

# **The prevalence of diabetes and pre-diabetes in Kuwait**

**Abdullah Alkandari**

**CAMBRIDGE DIABETES SEMINAR**

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معهد دسمان للسكري

Dasman Diabetes Institute

الهيئة مؤسسية الكويت للتقدم العلمي  
Foundation for the Advancement of Sciences

# Diabetes in the MENA region

- Diabetes prevalence in MENA is high
- Prevalence of obesity and associated disorders also high
- High socioeconomic costs

	2015	2040
Global	8.8	10.4
MENA	9.1	11.4
Kuwait	14.3	-

# 2014 EMAN-Steps study

- Nationwide health survey
- Aim: Determine the prevalence of NCD and their risk factors in Kuwaiti adults
- Age: 18-69
- All 6 urban areas
- Conducted Feb 2013-Sept 2014 by MOH

# Survey design

- WHO Steps Instrument for Chronic Disease Risk Factor Surveillance
- 3 Steps
  1. Demographics, lifestyle and medical history
  2. Physical measurements
  3. Biochemical analysis

# Study demographics

Characteristic	All (n=2561)	
	Mean	[95%. C.I.]
Mean age (years)	36	[35.9, 36.9]
Sex (% female)	53	[50.5, 54.5]
Mean Body Mass Index (kg/m <sup>2</sup> )	31.4	[30.4, 32.4]
Mean Waist-to-Hip ratio Men	0.89	[8.88, 0.90]
Mean Waist-to-Hip ratio Women	0.83	[0.82, 0,83]
Mean HbA1c (%)	5.8	[5.7, 5.8]
Mean Fasting Plasma Glucose (mmol/L)	5.7	[5.6, 5.8]

# Diabetes definition

## I. DM

- Self-reported history with treatment
- Or FPG  $\geq 7\text{mmol/L}$
- Or HbA1c  $\geq 6.5\%$

