

Abstract Presentations

1. Miguel Domínguez-Santaella, Spain



Research Ideas on Respiratory Conditions and Tobacco Dependency

What is the prevalence of Undiagnosed Chronic Obstructive Pulmonary Disease (COPD) in the user population of two urban Health Care Centers? (Protocol Study)

Miguel Domínguez-Santaella

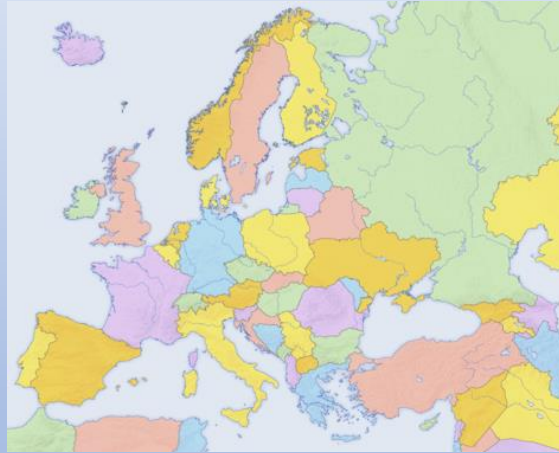
"Victoria" Health Center

Multiprofessional Teaching Unit of Community and Family Attention

Málaga Primary Care District, Servicio Andaluz de Salud, Málaga, Spain

Member of GRAP, semFYC and SAMFyC Respiratory Group

Location



“Victoria” and “Rincón de la Victoria” Health Centers.

Malaga-Guadalhorce Primary Care District ,
Málaga, Spain.

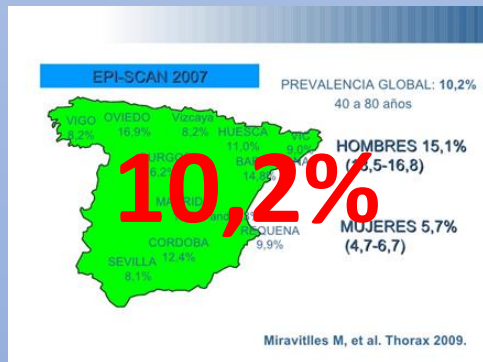


Research Question



1. What is the prevalence of undiagnosed COPD in our population?
2. What are the sociodemographic and clinical characteristics of these subjects?

Background



- COPD is an underdiagnosed disease in our context.
- EPISCAN Study (Miravittles, 2009): Estimated a **7,4 %** of undiagnosed COPD in adults aged 40–80 years old in Spain
- Primary Care is the proper healthcare level to identify this patients at early stages and develop initial assistance.

Objectives



- **Main objective**

- To establish the prevalence of undiagnosed COPD in the population of two urban Health Centers (HC)

- **Specific objectives**

- To know the clinical and sociodemographic characteristics of the diagnosed subjects.
- To establish the validity of the COPD-6 device by comparing it with the spirometry values as a reference test.

Methodology (1)



- **Design:** Multicenter Cross-sectional descriptive or prevalence observational study.
- **Emplacement and Population:** In Primary Care (two urban HC). User population of two Health Centers located in Málaga (Andalusia, Spain).
- **Sampling methods and Inclusion criteria:** A non-probabilistic **sampling** of patients attending a consultation on demand and who agree to participate by signing the informed consent is performed. Each subject will have a personal interview to determine if they meet inclusion criteria to be included and collect clinical information.

Methodology (2): Measurements

- COPD-PS (Chronic Obstructive Pulmonary Disease-Population Screener) questionnaire (cut off of 4 units)

Continuando de detección de casos de EPOC COPD-PS

En esta encuesta se le hacen preguntas sobre usted, su respiración y su capacidad para realizar algunas actividades. Para contestar la encuesta, marque con una X la casilla que describe mejor su respuesta a cada una de las preguntas a continuación.

1. Durante las últimas 4 semanas, ¿cuántas veces sintió que le faltaba el aliento?

Nunca	Pocas veces	Algunas veces	La mayoría de las veces	Todo el tiempo
<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 2

2. ¿Alguna vez espesa algo al toser, como mucosidad o flema?

