

Idiopathic Pulmonary Fibrosis (IPF) : Epidemiology and characteristics of patients in Morocco

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INTRODUCTION

IPF is a chronic fibrotic lung disease of unknown cause that occurs in adults and has a poor prognosis. The rarity of the disease means that local information is scarce. We therefore aimed to identify the epidemiology, demographic and clinical characteristics of IPF patients in Morocco.

METHODS

A cross-functional survey was conducted with 9 pulmonology experts from the reference hospital centers across Morocco, to describe prevalence, incidence and clinical characteristics of IPF patients. Data were collected using local registries complemented with experts' opinion where required. Epidemiological data was then projected over the total country's population, based on catchment areas for each hospital center to estimate national prevalence, incidence demographic and clinical characteristics of IPF patients .

RESULTS

Data collected from the 9 centers enrolled in the study identified 278 existing patients and 134 patients newly diagnosed in 2021. The 9 centers cover approximately 61% of the total population of Morocco.

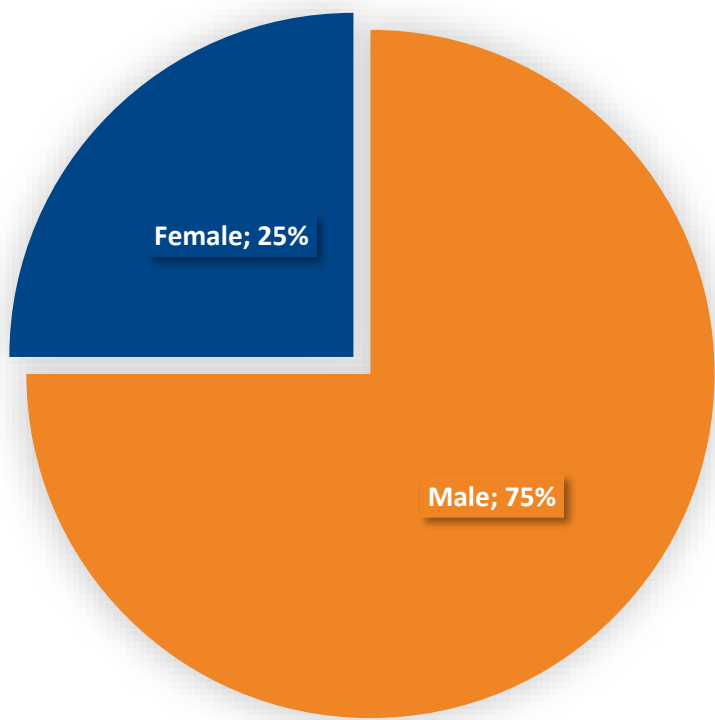
An extrapolation to the whole country would suggest 457 patients suffer from IPF and 220 new cases are diagnosed every year. Thus, prevalence and incidence were estimated at 1.26 per 100,000 per year and 0.61 per 100,000 person-years, respectively. (Table 1)

Table 1. Epidemiology of IPF in Morocco

Epidemiology			
Total population Morocco (2021)	36 313 239		
Item	Rate per 100,000	Patients observed	Patients projected
Incident cases	0.61	134	220
Prevalent cases	1.26	278	457

