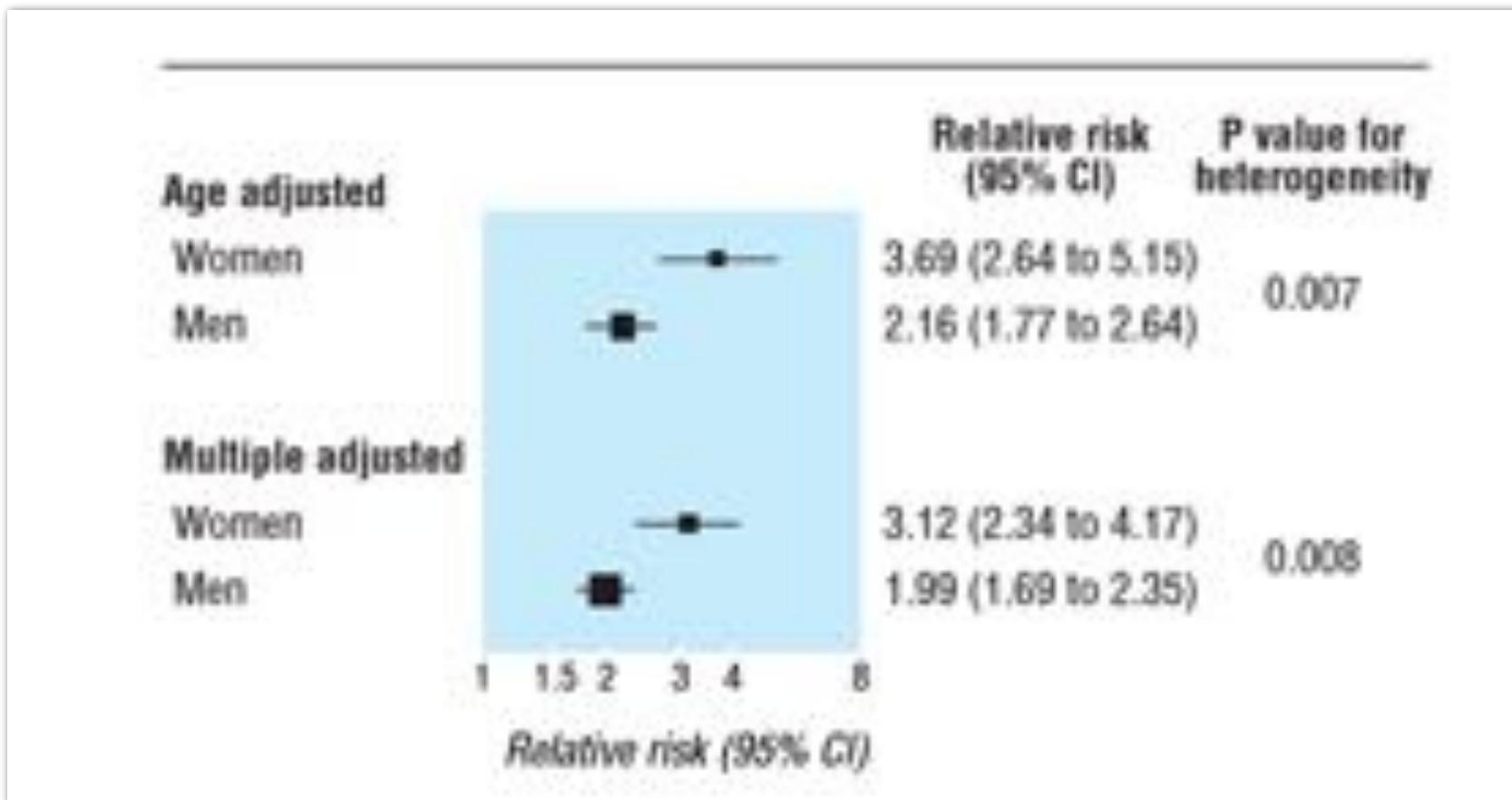
Sex-Specific Differential in Risk of Diabetes-Related Macrovascular Outcomes