Solo con resaca o infecciones del pecho ocasionales		Si, algunos días del mes	Si, casi todos los días de la semana	Si, todos los días
No, nunca	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 2

3. Durante el último año ¿ha reducido sus actividades cotidianas debido a sus problemas respiratorios?

No, en absoluto	Casi nada	No estoy segura	Si	Si, mucho
<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2

4. ¿Ha fumado al menos 100 cigarrillos en TODA SU VIDA?

No	Si	No sé
<input type="checkbox"/> 0	<input type="checkbox"/> 2	<input type="checkbox"/> 0

5. ¿Cuántos años fuma?

De 35 a 49 años	De 50 a 59 años	De 60 a 69 años	De 70 en adelante
<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 2

Suma la puntuación de cada una de sus respuestas (anotando, a continuación, el número que figura al lado de cada una de ellas) y anote el resultado total.

<input type="checkbox"/>	+ <input type="checkbox"/>	= <input type="checkbox"/>	+ <input type="checkbox"/>	= <input type="checkbox"/>	+ <input type="checkbox"/>	= <input type="checkbox"/>	+ <input type="checkbox"/>	= <input type="checkbox"/>	+ <input type="checkbox"/>	= <input type="checkbox"/>
Respuesta 1	Respuesta 2	Respuesta 3	Respuesta 4	Respuesta 5	Resultado total					

Si el resultado es igual o mayor de 4 es probable que tenga enfermedad pulmonar obstructiva crónica (EPOC). Consulte con su médico.

Si el resultado es entre 0 y 3 pero tiene problemas respiratorios consulte con su médico.

- Spirometry screening with the Vitalograph-COPD-6 portable device (cut off of 0.75)



- If either of them were positive, the participant would be called to perform a **Forced Spirometry (EF) and the Bronchodilation Test.**
- The degree of severity of COPD obstruction would be classified according to the GOLD standard.

Methodology (3):



- **Sample size:** estimating a prevalence, expected proportion **7,4%: 246** participants in both centers
- **Variables**
 - **Dependent variable:** undiagnosed COPD.
 - **Independent variables:**
 - **Sociodemographics:** age, sex, education, income, employment status, activity, marital status, medical quota.
 - **Clinicals:** tobacco consumption pattern (Pack-year index), obstructive pattern (GOLD), personal background (Hypertension, diabetes mellitus, dyslipidemia, obesity, ischemic heart disease, stroke, neoplastic process, mental illness), treatment with psychotropic drugs, dyspnea (mMRC and Borg scale).
- **Statistic Analysis**
 - **Descriptive** cross-sectional analysis of all variables
 - **Bivariate analysis** of the dependent variable
 - **Multivariate analysis** to determine the contribution of each explanatory variables on the outcome, taking into account the **confounding factors**.

Ethics and Legal Aspects



- Approved by the local Clinic Investigation Ethics Committee.
- International Principles and Laws: Declaration of Helsinki, Council of Europe Convention on Human Rights and Biomedicine.
- Requirements established in Spanish legislation:
 - Rules of good clinical practice (art. 34 RD 223/2004; community directive 2001/20 / CE)
 - protection of personal data (LOPD 15/1999).
 - Patient Autonomy Law 41/2002 and the Biomedical Research Law 14/2007.
- Informed consent and Participant Information Sheet.

Funding

- This project has received a grant "Isabel Fernández 2019" from the "Sociedad Andaluza de Medicina Familiar y Comunitaria (SAMFyC)"



Questions to discuss: Applicability



- The study will help us to know:
 - The estimated prevalence of undiagnosed COPD and the clinical and sociodemographic characteristics of users with COPD,
 - Percentage of underdiagnosed women,
 - Smoking habit or exposure to tobacco of the diagnosed subjects,
 - GOLD stages of the undiagnosed patients.
- To Organize a **focused screening program** to find patients with undiagnosed COPD
- Additionally, the **validity of the COPD-6 device** will be established by comparing it with the spirometry values as a reference test.



Thanks for your attention!!

mduominguesan@gmail.com