

Losses in Mental Illness Productivity and Disability Can Be Reduced

The main cause of workplace losses due to mental illness is, in fact, anti-depressant failure, says Mark Faiz, CEO at Personalized Prescribing, Inc.

He told the *Benefits and Pensions Monitor* 'Losses in Mental Illness Productivity and Disability Can Be Reduced' that anti-depressants are very challenging because they are prescribed using trial and error. Unfortunately, doctors are not able to get an actual biopsy on the brain to determine what's wrong and prescribe the right medication as is done with other conditions. The guideline is to start with medication which works with most people. If it doesn't work, they go to the next and if it doesn't work, try this. Because they are only guessing which drug might work, the condition becomes worse and worse and, eventually chronic. It then becomes very challenging to bring the patient back to full health.

Untolerated Side Effects

In fact, the failure rate on anti-depressants is 50 per cent and failure can often result from intolerated side effects. A person experiencing really bad side effects is not going to adhere to their medication.

To quantify the cost of mental illness in the workplace, he cited a paper – 'Global Workplace Depression' by Dr. Sara Evans-Lacko and Professor Martin Knapp of the London School of Economics. It determined the annual cost was \$1,567 per person who is depressed and absent.

Presenteeism, where a worker comes to work and is not really productive is a worse problem. Canadian employers lose \$4,270 per employee suffering from mental illness or depression per year.

The makes the cost of depression which causes absenteeism and presenteeism roughly \$6,000 per employee each year for an employee earning \$26 an hour.

Mental illness comes in many different shades, said Faiz. About 25 per cent are not serious. They last for no more



than six months with only a little loss of productivity.

More serious are transitory cases (35 per cent). They last between six and 18 months and they generally recover on their own with a little bit of psychotherapy and medication.

Chronic cases, where anti-depressants failed, account for 40 per cent of cases with 50 per cent of these due to anti-depressants failure the first time they are prescribed. These are costing \$24,000 per employee – most of the cost of lost productivity.

"My argument is the solution is pharmacogenomics," said Faiz, because it usually puts people on the right medication as early as possible.

Pharmacogenomics is a genetic test that basically identifies the most appropriate medication for a patient and Personalized Prescribing has achieved tremendous success with its offering.

Due Diligence

Those contemplating it must do their due diligence.

The service must test for pharmacokinetics, which is what the body does with the drug, ensuring the active ingredients pass through the liver enzymes successfully.

Then, if the anti-depressants are going to work, they need to cross the blood brain barrier, an enzyme that protects the brain by preventing foreign substances from entering. "Drugs are a foreign substance which makes the blood brain barrier huge when selecting a drug. This is where understanding that genetic component comes in," he said.

The most important and complex is the need to test for the pathways of the drug in the brain. If any of the genes in that pathway are extremely changed for whatever reason, then the drug will fail.

The genes also indicate whether a patient may suffer from extreme side effects. The science is not very good on side effects. "We're discovering more and more side effects which are impacted by genes that we don't even test for," he said.

The pharmacist must look at the totality of all these genes and make a final decision which is delivered to the doctor.

A client for about a year and a half is Manulife. The first thing it did, "which I believe was brilliant," is offer it as a benefit to its employees. Early program results showed that 53 per cent of the members who took that test, changed their medication or the dosage. And 82 per cent of these members reported an improvement in their symptoms. Based on this, it believes it saved up to \$2,400 in direct and indirect costs by using pharmacogenetics, achieved a six-to-one return on its investment in personalized medicine.

It also saw a 17 per cent reduction in short-term disability duration for members who were tested compared to those who were not. And while Manulife is very happy with that result, Faiz is not. "I'm unhappy with it. I believe that as we get better at convincing people to be tested, this will improve," he said. **BPM**