ENHANCING WORK BEHAVIOR AND SOCIAL FUNCTIONING IN PERSON WITH SCHIZOPHRENIA ATTENDING CENTER FOR REHABILITATION SCIENCES: A CASE STUDY

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Abstract
Vocational rehabilitation is essential to decrease functional impairment in persons with schizophrenia. Assessment of work behavior and social functioning for persons with mental illness is necessary to measures in a rehabilitation center (Vocation Rehabilitation Center) to improve social skills, work habits and quality of work. The present case study aimed to assess work behavior, social functioning and self-esteem in person with schizophrenia and provide psychiatric social work intervention to enhance work behavior and social functioning. It is a single subject case study conducted at the Center for Rehabilitation Sciences, LGBRIMH, Tezpur. Socio-demographic datasheet, work behavior inventory, life skills inventory, Rosenberg self-esteem scale, family assessment device, and positive and negative syndrome scale (PANSS) was administered to see baseline changes before and after the intervention. Psychiatric social work intervention was provided to the client and family members. There was a significant difference observed in the pre and post-test scores of work behavior inventory, life skills inventory and self-esteem scale. Psychiatric social work assessment and intervention can be helpful in enhancing work behavior and social functioning in persons with schizophrenia.

Keys words: Work Behavior, Social Functioning, Rehabilitation, Schizophrenia, and Psychiatric Social Work

INTRODUCTION

Schizophrenia is characterized by profound disruptions to thoughts, cognition and emotions often resulting in progressive loss of self-care and social functioning in affected individuals. Negative symptoms in schizophrenia were found to be consistently linked to poor functional outcome, including poor vocational functioning, household integration, social functioning, participation in leisure activities and quality of life (Fervaha, Foussias, Agid, & Remington, 2014). Negative symptoms predict impaired vocational and social functioning (Fervaha et al., 2014), and interfere with daily living and work in people with persistent negative symptoms (Beck, Grant, Huh, Perivoliotis, & Chang, 2013; Kirkpatrick, Fenton, Carpenter, & Marder, 2006). Vocational
functioning is markedly impaired in people with schizophrenia. Engaging in vocational activities has however been an important aspect of the recovery from mental illness since the advent of moral treatment in the 18th century (Killackey, 2015).

Studies have reported that many people with schizophrenia stated that they wished to work (Davis & Rinaldi, 2004; Marwaha & Johnson, 2004; Mueser, Salyers, & Mueser, 2001). They emphasize that working is the normal thing to do, allowing them to take responsibility, use their resources and contribute to society (Auerbach & Richardson, 2005). Working provides income, improving economic security and social status, and is described as an antidote to chaos and boredom, providing structure and content to daily life (Auerbach & Richardson, 2005). Moreover, work has a positive effect on self-esteem, quality of life and social functioning (Burns et al., 2007; Nordt, Müller, Rössler, & Lauber, 2007; Ruesch, Graf, Meyer, Rossler, & Hell, 2004; Üçok, Gorwood, & Karadayı, 2012).

Psychosocial rehabilitation (vocational rehabilitation) for a person with schizophrenia attempts to increase an individual’s level of functioning. Lalonde (1995) stated that the goal of rehabilitation is to nurture the strengths and life skills that the patient with schizophrenia requires to live as independently as possible in the community. Stuart and Sundeen (1995) stated that aside from the development of work skills, the goal of these programs is to promote good work habits. Working provides opportunities to interact with others and to practice and improve social skills (Burns et al., 2007; Lehman, Goldberg, & Dixon, 2002). Work is correlated with higher self-esteem, fewer hospital admissions, reduced health care costs, reduced positive and negative symptoms, enhanced social functioning, and improved quality of life (Bond, 2001; Cook et al., 2005). The current research is a case study of a patient to assess work behaviour and social functioning and to provide psychiatric social work intervention to enhance work behavior and social functioning. The patient was referred from indoor to the Center for Rehabilitation Sciences of LGBRIMH to improve her work functioning and social skills.

**Methodology**

The present case study uses a single subject case study design and compares pre and post-intervention baseline data with that following psychiatric social work intervention. The attempt has been to bring out changes in work behaviour and social functioning. The research setting was at the Center for Rehabilitation Sciences, LGB Regional Institute of Mental Health, Tezpur, Assam.
Case introduction
The client was 30 years old female, Hindu, unmarried from lower-middle socio-economic background, hailing from the rural area of Golaghat district of Assam. The client was admitted in a hospital for treatment of schizophrenia. The client herself, her father, elder brother, and case record file were sources of information, which were reliable and adequate. The case was referred to the department of psychiatric social work for adequate psychosocial assessment and intervention.

