Depression in Australia

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Abstract

Although commendable milestones have been achieved in terms of detection and management of mood disorders in the last few years, the escalating worldwide occurrence of depression is persistently challenging researchers and medics alike. The World Health Organization (WHO) has projected that by 2030, depression will represent the biggest level of disability associated with any physical or mental disorder across the world (WHO, 2004). In Australia, considerable levels of depression affect an estimated 20% of adults directly or indirectly within their lifetime, with approximately twice as many women identified with the disorder in comparison to men. Almost 80% of suicides are said to be preceded by a mood disorder. This document looks at various aspects of depression in Australia and its management.

Prevalence and statistics

The latest health ‘picture’ of the 33 OECD (Organization for Economic Co-operation and Development) countries has disclosed that Australia is currently positioned in number two as the highest prescriber of anti-depressant medicines. Based on the report, the figures of anti-depressant prescriptions in Australia seem to have doubled between the years 2000 and 2011(www.oecd.org). In every 1,000 Australians, Eighty-nine are currently prescribed some kind of daily anti-depressant in comparison to 71 in the United Kingdom, and a standard of 56 in all OECD countries. Yet 10 years back the rate was nearer to 45. An element in the problem is that depression is an intricate condition, varying in severity, cause, biochemistry as well as outcome. Antidepressants function very well for some individuals, but for others they can be ineffective, this therefore means it is not possible to have a one-size-fits-all therapy, according to Dr Jan Orman, a General Practitioner at the University of Sydney as well as General Practitioner Services consultant for the Black Dog Institute (www.abc.net.au).

In the year 2007, 45% of Australians within the 16-85 year age bracket (or 7.3 million Australians) had, at some point in their life, been exposed to at least one of the chosen mental disorders (anxiety and mood disorders and substance use disorder). Because comparatively more men than women fall under the substance use disorder (regularly alcohol-related) at some point, men were more provable than women to have experienced a mental disorder in their lifetime. This pattern was overturned when analyzing the mental disorders in the 12 months before the commissioning of the survey, when females were more probable than men to have shown symptoms of mental sickness (22% and 18% in that order). The high rate of anxiety disorders in women was recognized as the key player in this differential among all age groups. The levels of mental illness were greater for men within the 16-34 year age bracket which represented 23% and women aged between 16-24 years representing 30% in comparison to older age groups (Australian Bureau of Statistics, 2008).

This is illustrated in Figure 1- top of next page.
Types of depression

Since there is so much that needs to be unraveled regarding depression, one may encounter various ways of categorizing as well as describing depression.

Seasonal Affective Disorder (S.A.D)
Seasonal Affective Disorder or S.A.D has not so far been categorized as a unique psychological disorder. S.A.D seems to affect a majority of individuals throughout their life and some individuals probably do not realize it. It appears to be that with the variation of seasons, people’s moods change depending on the level of sunlight or rain there is. The usual times of the year for individuals to fall into a depressive state is normally winter. The days are unusually short as well as colder; it is desolate and more unlikeable outside. The sufferer will tend to eat more and have extended sleep time, experience chronic fatigue and gain weight. In some extreme cases of S.A.D the sufferer can also have significant social withdrawal (Partonen & Pandi-Perumal, 2009).

Mild depression
Mild depression normally brings out symptoms that are noticeable and affect an individual’s daily activities. An individual is less interested in doing things he/she previously enjoyed, has abnormal irritability, has minimized motivation at work, and home or social activities are ordinary, however he/she continues to function, just maybe not as well as he/she would usually do when in good health. Mild depression in most cases goes undiagnosed since the symptoms are not presumed to be ‘bad enough’ for individuals to think they may have depression as well as discuss it with their health providers or other people. Nonetheless, correctly diagnosing depression at the mild stage and containing it effectively at this phase can halt the condition from developing into major or suicidal depression.