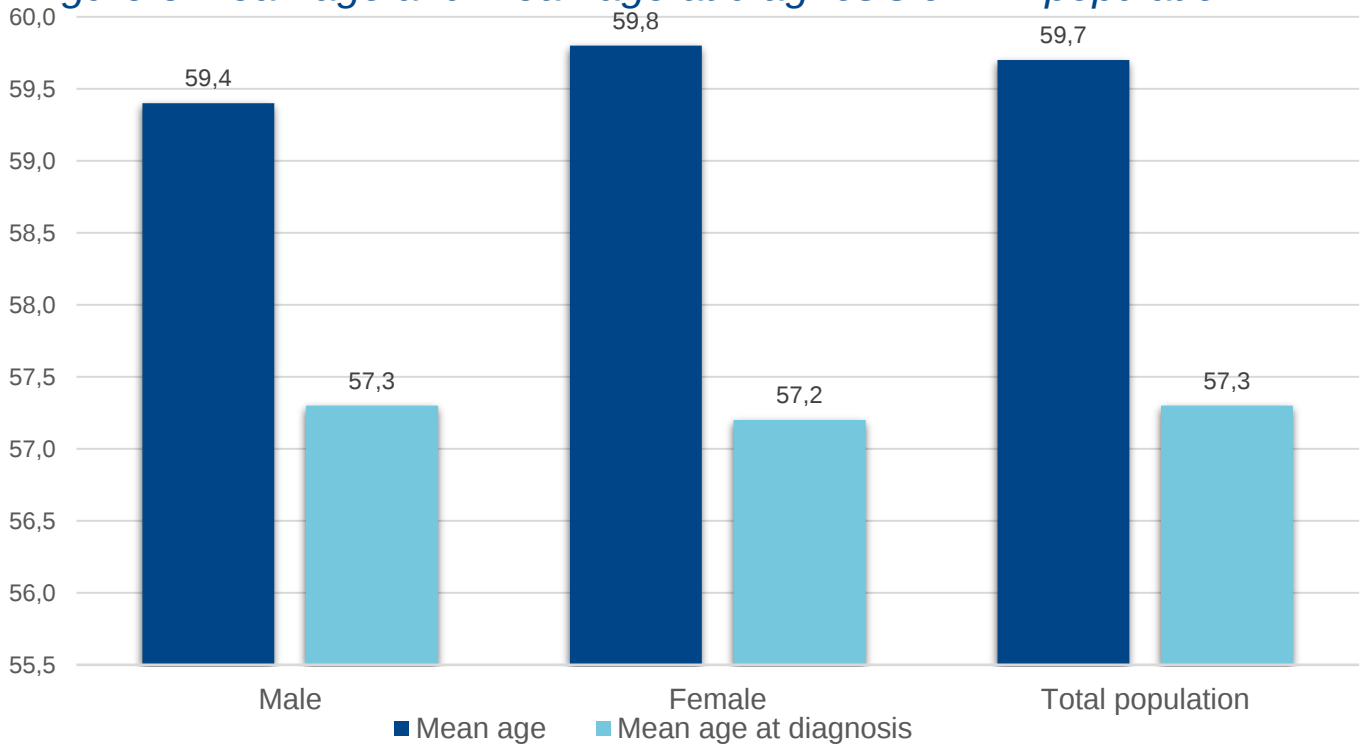
IPF was more frequent in men with a proportion of 75% (Figure 1).