Amanda Lyon¹ · Elizabeth A. Jackson² · Rita R. Kalyani³ ·
Dhananjay Vaidya³ · Catherine Kim⁴

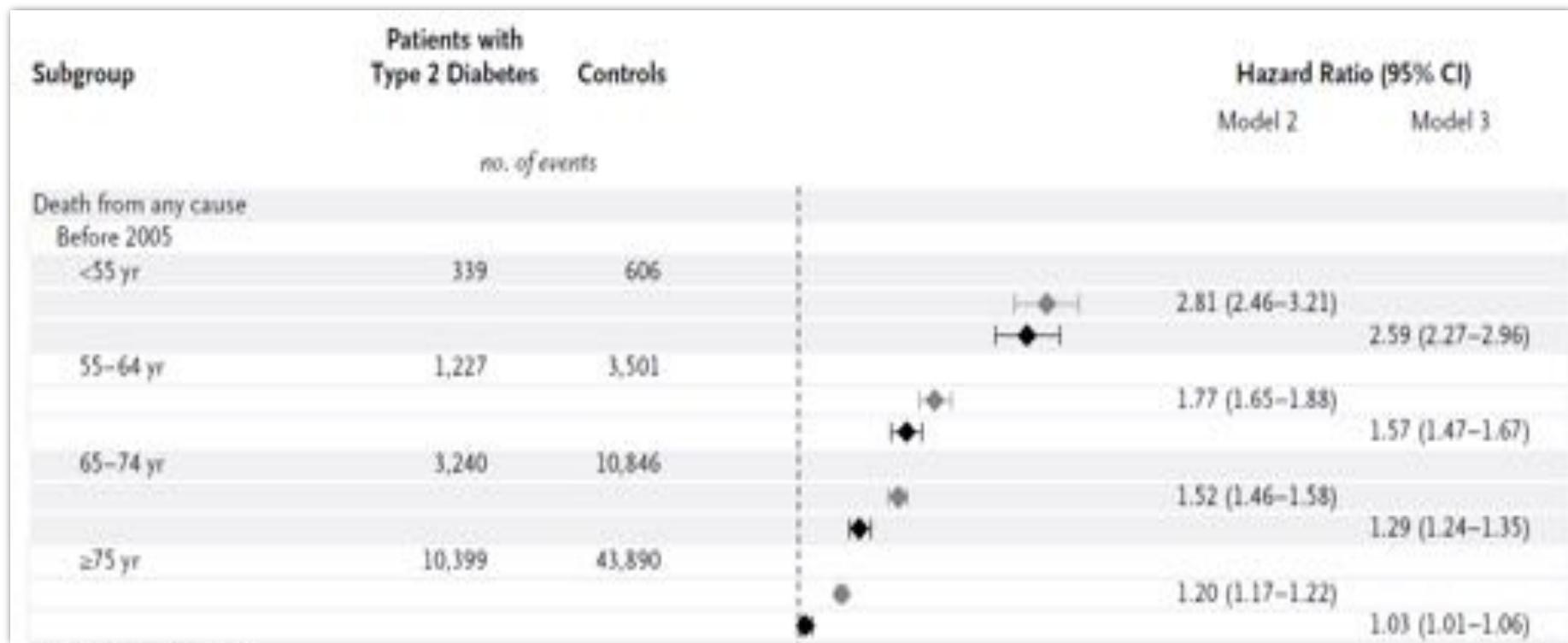
¿Quién tiene mas riesgo cardiovascular?