Major depression
Major depressive disorder is alternatively referred to as clinical depression and is also known as major depression, or unipolar depression. The term unipolar indicates the existence of a single pole, or one severe mood, also known as depressed mood. This may be put into comparison with bipolar depression which contains the two poles of depressed mood as well as mania, that is euphoria, escalated emotion and activity. In grown-ups, major depressive disorder targets twice as many women as men. For the two genders it is most prevalent in those who fall within the 25-44 years bracket, and less prevalent in those falling within the 65 year bracket. In children, major depression targets boys and girls at almost the same rate. Within an entire life, clinical depression will affect between 10% and 25% of women as well as between 5% and 12% of men. At any particular point in time, between 5% and 9% of women as well as between 2% and 3% of men are probable to be clinically depressed (Verster, Pandi-Perumal & Streiner, 2008).

Suicidal depression
Suicidal depression leads to considerable pain or anxiety, loss of self-esteem or feelings of unworthiness as well as guilt. In most cases the individual is unlikely to be able to carry on with work, social as well as domestic activities. Severe depression normally brings with it severe symptoms for a change to be recognizable by those near the affected individual even if that individual tries to hide how he/she

There are also additional treatment choices obtainable for mild depression. Changes in lifestyle like regular exercise, recreation, making sure one has enough and regular sleep can be effective. Natural medications such as St John’s Wart could also be effective therapies for depression if it is diagnosed in time, which is when ‘mild’ (Gotlib & Hammen, 2014).

Figure 1: Source: www.abs.gov.au

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An individual with suicidal depression will usually experience the majority, if not all of the symptoms of clinical depression. Suicide is a unique as well as significant danger. While the individual may be controlling one moment, he can tumble very rapidly into feelings of hopelessness as well as despair. It is usual for individuals to feel that they are in some way accountable as well as ‘to blame’ for their feelings and conclude that others will be better off without them. Individuals with suicidal depressive episodes could also suffer from hallucinations, delusions or depressive stupor although these are not very common (Wasserman, 2011).

The under-recognized role of Dopamine in the treatment of Major Depressive Disorder

Major depressive disorder (MDD) is a widespread mental condition with a lifetime occurrence rate of 6.7% which is 3.8% for men and 7.5% for women (Waraich et al, 2004). As a disabling, repeated, as well as chronic condition, it is a key load for people, family members, communities as well as health care services (Culpepper, 2011). In 2000, depression was a recognizable cause of illness burden representing 4.4% of the total disability amended life years or 12% of all total years survived with disability in the whole world (Bech & Cialdella, 1992).

Regular categories of agents for the management of MDD consists of selective serotonin reuptake inhibitors (SSRIs) (Tignol, Stoker&Dunbar,1992), serotonin-norepinephrine reuptake inhibitors (SNRIs) (Entsuah, Rudolph & Chitra, 1995, Mallinckrodt, et al. 2005 ), tricyclic antidepressants (TCAs) (Storosum, et al. 2001) as well as monoamine oxidase inhibitors (MAOIs) (Papakostas & Fava,2006). The graph (Figure 2) represents Major Depressive Disorder (MDD) percentages in terms of age group.

Various meta-analytic results indicate that patients with MDD might not completely respond and/or cannot completely remit after taking sufficient doses as well as a period of these antidepressants (Entsuah, Huang, Thase, 2001). Just 30% to 55% of MDD patients gain remission state at the close of severe SSRI or SNRI treatment (Entsuah, Rudolph & Chitra, 1995). Additionally, the complete dropout levels as well as the dropout levels due to difficult events are comparatively high in the margins of 25 to 39% and 9 to 17% (Papakostas, Charles & Fava, 2010), respectively, which indicates that the majority of MDD patients cannot agree to or withstand currently obtainable antidepressants (Cipriani, et al., 2009). While these antidepressants apparently affect serotonin as well as norepinephrine neurotransmitters, various lines of proof support that dopamine neurotransmitters could also play a significant role in the treatment of MDD patients (Nutt, 2006).

