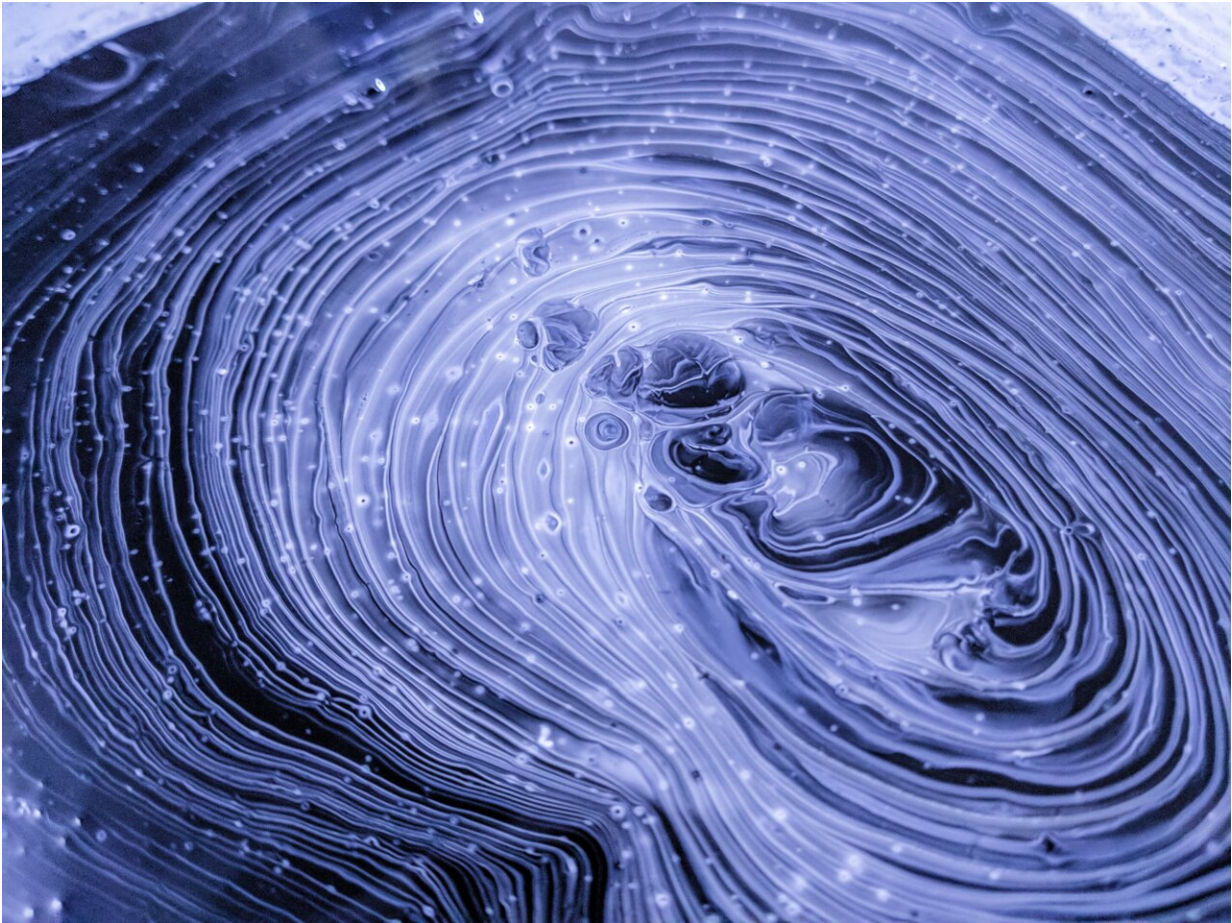# Detecting depression in teens

September 10 2018, by Jane Fisher, Fransiska Kaligis, Thach Tran And Tjhin Wiguna

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Today is World Suicide Prevention Day. According to [WHO 2014 Mental Health Atlas](link), suicide rates in Southeast Asia, which includes

Indonesia, are the highest in the world, reaching 20 per 100,000 people annually. The global suicide rate is estimated to be 10.5 per 100,000 people.

In Indonesia, according to the country's 2013 Basic Health Research (Riskesdas) 6% of the Indonesian adult population has mental-emotional disorders, such as mood disorders, anxiety, psychotic, and substance use.