Excess risk of fatal coronary heart disease associated with diabetes in men and women: meta-analysis of 37 prospective cohort studies



El problema de la mortalidad en edades medias de la vida



N Engl J Med 2015;373:1720-32

Un episodio inesperado

Ella

- A las 16.50 tras haber comido a la vuelta del trabajo, nota un dolor interescapular y una súbita sensación de decaimiento, que le produce intranquilidad. Tenía cita con el abogado un par de horas mas tarde. Ninguno de sus hijos estaba en casa

El

- A las 16.50 tras haber comido a la vuelta del trabajo, nota un dolor precordial con cierta sudoración. Iba a jugar a padel y pensado tomar algo después con su pareja. Ella estaba en casa. Su hijo no estaba en casa

Un episodio inesperado: ¿Qué ha hecho nuestra paciente?

- Ir a Urgencias del Centro de Salud
- Ir a Urgencias al Hospital
- Tomarse un Orfidal
- Esperar la llegada de alguno de los hijos
- Tumbarse en la cama
- Llamar a un familiar/amigo

Un episodio inesperado: ¿Qué ha hecho nuestro paciente?

- Ir a Urgencias del Centro de Salud
- Ir a Urgencias al Hospital
- Tumbarse en la cama
- Llamar a un familiar/amigo
- No le ha dado tiempo a pensar...su pareja lo ha llevado al hospital

Y allí...

- ¿Quién llega antes?
- ¿Es igual la atención sanitaria?
- Los dos son dados de alta:
 - ECG normal, Troponinas negativas (ambos)
 - Derivaciones: P. esfuerzo, Coronariografia, Cardiólogo en un caso (él), Salud Mental (ella)
- Valor predictivo de las pruebas complementarias

¿Que se espera en los proximos meses?

- ¿Quién estará mejor controlado?
- ¿Quién tendrá mas olvidos de la medicación?
- ¿Quién estará mas apoyado por la red familiar/social?
- ¿Influirá esto en el pronostico?

Predictores psicosociales de adherencia a la medicación en pacientes con diabetes tipo 2