![Figure 2: Source: ww1.cpa-apc.org.](image-url)
Common Pathways of Depression

Mounting evidence indicates that in some patients having depressive disorders a neurodegenerative procedure may happen, highlighting the significance of early as well as aggressive involvement. Serotonin (5-HT), as well as norepinephrine (NE), neurotransmitter systems affect neuroplasticity in the brain and the two play a role in mediating the therapeutic outcomes of the majority of currently obtainable antidepressants. Serotonin transmission from the caudal raphe nuclei as well as rostral raphe nuclei is minimized in patients with depression in comparison to non-depressed controls. Raising the levels of serotonin in these pathways, by minimizing serotonin reuptake and therefore escalating serotonin function, is among the therapeutic methods of treating depression. In mammals’ brains, dopamine neurons of the ventral tegmental section in the midbrain trigger two important dopaminergic pathways, the mesocortical as well as mesolimbic pathways (Ciraulo & Shader, 2011).

These pathways stimulate through the nerves several brain regions, such as the medial prefrontal cortex (mPFC; mesocortical and/or mesoprefrontal pathway) as well as the nucleus accumbens (NAC; mesoaccumbal or mesolimbic pathway). Significantly, molecular interferences in these brain regions are said to affect the growth of psychiatric disorders like schizophrenia, in addition to depression. GABA is created in brain cells of glutamate, and works as an inhibitory neurotransmitter implying that it bars nerve impulses. Without GABA, nerve cells shoot repeatedly as well as easily. Anxiety disorders like panic attacks, seizure disorders, in addition to numerous other conditions such as addiction, Parkinson’s syndrome, headaches, and cognitive impairment are all associated with low GABA activity (Clark, 2006).

Essential Fatty Acids

Omega-3 fatty acids (ω-3 FAs) belong to a group of supplements which depressed patients take. Docosahexaenoic acid (DHA) as well as eicosapentaenoic acid (EPA) happen to be the two important long chain ω-3 FAs believed significant in depression. Epidemiological as well as treatment research has indicated that dietary ω-3FA shortage may be of etiological significance in depression. It has been said that depression is conversely associated with long-term ω-3 FA consumption in adults, the aged, as well as adolescents in Crete islands. An ecologic research has offered a highly negative relationship between fish intake and key depressive disorder commonness in various countries (Hibbeln, 1998).

Kryptopyrroluria

This condition is explained as a situation in which the body releases unusually high levels of a substance in the urine referred to as hydroxyhemopyrrolin-2-one (HPL), normally referred to as kryptopyrrole. The biological root of this HPL is unclear, and it could be a product linked unusual hemoglobin synthesis. This condition is hereditarily confirmed. High HPL level is largely linked to zinc as well as Vitamin B6 shortage, with the two nutrients being important for neurotransmitter creation (Dittmann, 2012).
Summary

Hormones and Depression in Women

It is usual for menopause to trigger emotions of sadness as well as depression in women. There is an estimation of between 8% and 15% women in menopause undergo depression of some kind, mostly starting in perimenopause. The start of perimenopause as well as menopause leads to different physical as well as emotional indications which may cause stress, frustration, as well as ultimately depression (Agnoli, Andreoli, Casacchia, Cerbo, 1976). These indications, combined with an already full pack of duties in a family, work and resources may seem too much for a woman to deal with. It does not help that the majority of women are afraid of menopause throughout their lives because of the scary stories that are narrated by friends as well as family members (Keyes & Goodman, 2006).

Conclusion

With respect to the above information, it is therefore important to understand that depression is a complicated condition, changeable in severity, cause, biochemistry as well as outcome. Also worth noting is that antidepressants function very well for some individuals, but for others they can be ineffective. This therefore means it is not possible to have a one-size-fits-all therapy. This document also quotes a report on the current outlook of the 33 OECD (Organization for Economic Co-operation and Development) countries and has disclosed that Australia is currently positioned in number two as the highest prescriber of anti-depressant medicines. Based on the report, the figures of anti-depressant prescriptions in Australia seem to have doubled between the years 2000 and 2011.

References