Brief clinical history and diagnosis: The index patient 30 years old female, Hindu, belongs to lower socioeconomic status presented to Out Patient Department (OPD) by family members with the chief complains of decreased sleep, irritability, increased anger, decreased talk, suspiciousness, decreased work functioning and wander some behavior for the past 20 months. The mental status examination relieved that patient was uncooperative, touch with surrounding was absent, decreased psychomotor activities, in speech patient was relevant, coherent and goal-directed, in thought delusion of persecution and auditory hallucination was present; judgment was poor with grade 1 insight. She was diagnosed with F20. The patient was admitted to the indoor department for three months.

Family genogram

Family interaction pattern with the family of origin
The interaction between the patient’s parents was cordial. They used to discuss the issues in the family and consult with each other before taking a decision. The interaction between the patient and parents was cordial. The patient loves and respects her parents. Interaction between the siblings has always been a cordial relationship among themselves.

**Family dynamics**

The patient’s family has an open boundary. Subsystems are present in the family that is father-child subsystem, parent-child, grandfather-grandchildren and siblings subsystems. Though all members are treated equally, the male members hold higher position in the decisions taking. Females are mostly engaged in household activities and look after family members. Patient’s father is the head of the family as he takes decision however the patient’s brothers also give their opinion during the decision making the process. Patient’s sister-in-law plays the role of the functional leader as she executes most of the household activities. Specific roles were assigned to each member of the house. Patient’s father and brothers have the responsibilities of earning money and provide economic support, where else the patient’s sisters-in-law and she have the responsibilities to look after the family and take care of the household work. The family’s communication pattern is clear and direct. The family members discuss the issues well among themselves. Before the onset of the patient’s illness, the communication pattern was healthy, but due to her illness the noise level in the family has been increased, there are frequent arguments. Critical comments and hostility were seen from the family members towards the patient. There is positive reinforcement practiced in the family. Mutual support and we-feeling were present in the family. Index family is found to be a cohesive unit. Due to the illness, there was stress in the family.

The family members were having poor knowledge regarding mental illness. Care burden was present in the family. Patient’s family members were not able to manage the patient symptomatic behaviour and send her to her maternal uncle’s house for treatment. Coping ability and problem-solving abilities were adequate in the family. Primary support was adequate. The patient received secondary support from the close relatives. The tertiary support was not adequate as the patient’s family belong to a remote area of Golaghat, Assam. They do have much access to the health care system. They don’t have any primary health center in their village. They need to travel a long way to the Golaghat Civil Hospital. Patient belongs to a low socio-economic family. The family has its land for cultivation. They also have animal husbandry as a
source of income. The main source of income is from the male members of the house through cultivation and daily wage labour. The family also participates in a various social occasion organized in the community.

**Personal information**
The patient is the 3rd among the three siblings. Early development developmental milestones were age-appropriate and achieved normally. The patient had not attended any formal education patient was a homemaker. She used to do household activities along with her sisters-in-law and take care of the other family members. The patient was also engaged in animal husbandry; she had domestic animals at home and was taking care of them. The patient attended puberty at the age of 14. No menstrual problem was reported. The patient is unmarried. Patient hails from lower socio-economic family. The main source of income is the patient’s father and brother’s earning from cultivation. The patient was having well-adjusted premorbid personality.

**Assessment**
1. **Semi-structured clinical and socio-demographic data sheet**: A relevant socio-demographic and clinical detail was collected using this proforma.
2. **Work Behavior Inventory** (Bryson, Bell, Lysaker, & Zito, 1997): The Work Behavior Inventory (WBI) is an on-site assessment of work behaviour, developed specifically for people with severe mental illness. The instrument was developed in the USA and is well-validated for assessing areas of vocational functioning particularly relevant to people with severe mental illness assess based on Cooperativeness, Work habits, Personal presentation, Work quality and Social skills domains.
3. **Life Skills profile** (Rosen, Pavlovic, Parker & Trauer, 2006): The Life Skills Profile (LSP) measure functioning (“life skills”) in person with severe mental illness it comprises five subscales (Communication, Social Contact, Non-turbulence, Self-care and Responsibility).
4. **Rosenberg Self-Esteem Scale** (Rosenberg, 1965): Is a 10-item questionnaire that asks participants to indicate the degree of their agreement or disagreement with statements about their self-esteem and self-deprecation. Item responses are summed into a total score such that a higher score indicates greater self-esteem.
5. **Positive And Negative Syndrome Scale** (Kay, Fiszbein, & Opler, 1987): The Positive and Negative Syndrome Scale (PANSS) is a 30-item rating scale that assess negative and positive symptoms in person with mental illness.

