This weekend marks the end of daylight saving time. That means that, on Sunday morning at 2 a.m., clocks across America will make their biannual time change, magically jump back one hour. For many, this offers a small but valuable treat: An extra hour of sleep. But those extra winks may come at a high cost, according to a new research paper published in the journal Epidemiology. The study shows a drastic spike in diagnoses of depression immediately following the time change. What's going on here?

Roughly 1.6 billion people in about 70 countries observe DST. The exact day and time may differ, but the gist is the same: In the spring, we push our clocks forward, and in the fall we put them back. The goal is to make the best use of daylight as the seasons change and the days get either longer or shorter.

But it seems this transition can have a noticeable effect on many people's psychological health. Why? Because it screws with our circadian rhythm, or internal clock. When this clock gets out of sync, it can alter the chemicals in our brain, leading to depression.

Think about it: That extra hour of daylight you'll get on Sunday morning might not actually do you much good. In the morning, you're likely to be in bed, or in the shower, or commuting to work. Chances are you're not out and about taking in the sunshine. In other words, people may miss out on an hour of daylight that they were able to benefit from when it was in the afternoon, during DST. This is no good when you consider that sunshine itself is also really important for our mental health. Research has indicated that moderate exposure to the sun boosts our vitamin D levels. And for many, the very act of jumping back an hour in time is an unwelcome reminder that dreary weather is coming, and that thought alone may prompt symptoms associated with depression.

Indeed, all of this showed up in the research: According to the study, there is an 11 percent spike in the number of depression diagnoses after the autumn time change. Perhaps the worst part of his team's findings is this: It takes about 20 weeks after the time change for the number of depression diagnoses to level off. Twenty weeks! That's about five months!

The team also examined how depression levels changed in the spring, right after jumping forward an hour. They expected to see at least a slight decrease in diagnoses, but found no change at all.

So what does all of this mean?

As the end of daylight saving time draws near, it wouldn't be such a bad idea to start shifting your schedule slightly so that you get all of the sunlight your body needs. This could be as simple as waking up a bit earlier or simply taking a walk before work or school. And once Sunday hits, it's worth keeping tabs on your mood and energy level, so you're aware of any significant changes.

### Questions

1. Why, according to the article, is daylight saving time bad for our health?
2. This article is organized be presenting the problem followed by the solution. What is the problem? What is the solution?
3. List all the stems on the back along with their meanings, the word in the text that contains the stem, and your definition of that word.