Revista Iberoamericana de Psicología y Salud (2015) 6; 19-27

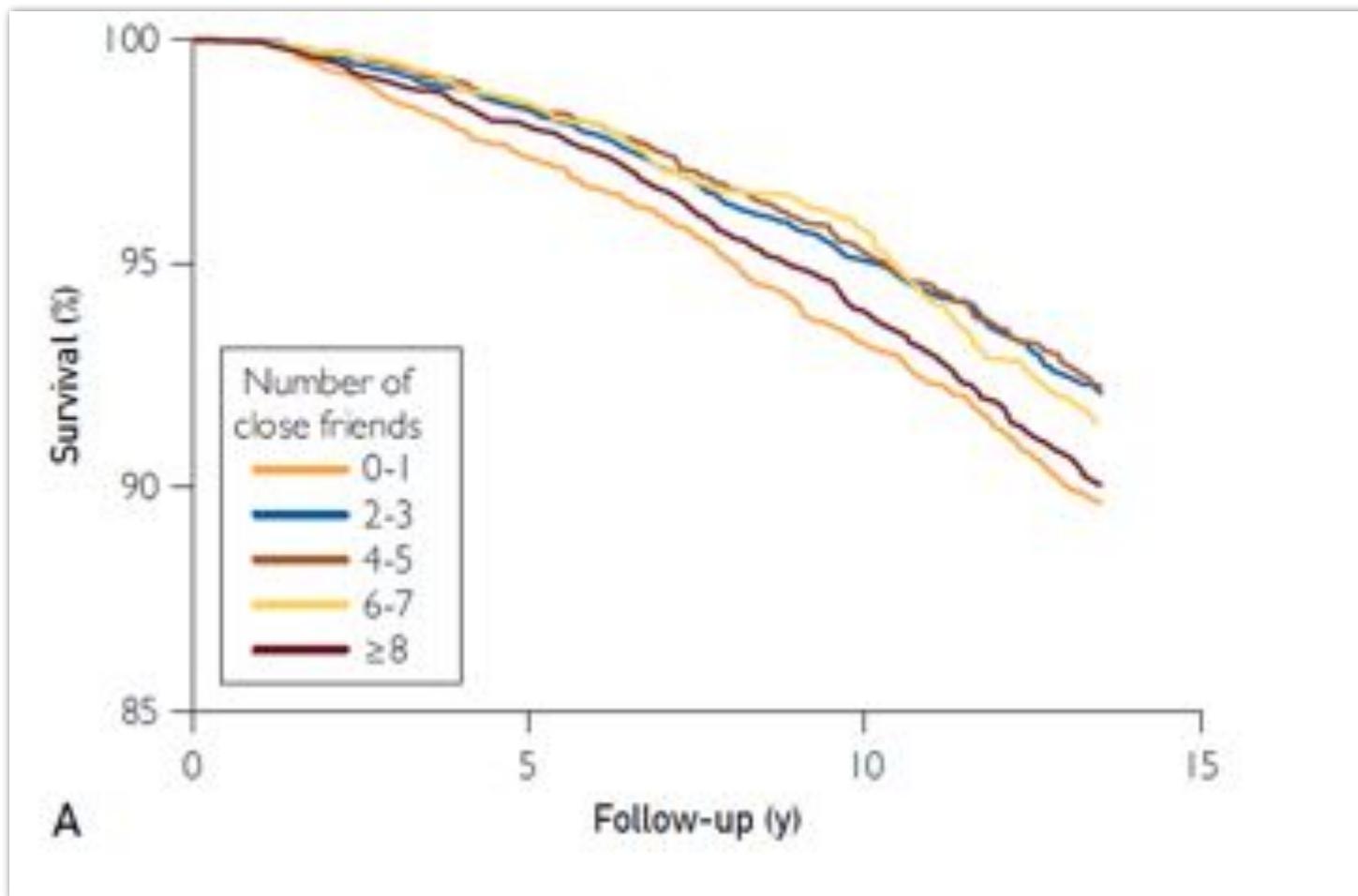
Adherence to diabetes medication: a systematic review Diabet Med 2015 ;32:725-37



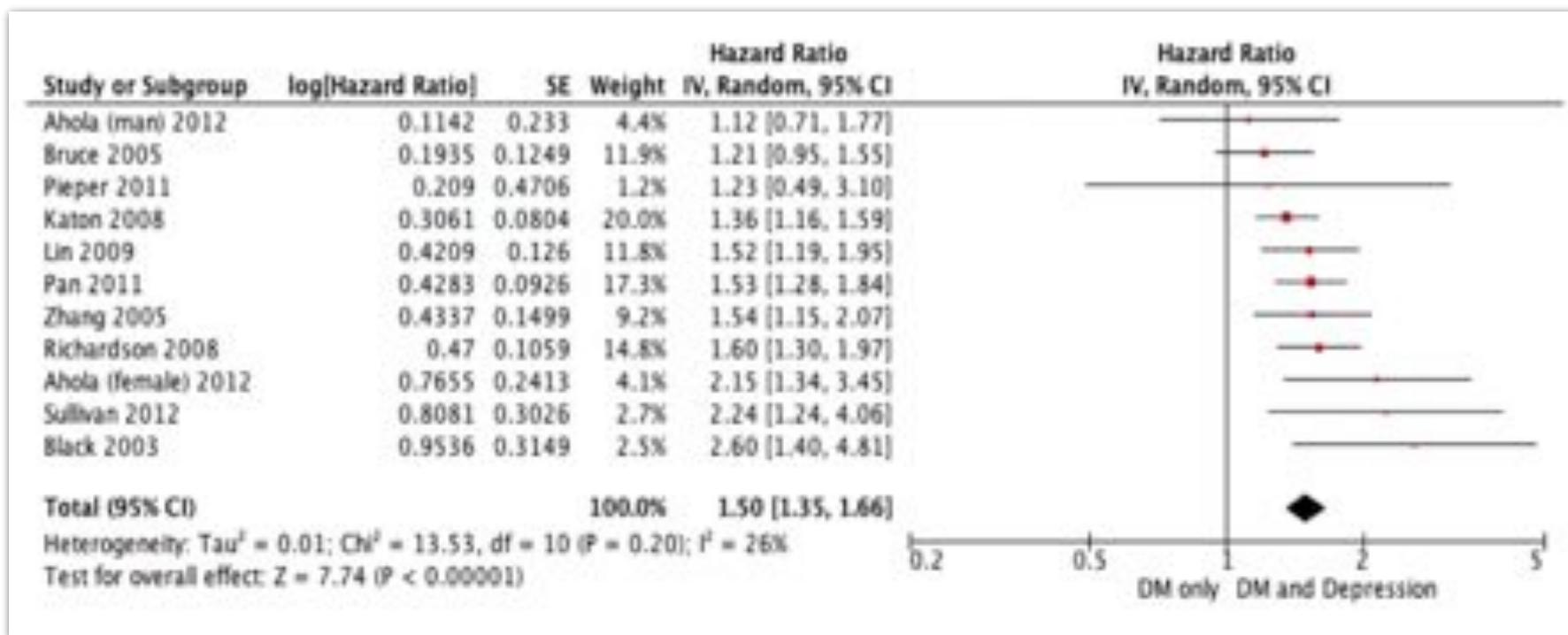
Psychosocial factors associated with adherence to non-insulin antidiabetes treatments

