New research takes p*** out of incontinence

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Millions of people might eventually be spared the embarrassment and extreme isolation caused by wetting themselves, thanks to new research.

One in every five people has a lower urinary tract disorder called overactive bladder which, for some, means not being able to hold in

urine, needing to go to the toilet often, or waking in the night to empty their bladder.

Some wear sanitary towels or disposable underwear, while others worry that even with absorbent underwear, they'll smell of urine, so they choose instead to stay at home.

Now, scientists at the University of Portsmouth have identified chemicals in urine that are specific to overactive bladder. The next step is to develop a gadget similar to a pregnancy test, to see if these chemical markers are present. Such a device is 12-24 months from clinical trials, but the early signs are encouraging.

Dr. John Young and Dr. Sepinoud Firouzmand, both in the School of Pharmacy and Biomedical Sciences at Portsmouth, published their research in Nature's *Scientific Reports*.

Dr. Young, who led the research, said: "The first step has been to identify chemicals in urine that are specific to overactive bladder. The next step is to develop a gadget for use in GPs, pharmacies and nursing or care homes which is simple to use, accurate and doesn't need to be sent to a laboratory for processing.

"If successful, it would save millions of patients from painful procedures and long waits for a diagnosis."

It would also save healthcare providers, including the National Health Service (NHS), millions of pounds.

Dr. Young said: "This is the first step in transforming the lives of millions of people who suffer in silence, too embarrassed to go out or even to speak about their condition.

"It is not too strong to say this could be a game changer."

If clinical trials bear out the development, it would allow treatment for the condition to begin much earlier.

Urinary disorders affect 20 percent of the population as a whole. By the age of 50, one in three people will have a urinary disorder.

Diagnosing an overactive bladder—when a patient needs to urinate very often, and sometimes wets their pants—is, at best, a cumbersome process. Clinicians need to first rule out a wide range of possible diseases and conditions with the same symptoms, including some cancers, Type 2 diabetes, cystitis, and a urinary tract infection. One of these tests is invasive and painful and costs £1,000 per person. The treatments for each possible disease varies greatly. Some of the tests aren't accurate at giving a clear result, prolonging clinicians' search for a diagnosis.

The conditions can be so complex to diagnose, that patients' health has often worsened by the time the results are finally in.

The dipstick test Dr. Young and colleagues are proposing would cost about £10 and take a few minutes to give an accurate result.

Treatment could start immediately, long before the sometimes debilitating symptoms have forced a patient to wear sanitary products, or to stop going out altogether to avoid wetting themselves in public.

"It'd be as simple as a pregnancy test," Dr. Young said. "Effective treatment is early treatment. When left untreated, the bladder can change. Additional nerves, blood vessels and cells grow, leaving it smaller than before."It isn't good enough that so many millions of people feel forced to isolate themselves in their homes, avoiding all social

interaction, with a condition which if caught early, has treatments which can help."

Provided by University of Portsmouth