



# affa sair

registered charity SC049728

self help for chronic pain sufferers

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## BAROMETRIC PRESSURE SURVEY

Far too often, distant and powerful organisations such as NICE, proclaim there is no proof that a certain type of treatment works purely because there hasn't been a scientific study done to prove the hypothesis. Yet, there is no imperative placed on them to organise such a study. So, sufferers are left in limbo and denied possible treatments.

For as long as there has been pain in the world, sufferers have said that the weather affects their pain levels, and they can use their own bodies to predict the weather. It is so well known it has become accepted common knowledge – except in the world of hidden scientists who control what is or is not available to help sufferers.

In September 2021 we at Affa Sair decided to see how the weather affects the pain levels of our members. We created a simple questionnaire asking our members how they felt compared to the barometric pressure readings of that day.

Barometric pressure, also called atmospheric pressure or air pressure, is the force or weight of the air surrounding us. Barometric pressure is measured by a barometer. One of the commonest types of barometers is a mercury barometer in which the height of a column of mercury that exactly balances the weight of the column of atmosphere over the barometer represents the barometric pressure at that point. At standard sea level, the barometric pressure equals 760 mm (29.92 inch) of mercury. A rise in barometric pressure is generally considered an improvement in the weather, while a fall in barometric pressure may mean worsening weather.

It is known (and scientifically accepted that a fall in barometric pressure can affect health in various ways.

- **Mountain sickness or altitude sickness:** It refers to a group of general symptoms occurring on climbing or walking to a higher altitude or elevation too quickly. At heights above 1,500-3,000 m (5,000-10,000 feet), the pressure is low enough to produce altitude sickness. This happens especially when the person ascends too rapidly not allowing their bodies to adapt or acclimatize to the fall in pressure and oxygen levels with increasing height
- **Worsening of arthritis:** It refers to the inflammation of joints. This may be due to the changes in the joint fluid as the pressure changes. Arthritis manifests as painful, swollen joints that may be associated with joint stiffness. Elderly people often describe the pain associated with a fall in barometric pressure as a storm coming in their knees (storms are associated with a sudden fall in barometric pressure). Some people may be more sensitive to weather changes experiencing more stiffness, pain, and swelling with a barometric pressure decline.
- **Headaches:** Some people report worsening of headaches including those caused by sinusitis (sinus inflammation) and migraines when the barometric pressure falls

As a wee initiative to get a goodish number of participants we offered a £25 Amazon voucher for one lucky participant, drawn at random, who submitted a fortnight's worth of answers. As with all things, that immediate enthusiasm to take part waned, but enough people stayed the course that we decided to extend the survey to four weeks after the voucher was won at the end of the two week period.

We tried to keep the questions as simple as possible and the whole experience quite light-hearted with accompanying graphics. We used Google Forms to design and publish the survey. The only part of the questionnaire that needed some research by the participants was to get the barometric pressure for that day. However, we attached a link to the free BBC Weather internet page which gave the relevant details. The questions took an average of 5 minutes to answer.

What is your name? \*

Your answer

Date

dd/mm/yyyy

How do you rate your pain levels today? \*

Better than my normal pain level

My normal pain level

Worse than my normal pain level

What are the weather conditions like? \*

Cold

Hot

Cloudy

Pleasant

Sunny

Rain

Now please enter the pressure and temperature readings in the following panels.

Please use a free weather app of your choice or the BBC Weather page at [www.bbc.co.uk/weather](http://www.bbc.co.uk/weather)

On the web page:  
Enter your postcode.  
Scroll down  
You will find the pressure and temperature readings under OBSERVATIONS.

What is the Barometric Pressure? \*

Your answer

What is the tendency (if available) \*

Rising

Falling

Steady

Unknown




What is the temperature? Just the number is needed. \*

Your answer

Submit Clear form

### The Results

Over the four-week period, some 375 submissions were made to the survey which showed that during times when the pressure was low - less than 1013 hPa (hectoPascals) - a whopping 48% of contributors had a worsening of their pain levels. This compares to only 19% of the contributors' pain levels getting worse during high pressure periods (more than 1021 hPa).

	<b>Pressure</b>	<b>People</b>	<b>Percentage</b>
 Low	1012	92	48%
 Normal	1013	64	33%
 High	1022	36	19%
<b>Total</b>		<b>192</b>	<b>100%</b>

<b>When pressure is low</b>	<b>(less than 1013)</b>	<b>48% report worsening pain</b>
<b>When pressure is normal</b>	<b>(less than 1021)</b>	<b>33% report worsening pain</b>
<b>When pressure is high</b>	<b>(more than 1021)</b>	<b>19% report worsening pain</b>

Will this study be accepted by such organisations as NICE or the scientific community – absolutely not!

That was never the real intention, but we do hope that organisations or scientists with far more clout and standing develop the survey and produce a scientifically accepted paper on it. No person with any integrity or compassion should leave fellow humans suffering because of the self-superiority of stuffy scientific procedure. Where there's a will, there's a way after all.