Journal of Diabetes and Its Complications Accepted date: 21 October 2015

Influence of the Source of Social Support and Size of Social Network on All-Cause Mortality



Depression and risk of mortality in individuals with diabetes: a meta-analysis and systematic review



[Inicio](#)[Básicos de Diabetes](#)[Viviendo con diabetes](#)[Alimentación y Bienestar](#)[Noticias](#)

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Noticiero virtual

- ¿Olvido su contraseña?
- ¿Olvido su nombre de usuario?



Descubre ¿Qué pasa si
me salto desayuno?



Conoce el poder de la
biotina

Vivir en pareja disminuye el riesgo de enfermedades cardiovasculares

Miércoles, 02 de Abril de 2014 10:00



Los casados tienen cinco por ciento menos riesgo de padecer males cardíacos, porcentaje que aumentaba en menores de 50 años. El tabaquismo es más frecuente entre los divorciados, la obesidad es más común en solteros y divorciados, mientras que los viudos tienen las mayores tasas de presión alta, diabetes y ejercicio insuficiente, de acuerdo a un estudio realizado en Estados Unidos a 3.5 millones de personas.

Según los resultados, el matrimonio parece ser más beneficioso para los menores de 50 años, que mostraron 12 por ciento menos posibilidad de enfermedades cardíacas que los solteros de la misma edad.

If it does not significantly change HbA1c levels why should we waste time on it? A plea for the prioritization of psychological well-being in people with diabetes.



Diabetes-related emotional distress instruments: A systematic review of measurement properties