Figure 1. Proportion of IPF patients by gender



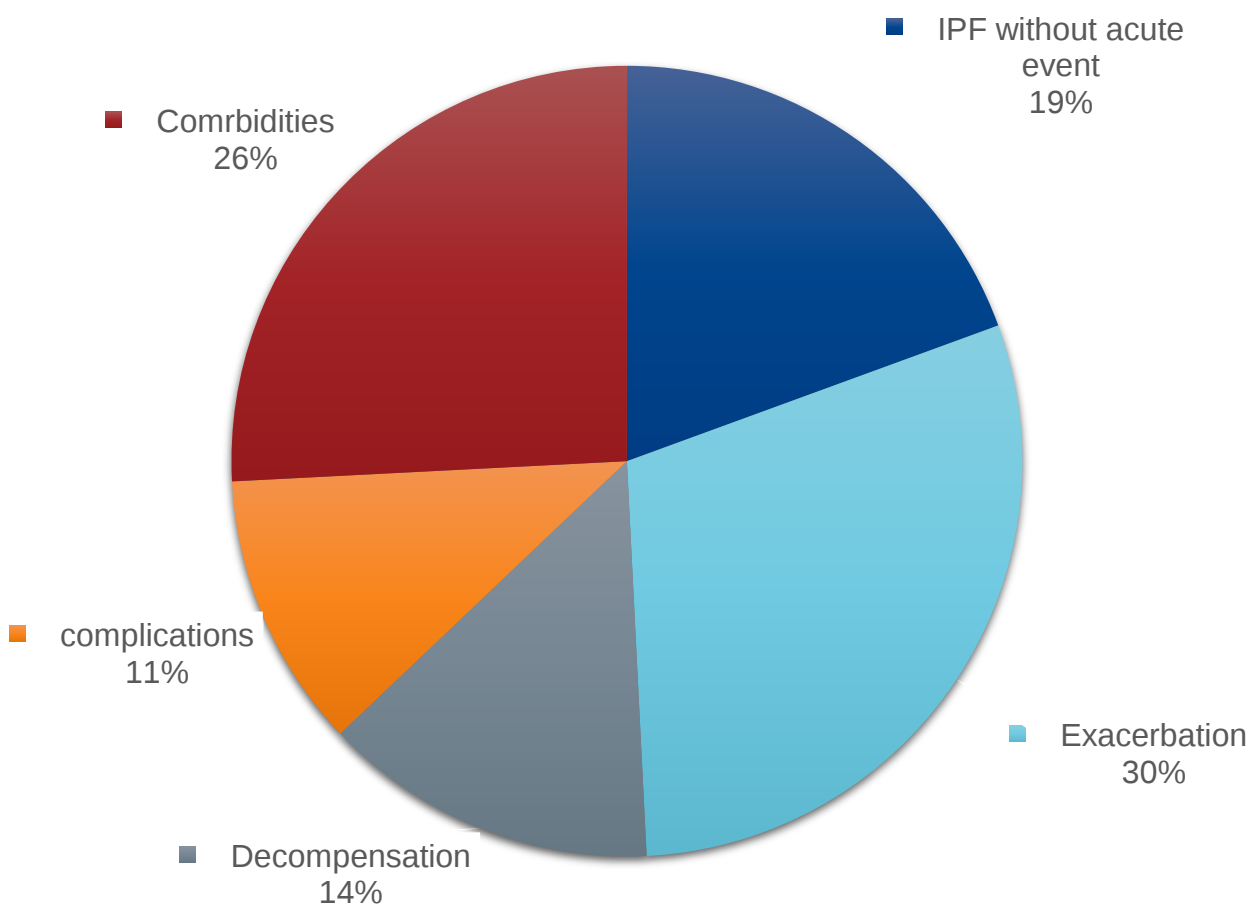
IPF patient were relatively old with an average age of 59.5, while the average reported age at diagnosis was 57.3 (Figure2).

Figure 3. Mean age and mean age at diagnosis of IPF population



This survey revealed that severe clinical manifestations such as exacerbations (28%) were higher than what is commonly observed in the literature (Figure3). This could be explained by late diagnosis, often established during hospitalization due to worsening of the patient's conditions.

