Effect of Nurse-Led Counseling on Maintenance of Healthy Lifestyle Among Outpatients Receiving Antipsychotics: Clinical Case Reports

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An estimated 264 million people are affected by depression, about 45 million with bipolar disorder, and 20 million with schizophrenia.[1] Severe mental illness (SMI) was associated with a weighted average of 14.5 years of potential life loss,[2] which appears to be a serious public health issue affecting people across the world.[3] Antipsychotics are the key treatment modality for schizophrenia and are frequently used in mood disorders.[4] Compared to the first-generation antipsychotics, the second-generation antipsychotics (SGA) have fewer extrapyramidal side effects but have a higher risk for metabolic side-effects.[5] This affects the cardiometabolic health of persons with mental illness (PwMI), with alarming obesity rates of 45%–55% and diabetes type 2 rates of 10%–15%, which is up to four times higher than in the general population.[6] Unhealthy lifestyle behaviors play a major role in the development of these conditions.

Poor dietary habits, sedentary lifestyle, and side effects of antipsychotic medication are all modifiable risk factors that contribute to the increased mortality.[7] As per multidisciplinary guidelines, regular screening of somatic and mental health is obligatory for patients with SMI.[8] However, in both mental as well as general health care settings, PwMI receive insufficient attention for their physical health condition, which can be due to diagnostic overshadowing, overburdened health care system, and lack of resources and time.[9]

Among PwMI, lifestyle interventions have been shown to effectively reduce body weight[10] and cardiometabolic risk factors such as central obesity.[11] Systematic reviews on lifestyle interventions among different populations indicate that to be effective, a lifestyle intervention should contain at least three key components: exercise, diet, and behavioral therapy.[12] The behavioral change includes improving self-management skills such as tailoring information to the individual, identifying lifestyle areas for improvement, goal setting, making action plans, giving personalized feedback to reinforce new behaviors, and using social and environmental strategies to support change.[13]

Most of the interventions work well for motivated patients,[14] and lifestyle interventions are effective in improving weight status and body mass index (BMI) among overweight and obese adults and of PwMI in a broad range of other domains like sleep and physical activity.[15] Lifestyle interventions are feasible in PwMI and can lead to weight loss and improvements in cardiometabolic health.[16] These are safer and effective in promoting and maintaining a healthy weight. They improve quality of life and can be delivered at low cost.[17] Nurses working closely with the patients are well placed to screen and counsel the

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PwMI during their follow-up visits.[18] The following case reports demonstrate that adequate physical assessment and lifestyle counselling in the OPD during regular follow-up visits could improve the physical health and dietary pattern of PwMI. This can help in maintaining a healthy lifestyle and preventing cardiometabolic complications. We report the following cases from the psychiatric OPD of a tertiary psychiatric hospital of South India. Written consent was obtained from the subjects of this case study.

Case Report # 1

A 30-year-old unmarried lady from an urban background, graduate, working in the government set up, belonging to the middle socioeconomic status, with 12 years history of paranoid schizophrenia, came to the psychiatric outpatient department (OPD) for her routine follow-up. During the consultation, she complained of increased weight, increased sleep duration, and decreased motivation to do any work. Her mother reported that she does not perform any household works and is always busy watching TV or mobile when not on duty. She had a history of relapse three years back when she had stopped her medications.