Teenagers and children also experience these problems. Some 140 of 1000 teens below 15 years old and 104 out of 1000 children age between 5 and 14 years old have mental health problems.

To overcome all these problems, access to mental health services for adolescents should be improved. But not only that, counsellors in schools, general practitioners and nurses should be equipped with tools to detect symptoms of mental health problems.

Between January and July this year, a group of us, consisting of researchers from Australia and Indonesia, carried out a study to translate into Indonesian the instruments to detect symptoms of depression. We also tested to see if they could be easily understood and accepted by Indonesian young people.

Not easy to detect

Mental health practitioners are trained to diagnose people with depression. They usually use clinical interviews to make these diagnoses. However, the pathway for people to seek help for mental health problems can be difficult.

There is stigma surrounding emotional disorders, which prevents people from seeking help. And most people often don't know that they or their friends or a family member are experiencing depressive symptoms.

Schools have several characteristics that make them an ideal place to promote the mental health of adolescents. Primary schooling is compulsory for Indonesian children. They spend six to eight hours a day at school, giving teachers an opportunity to recognise emotional and behavioural problems among them.

But, counsellors in primary schools in Indonesia do not have tools to help them screen mental health problems.

Tools to detect depression

Detection of depression and anxiety among adolescents is not easy and often only happens when symptoms have become severe. We can see this in the media reports of teenage suicides.

Indonesian medical health researchers do have screening tools to detect symptoms of depression and which has been translated to Indonesian. For example, the Mini Kid, a semi structured interview guideline to diagnose several mental disorder, including psychosis, depression, and anxiety among young people. But, it's more commonly used for research purposes. For clinical work, psychiatric examination and interview is used much more commonly for diagnosing mental disorder including depression.

That's why we translated instruments that can be used by general practitioners, nurses and counsellors to help them detect depression and anxiety among older adolescents or teenagers around 16 to 18 years old.

For our study we translated the Center for Epidemiologic Studies Depression Scale that had been revised (CESD-R) and the Kessler Psychological Distress Scale—10 items (K10).

The K10 scale was created by Lenore Radloff an epidemiological

statistician at the National Institute of Mental Health (NIMH), US in 1977. Meanwhile the CESD-R scale was created by in 2004 by William Eaton and colleagues.

These instruments are in the form of self-completed questionnaires. Even though the instruments are not specific for adolescent population but in many other countries these instruments are useful for detecting early symptoms of depression and anxiety in adolescents.

Early detection can help adolescents get specific assistance such as counselling, support, family therapy, and in severe cases, medication.

Translating mental health screening tools

For our study, two bilingual translators, whose first language was Indonesian, translated the original questionnaire independently. The translators were psychiatrists who were not involved in the field study.

We then studied the translation and decided on the appropriate translation for each item in accordance to the original language of the instruments.

Back translation to English was done by a sworn professional translator from the language centre in Universitas Indonesia. Experts in Australia evaluated the back translation to make sure that the statements in the Indonesian version are similar to the original version.

We tested the final version of the questionnaires with 10 young people aged 16-18 in Jakarta in February 2018. From the pilot testing, all participants agreed that the translated questionnaires of CESD-R and K-10 could be easily understood.

We also carried out a validation study, to compare the Indonesian

version of CESD-R with the [Mini Kid](#).

Some 196 high school students aged 16-18 years in Jakarta participated in the validation study. The students completed the Indonesian Version of CESD-R and MINI Kid assessments and we compared them to see if the result of CESD-R is similar to the valid measurement (MINI Kid).

Through statistical analysis which measures or compare CESD-R and K-10, we found that all of the scales had good validity to screen depression and anxiety.

CESD-R is 75% sensitive, meaning it can detect 75% people with depression and almost 80% specific to screen depression symptoms like low mood, sleep problem, poor appetite or problems in social interaction; whereas instrument K-10, is 85.7% sensitive and 74.7% specific to screen anxiety.

What next?

School counsellors, nurses or doctors can be trained to use these instruments to detect symptoms of depression. The government should also strengthen the country's referral systems by training primary and secondary health care doctors to manage or refer cases to mental health practitioners.

It's important to increase public awareness on [mental health problems](#). The whole community should support teenagers who are struggling with anxiety, mood disorders, and [depression](#). Rather than judging or labelling them as teenagers with "problems", we should listen, empathise and help them seek professional help if needed. This will reduce stigma and help Indonesian youth themselves value their own psycho-social well being.

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