

Flashes of inspiration needed to solve weather and pain mystery

June 10 2016



Credit: University of Manchester

The University of Manchester team behind a ground-breaking study recording how thousands of people with chronic pain react to the weather is seeking help from the public to come up with explanations for the results.

More than 8,000 [people](#) from all over the UK have downloaded the Cloudy with a Chance of Pain app and over a million pieces of data have been entered since the launch in January. Now the scientists are seeking to public's help to draw links between the [weather data](#) and the recordings of [pain](#).

Dr Will Dixon, Director of The University of Manchester's Arthritis Research UK Centre for Epidemiology and Honorary Consultant Rheumatologist at Salford Royal NHS Foundation Trust, had the original idea for the experiment. He said: "This project is all about getting people involved in the scientific process.

"We don't have the answers for this important question, but by getting large numbers of people to look at the results, we hope that someone will have a flash of insight that could lead to a breakthrough."

Anyone can take part in the study by visiting the website and looking at the data which can be displayed as symptom and [weather](#) landscapes. People can explore reported symptoms such as [pain intensity](#) alongside weather parameters such as barometric pressure using graphics developed by the Office for Creative Research in New York. They can then enter their hypotheses about any relationships they spot (or not).

Suggestions will be assessed by the research team and may form part of the final results of the study next year. The team will be highlighting some of the hypotheses it receives on the website and social media channels.

Dr Dixon said: "The project got global attention when it was launched and this led to us receiving dozens of possible explanations from the public and seeing hundreds more on social media. Now people have a chance to have a good look at the study data and give us their theories about if and how the weather affects pain."

Cloudy with a Chance of Pain is the world's first smartphone-based study to investigate the association between pain and the weather. The study is being carried out during 2016 using a smartphone platform called uMotif which people will use to record how they're feeling, whilst local weather data is automatically collected using the phone's GPS.

Anyone in the UK with arthritis or other chronic pain and aged 17 or over can take part. All participants need is a smartphone. Once the project ends in January 2017, the research team will also carry out a formal analysis and hope to use the information for generating pain forecasts, allowing people to plan their weekly activities.

Dr Dixon added: "There are many variables at work here. For example, does temperature affect people's pain? And if so, is it an increase or decrease? The rate of increase or the absolute value? And is it instantaneous or is there a lag of a few days?

"These are all questions that need to be answered and we need as many people to take part as possible."

More information: Visit the Cloudy with a Chance of Pain website to take part: www.cloudywithachanceofpain.com/citizen-science

Provided by University of Manchester

Citation: Flashes of inspiration needed to solve weather and pain mystery (2016, June 10)
retrieved 6 May 2024 from <https://medicalxpress.com/news/2016-06-weather-pain-mystery.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.