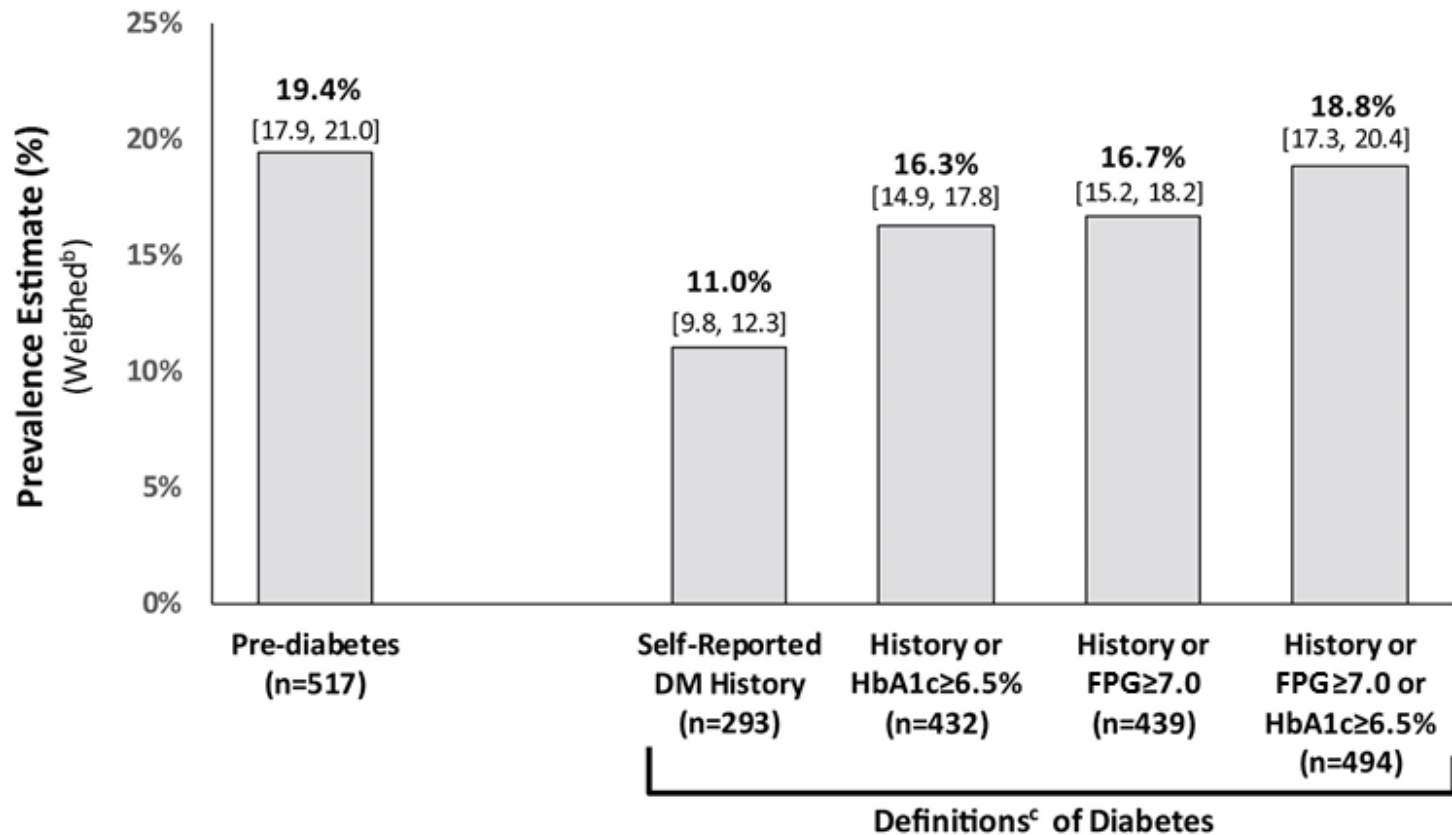
## II. Pre-DM

- FPG 6.1-6.9mmol/L
- Or HbA1c 5.7-6.4%



# Diabetes and pre-diabetes prevalence

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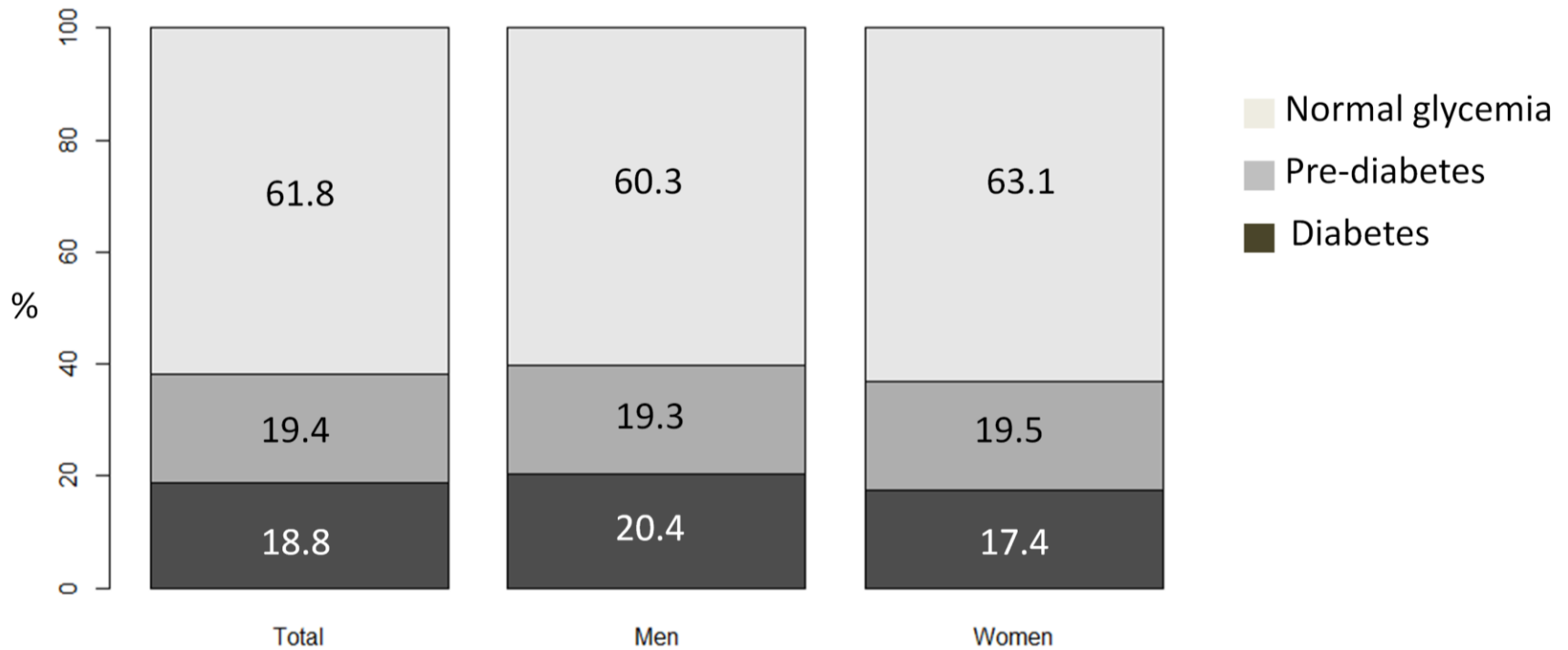