She was on tablets Clozapine (100 mg) and Aripiprazole (5 mg) once daily. On assessment, her weight was 81 kg, with height 162 cm, waist circumference (WC) 43 inches, and BMI 30.9 kg/m^2 **(Table 1)**. Hindi Mental Status Examination (HMSE) score was 28, and Clinical Global Impression Scale-Severity (CGI-S) score showed that she was mildly ill. On the Positive and Negative Syndrome Scale (PANSS), positive symptoms score was 14. (PANSS and CGIS were used to assess the disease condition, and HMSE was used to assess the cognitive function of the subjects for understanding the counselling sessions.) The mobility dimension of Euro-QOL (Euro-Quality of life, version 6) showed that she sometimes experienced moderate pain/ discomfort and felt anxious and depressed. On the first day of the assessment, she reported 70% feeling healthy on the Visual Analogue Scale (VAS). The sleep pattern assessed by Pittsburgh Sleep Quality Index (PSQI) was 5. WHO STEPS' diet component showed that she took one serving of fruits in a week for a maximum of two days and two servings of vegetables per day only two days a week. She took street food and food prepared at restaurants almost four days a week and junk foods were her favorites. The activity component showed that she does not engage in any type of vigorous or moderate-intensity activity. She also spent, on a typical day, around 4–5 hours simply sitting reclining.

It was identified from the above assessment that her dietary habit consists of more energy-dense foods. Her sleep pattern also showed that she spends more than ten hours in bed. The increase in weight could be due to the combination of consumption of energy-dense food, improper fiber intake, and physical inactivity.

Her counselling need was identified as healthy diet and physical activity. During the first contact based on her need, she was first made aware of her necessity of maintaining a healthy lifestyle. Counselling was given on healthy diet, exercise, and sleep. She was provided a diary to monitor her diet, exercise, and sleep. She was provided motivation to keep track of her lifestyle in terms of her diet, exercise, and sleep by a diary. After the first assessment, on every seventh day, for up to one month, she was given telephonic counselling. Her mother was involved during the counselling and was suggested to help her in sustaining the practices. The challenge, in this case, was found to be her craving for food and frequent demotivation. After a month of intensive counselling, for the next six months, she was given a motivational phone call every 15 days, to ensure adherence.

After six months, the postcounselling assessment showed a reduction in weight (76 kg) and waist circumference (39 inches). Euro QOL showed a reduction in her pain and discomfort, and was feeling 80% healthy as reported in the VAS. WHO STEPS showed that her vegetable and fruit intake had improved to five days a week. She has been going for a morning walk of 30 minutes daily and engaging in yoga and exercise for 20 minutes in the evening. She also reported that her bowel habit has regularized.

Case Report # 2

A 36-year-old married graduate male, belonging to middle socioeconomic status, having his own business, with 15 years history of bipolar affective disorder, complained of irritability and weight gain during his regular follow-up. His wife reported that he gets up late in the morning and sleeps late at night, complains of pain while walking, and does not take an interest in the business. He had last relapse five years back and many other before that, due to noncompliance with medication. Recently he is compliance to medication due to his wife's motivation and care. He was on a combination of tablets sodium valproate (1,000 mg), risperidone (6 mg), and lithium (600 mg) daily for the last four years.

On assessment, his height was 164 cm, weight 82 kg, BMI 30.5 kg/m^2, and WC 41 inches **(Table 1)**. His HMSE score was 23. CGIS score showed that he was moderately ill and minimally improved. In PANSS, he scored 13 in positive symptoms. Euro QOL showed moderate pain in the legs and sometimes feeling depressed and on its VAS, he reported 75% healthy. PSQI score was seven. The diet component of WHO STEPS showed

TABLE 1.

Pre- and Post-counselling Physical Parameters

Case Report	Medications (Daily Dosage)	Counselling Need	Precounselling Findings	Postcounselling Findings
Case report-1	Clozapine (100 mg) and Aripiprazole (5 mg)	Healthy dietary intake and increase in physical activity	Weight: 81 kg, WC: 43 inches, BMI: 30.9 kg/m^2	Weight: 76 kg, WC: 39 inches, BMI: 27.5 kg/m^2
Case report-2	Sodium valproate (1,000 mg), Risperidone (6 mg), and Lithium (600 mg)	Healthy diet intake, increase in the activity level, proper sleep routine, and medication adherence	Weight: 82 kg, WC: 41 inches, BMI: 30.5 kg/m^2	Weight:79 kg, WC: 37 inches, BMI: 29.5 kg/m^2

that he did not like to take fruits, his vegetable intake was five days a week, and he took around three servings per day. He liked to take food outside and keep munching on junk foods throughout the day. His activity component shows he sometimes does heavy lifting as he has a hardware business. He travelled to his workplace by walking, taking around 30 minutes a day, and he spent around four hours a day sitting.