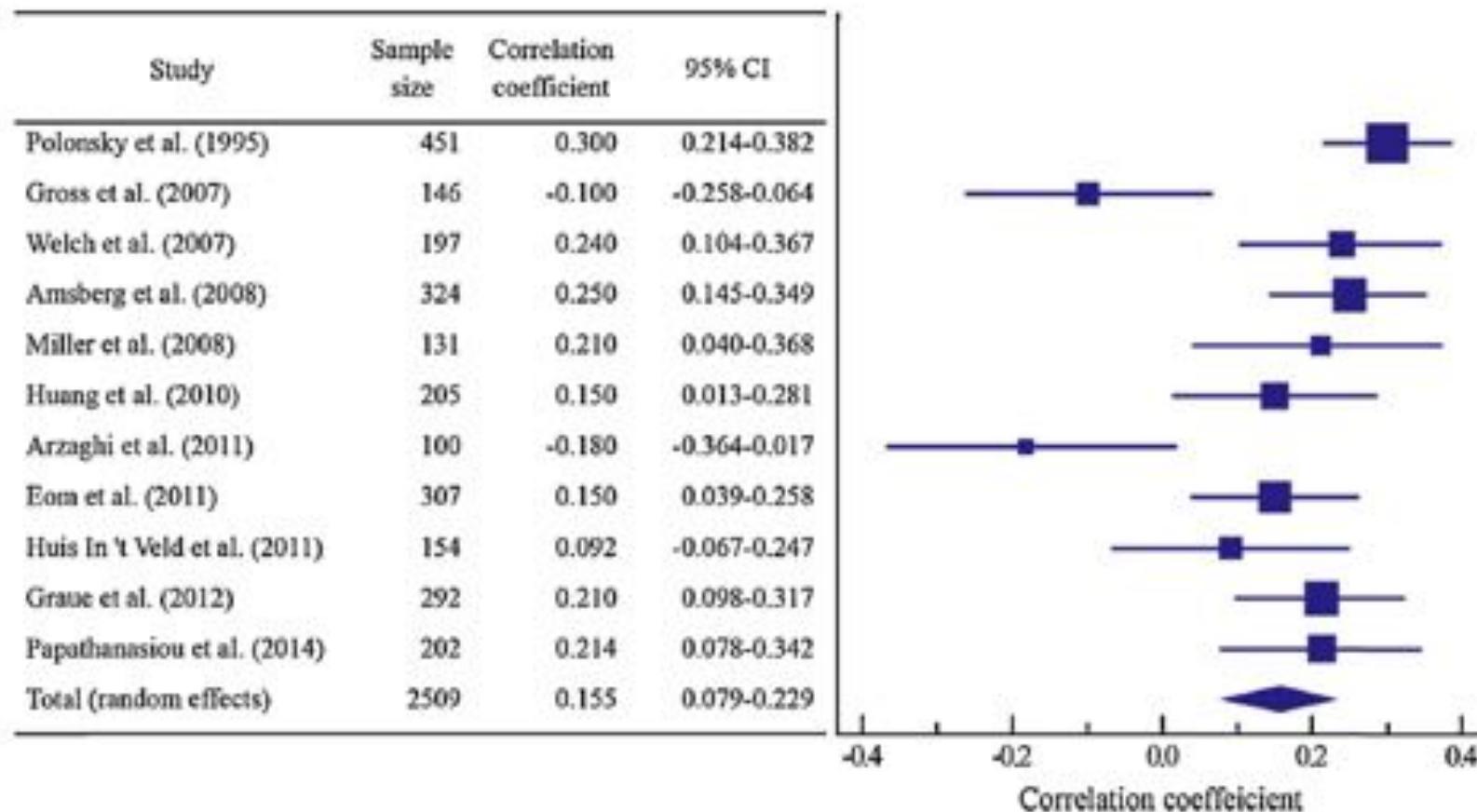


Fig. 2. Meta-analysis of correlation between the total PAID and glycated hemoglobin. 95% CI, 95% confidence interval.

Mucho por conocer...



Falta de cumplimientos de objetivos

Fisiopatología de las complicaciones



Factores diferenciales mas importantes

- Invisibilidad de la mujer en los estudios cardiovaseulares
- Propios del papel sociofamiliar por el género y las distintas expectativas
- Utilización de fármacos y pruebas diagnosticas
- El papel de la depresión
- La importancia del tabaquismo
- La acción de los fármacos (aspirina, estatinas)

"La perspectiva de género implica a ambos géneros en el desarrollo, es un esfuerzo por lograr modificaciones en las respectivas especificidades, funciones, responsabilidades, expectativas y oportunidades de varones y mujeres"

Lagarde, 1996



Gracias por vuestra atención y
complicidad en el intento de cambio