Figure 3. IPF Patient distribution by clinical expression

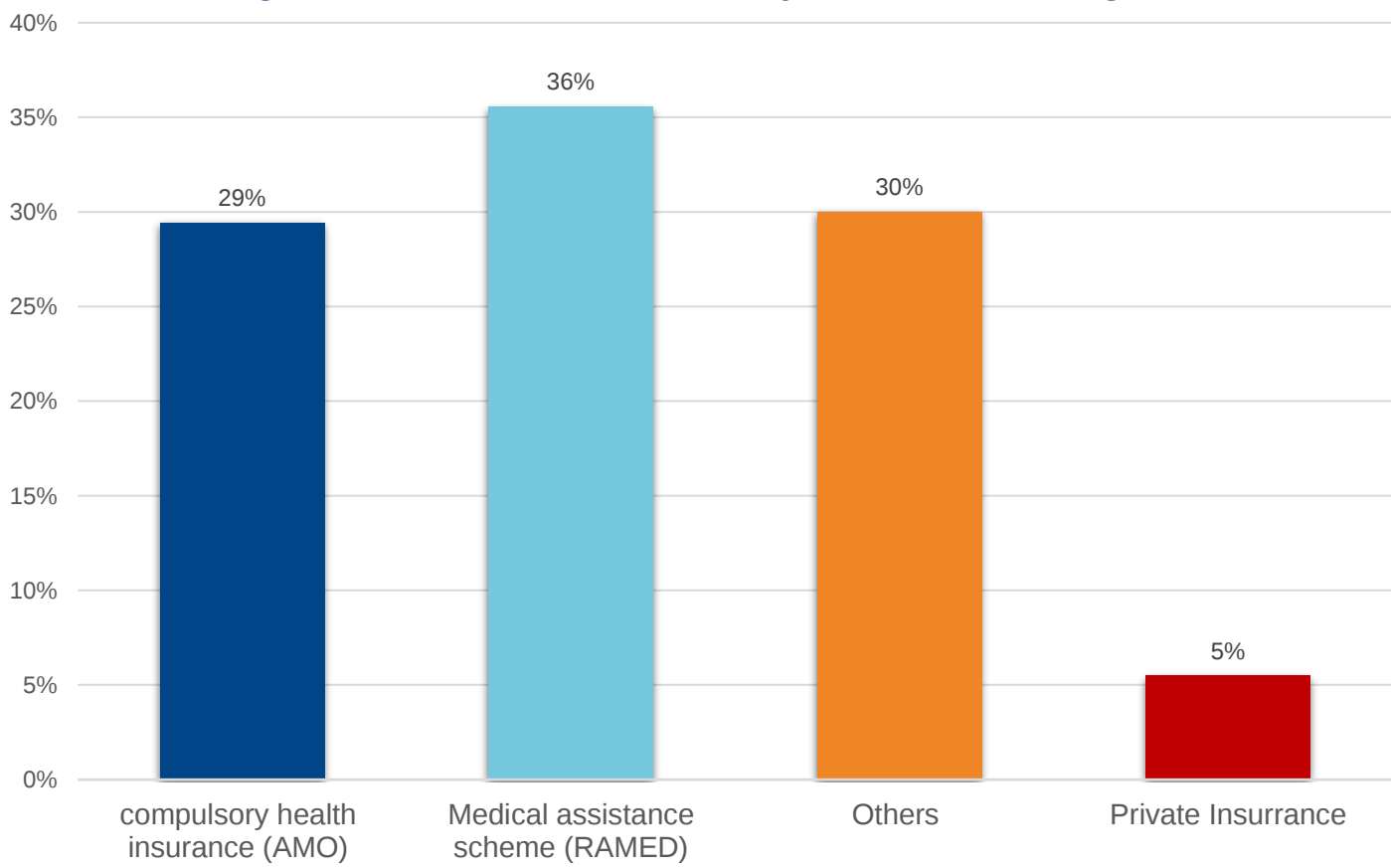


Among reported complications, common ones included respiratory infections ,Pulmonary hypertension and cardiovascular complications.

The most frequently pointed comorbidities were pulmonary (COPD, lung cancer, sleep apnea) . The extra pulmonary ones were cardiovascular diseases such (HTA, coronaropathy, and heart failure), as well as, Gastro esophageal reflux, diabetes and depression ,among others.

Notably, Most of the patients had medical coverage with a predominance of patients under Medical assistance Scheme (RAMED) (36%), followed by patients under compulsory health insurance (AMO) (29%) and other insurance ex: Military Royal Armed Force (M FAR) (30%). A minority of patients were privately covered (5%) (figure 4).

Figure 4. Patient distribution by medical coverage



CONCLUSIONS :

This is the first conducted survey to evaluate epidemiology of IPF in Morocco. Both estimated incidence and prevalence were pointedly below figures in mature markets, however those were in line with what was observed in neighboring countries. This does not indicate that IPF is less common in the region but most likely that data may be influenced by unidentified confounders or that this pathology is underdiagnosed. This could highlight a need to develop awareness around IPF. Moreover, high rates of severe events such as exacerbations were observed. Early diagnosis & effective treatments to manage IPF and slow disease progression are needed.

References: Dong Soon Kim, Acute exacerbation in patients with idiopathic pulmonary fibrosis).Respiratory research 14, Art n°86(2013).

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