It was identified that his junk food intake has recently increased to almost daily. He spends almost 11 hours sleeping and around four hours sitting. After dinner, he spent two hours watching TV or mobile, which led to late sleep, and he got up late in the morning. His increase in weight can be due to the combination of more junk food and long hours of inactivity.

His counselling needs were identified as a healthy diet, increase in the activity level, and proper sleep routine. The assessment revealed that even though he was aware of healthy diet and exercise, he was not motivated enough to maintain it and stops medication when he feels a little better. Motivational interviewing was initiated, and he was counselled about maintaining proper diet, exercise, and sleep routine. More emphasis was given to adherence to medication and healthy lifestyle behaviors. He was provided with a diary and motivated to keep track of his lifestyle in terms of diet, exercise, and sleep. His wife was advised to remind him to take medicine and go for a walk with him. After the first assessment, every seventh day, for up to one month, he was given telephonic counselling. After a month of intensive counselling, for another five months, he was given a motivational phone call each 15 days, to ensure adherence.

Six months postassessment, a reduction in weight (79 kg) and waist circumference (37 inches) was noted. The VAS of Euro QOL showed he is feeling 85% healthy, and he verbally reported feeling better and being free from anxiety. WHO STEPS showed that his dietary intake had improved. He showed interest in physical activity and went to work regularly. His sleep habit had improved, and screen time before sleep had decreased. His wife reported that he was regular in taking medications.

Discussion

These case studies on PwMI illustrate the importance of assessing the individual requirements, socioeconomic backgrounds, and of providing personally relevant feedback and individually tailored counselling that provide information regarding the maintenance of a healthy lifestyle. Both the patients were taking SGA. The long duration of SGA intake, unhealthy diet, physical inactivity, and inappropriate sleep cycle led to an increase in weight, mostly central obesity. Both the patients were taking medication for more than 12 years. Intensive counselling was given to the subjects based on their individual need, weekly once for one month, followed by motivational phone calls for up to six months. Family members were involved in the counselling process, to ensure adherence.

Proper screening of the outpatients during their follow-up visit can help identify, prevent, and manage obesity-related metabolic syndrome and cardiovascular diseases.[17] Registered nurses, irrespective of their specialization, working in psychiatric OPD can help in screening and provide counselling to PwMI based on their individual needs, which will help in the health promotion. The present case study has shown that counselling on healthy lifestyle during regular follow-up is effective, as shown in an earlier study on maintaining a healthy weight and preventing various cardiometabolic risk factors among PwMI.[10] Metabolic monitoring,[19] motivational interviewing, and healthy lifestyle interventions can facilitate lifestyle change behavior and help them to adhere to the change in their routine life.[17]

Counselling on a healthy lifestyle during the follow-up visits helps prevent and maintain the cardiometabolic health of the PwMI taking antipsychotics. These case reports provide evidence that individualized, patient-tailored counselling can effectively reduce the central obesity of the patients. Motivational phone calls seem to be effective in increasing adherence to healthy habits. Some of the limitations of these case reports are they are not focusing on medication adherence and consumption of drugs/alcohol.

Conclusion

Assessing the physical parameters of PwMI during their regular follow-up in the OPD can be effective in the identification of cardiometabolic abnormalities. Providing healthy lifestyle counselling based on their individual requirement is an effective means in preventing these risk factors. Nurses working closely with PwMI in OPD are well placed for identification of cardiometabolic risk factors and providing counselling on maintenance of healthy lifestyle.

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