



Introducing Health Sciences: COPD
Chronic Obstructive Pulmonary Disorder

Presenter

Betty is sixty-two. She was diagnosed with chronic obstructive pulmonary disease or COPD seven years ago. Betty lives in Sheffield in the north of England with her husband Tony, who is also her carer. They've had to come to terms with the fact that COPD places many restrictions on Betty's life.

Betty

Oh you might say one night that oh I'll go to town tomorrow and have a good look round shops. You get up next morning and you find oh can I manage it and you know at the back of your mind that you can't. But you keep wanting to push yourself but it don't work so I've realised now that you have to just take things as they come and like when I'm making the bed or 'owt like that – you know – if I'm changing bed I can only do so much and then I have to sit down.

Presenter

The Sheffield area has a high prevalence of COPD. Many people, especially among the older members of the population, have the condition. Betty regularly attends Breezes, a local support group and social club for people with COPD and their carers.

Breeze is run by Joan Higgs, a specialist COPD nurse and meets in a local pub.

“You can't just enjoy yourself like you used to.”

“You can't do steps and I live on a steep hill and it sounds ridiculous – I have a friend at the top of the hill and I have to get the car and drive round and down to their house. I can walk down – can't walk up. And coughing – it's at the most inappropriate and embarrassing times when you start.”

“Not being able to walk, particularly everybody does but I live in a particularly hilly district and I can't go anywhere without either the car and now I've got my little scooter I go on that.”

Doctor

The patients who get COPD are often more elderly patients. It is possible to get it in younger people in their thirties and forties but it usually tends to come on to a noticeable extent in the fifties and sixties and in people who are older than that it's more common still. It's usually

people who smoke. Ninety five per cent of people who get COPD have significant smoking history although a very few don't. Erm – it's often men – because men have done the smoking and that's also because they've often worked in heavy industries but that pattern's changing as time goes by and we're seeing more and more women who do get the disease and because they tend to be more sensitive to the affects of cigarette smoke um -they are often getting the disease younger than we've seen it in men in the past.

Presenter

The high rate of COPD among older people in Sheffield is also partly a legacy of the city's industrial past. Until recently the majority of employment was in heavy industries, where long term exposure to smoke or dust gradually damaged workers lungs.

Doctor

I guess the occupations in the past in Sheffield that would have significantly contributed to COPD currently would be any occupation where people would be exposed to fumes, dust or gases. That's a pretty broad definition but focusing particularly on Sheffield this is likely to have been the very heavy industry that Sheffield's well known for. So steel industry, metal industry, mining and so on, these would be the occupations that common sense would say people would get exposed to fumes, dust and gases.

Presenter

But there are a wide range of occupations where environmental conditions may contribute to the risk of developing COPD.

"I started work in a steel works and I've worked in cement factories and places like that with quite a bit of dust."

"Well when I first noticed this COPD coming on, I worked at a sweet factory."

"I worked in milling shops, casting shops and I worked in a foundry."

"I've always worked in an office, mostly at a paper mill."

"My main job's been in transport and erm I was diagnosed with COPD about eight years ago."

"Yeah – I worked contracting – I worked on power stations, chemical plants, universities, everywhere."

"And everywhere where there were dirt and dust."

Presenter

Sheffield's heavy industries have declined in the last twenty to thirty years and safety standards have vastly improved. However, COPD prevalence, not just in Sheffield but in the whole of the UK, will probably remain high in the future due to the high proportion of tobacco smokers in the population.

"And did you ever smoke?"

"Oh yes. I smoked for about forty five years."

"Forty five years - but that was the culture to smoke when you smoked."

"Yes. I blame the Navy for that because they threw cigarettes at you in the Navy."

"I smoked about ten to fifteen a day"

"Ten to fifteen a day"

"But I've been packed up now twenty two year –"

"Because you've got quite a large smoking history haven't you – you're quite a heavy smoker in the past."

"Yes I used to be."

"But you don't smoke now?"

"No – not for twenty years now."

"Have you ever smoked?"

"Yeah. I've been a heavy smoker."

"You've been a heavy smoker."

"I think it ran in the family because my grandfather and my father both were asthmatic and er because they smoked very heavy I vowed and declared that I would never smoke and I've never smoked."

"You've never smoked but you lived with parents that smoked –"

"I lived with parents that smoked yeah."

Doctor

Only about a third of people who smoke will go on to get the disease so there is something about people that gives them COPD, something in their genetic background. So it's the people who have the genetics to have sensitive lungs that are sensitive to the affects of cigarette smoke and pollutants who then get inflammation in the lungs, it damages the lungs and that's what produces COPD.