معهد دسمان للسكري

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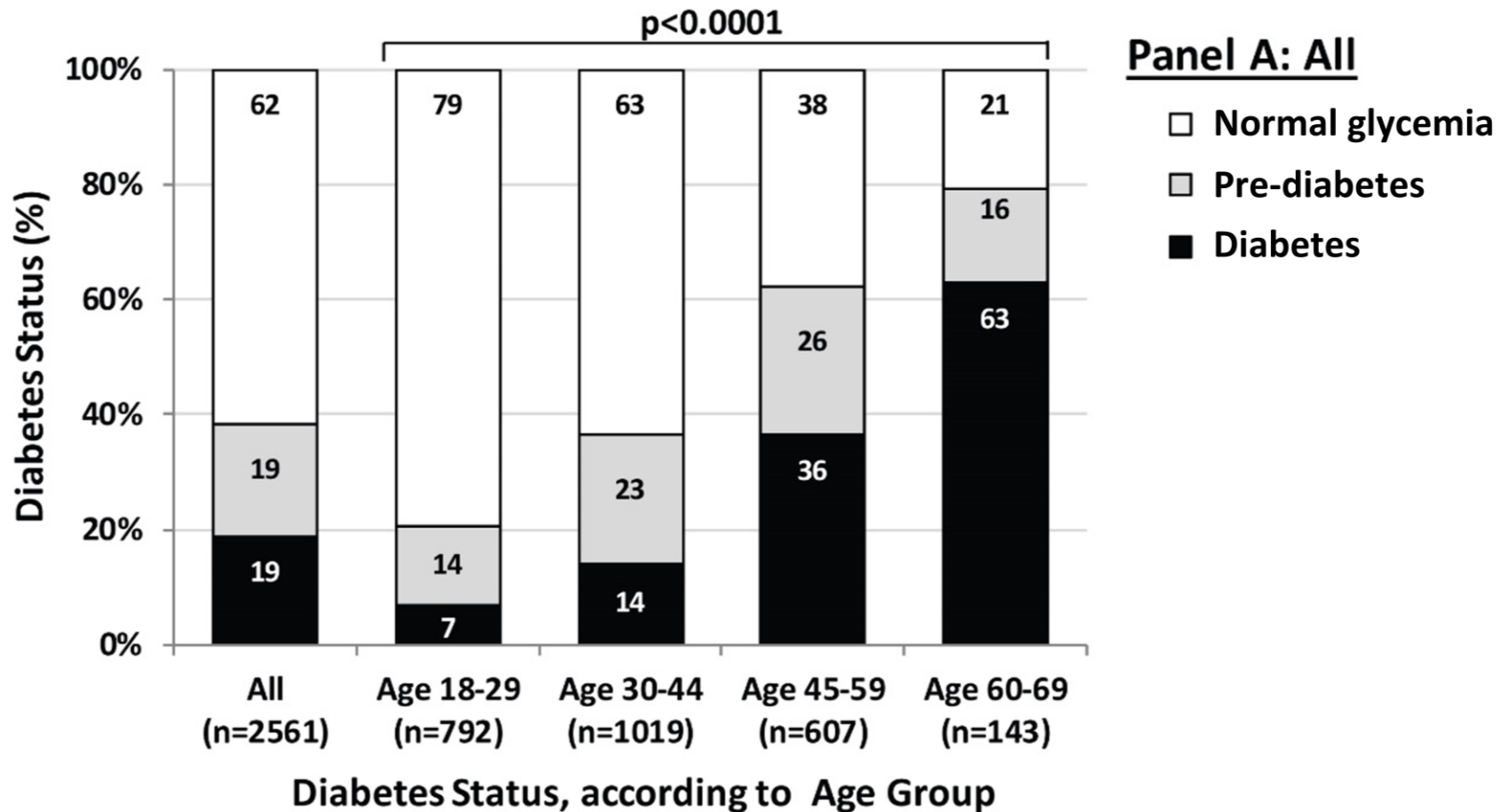
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# Prevalence by sex





# Prevalence by age



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## The prevalence of pre-diabetes and diabetes in the Kuwaiti adult population in 2014



Abdullah Alkandari<sup>a,\*,1</sup>, Joseph C. Longenecker<sup>b,1</sup>, Noël C. Barengo<sup>c</sup>, Ahmad Alkhatib<sup>a</sup>,  
Elisabete Weiderpass<sup>a,d,e,f,g</sup>, Rihab Al-Wotayan<sup>h</sup>, Qais Al Duwairi<sup>a</sup>, Jaakko Tuomilehto<sup>a</sup>

<sup>a</sup>Dasman Diabetes Institute, Kuwait City, Kuwait

<sup>b</sup>Faculty of Medicine and Faculty of Public Health, Kuwait University, Kuwait

<sup>c</sup>Medical and Population Health Sciences Research, Herbert Wertheim College of Medicine, Florida International University, USA

<sup>d</sup>Department of Community Medicine, Faculty of Health Sciences, University of Tromsø, The Arctic University of Norway, Tromsø, Norway

<sup>e</sup>Department of Research, Cancer Registry of Norway, Institute of Population-Based Cancer Research, Oslo, Norway

<sup>f</sup>Department of Medical Epidemiology and Biostatistics, Karolinska Institutet, Stockholm, Sweden

<sup>g</sup>Genetic Epidemiology Group, Folkhälsan Research Center, Helsinki, Finland

<sup>h</sup>Primary Health Care Department, Ministry of Health, Kuwait