**Z Diagnosis:**

- **Z55**: Problems related to education and literacy
- **Z56**: Problems related to employment & unemployment
- **Z59**: Problems related to housing and economic circumstances

**Psychiatric social work assessment and intervention**

Psychiatric social work intervention was provided to the patient during the stay in the hospital. A total of 20 number of sessions were given (Session with the patient: 18 and with family members- 2). The psychiatric social work intervention included following intervention.

1. Rapport establishment
2. Psychoeducation
3. Activity Scheduling
4. Vocational rehabilitation
5. Motivational counseling
6. Social Skills Training
7. Social Group Work
8. Family intervention
9. Discharge counselling

**Progress of intervention**

1. **Rapport establishment**: Rapport establishment aims to maintain a therapeutic relationship, cooperation and participation of the patient in the treatment procedure. Patient was informed about the importance of the therapy and benefit she would gain from the therapy. Patient and family was informed about sessions and basic rules regulations to participate in the sessions. Therapist listened concerns of the patient and family and gave assurance about treatment outcome and progress. Repeated reassurance and positive attitude towards the patient, however, had developed some rapport and basic trust of non-harm and well-being made the session successful.
2. **Psychoeducation**: In the initial session, the Trainee assessed the patient’s understanding of her illness. Further, the trainee she was educated the patient about the illness’s sign and symptoms, characteristics, course, prognosis, treatment available, the importance of treatment and medication, early warning sign and side effects of the medication. In family psychoeducation, the trainee educated the family about the illness, importance of treatment, the barrier of treatment adherence, recognition of early warning signs and about relapse prevention.

3. **Psychosocial rehabilitation**
   - **Rehabilitation assessment**: Rehabilitation assessment was done to assess the patient’s area interest in work, motivational assessment, social skills assessment, occupational history before the illness, strengths and difficulties, hobbies etc.
   - **Activity scheduling**: Activity scheduling was done for the patient with the help of the Occupational Therapist at Canter for Rehabilitation Sciences, LGBRIMH, Tezpur, Assam. Based on the mastery and pleasure principles patient’s interest hobbies discussed and activity schedule of the patient included mediation, exercises, weaving clothes, participate in the recreational activities with the other patients. Activities were scheduled from the morning at 9 o'clock to the evening at 4 o'clock till the patient stays in the center for rehabilitation sciences.
   - **Vocational rehabilitation**: After the assessment, she patient was found to be interested in weaving; therefore she was enrolled to the weaving section under the observation of the instructor, caretaker, occupational therapist and therapist. She was provided training on weaving and engaged in the weaving section for one month.
   - **Enhancement of work behaviour**: During the initial session patient was restless, uncooperative and inattentive in her work. Patient was found distant or withdrawn, she did not seem to have eased when other approaches and did not like to socialize. The patient seemed uninterested in initiating conversation with others. She was not able to express positive feelings and negative feelings inappropriate way but has positive relationships with a workmate. In cooperation, the patient occasionally worked comfortably in the presence of others; she accepted criticism without anger. The patient was unable to closely listen to the instruction, she rarely followed instructions without
resistance or without interrupting, she was not co-operating with her workmates and she also did not ask when she doesn’t understand something. In work habit patient arrived at work at the time, started working promptly and she followed the rules. The patient took rest breaks frequently and unable to carries out her task in a given time, couldn’t keep up the pace at work and didn’t show initiative at work. In the quality of work patient carried out work accurately and effectively and the quality of the product was average. She was not able to identify her mistakes and correct them. She was unable to do her task on the given time. Counseling was provided to the patients to enhance work behaviours, the importance of work in the recovery of illness was discusses. Throughout the sessions, the therapist recognized the client’s efforts, appreciated his strengths, and feedbacks were provided. After psychiatric social work intervention, she was found to be socialized with others and had the ease of talking when others approached. She started expressing her feelings to the trainee and instructors. The patient was also started listening to the instruction and followed them without interrupting. She became cooperative and more attentive towards her work. Her pace of work also improved and the quality of products was satisfactory. She started taking initiatives in work and able to complete the work in a given time. Her hallucinatory behaviour decreased as she was able to distract herself by engaging herself more in work. She started taking initiative in her work and able to work productively in the given time. The patient made 30 hand-woven handkerchiefs and 8 "towel" within one month.

- **Social skills training:** Social skills training are mostly focuses on activities of daily living, communications, and maintaining interpersonal relationships. These skills improve better community functioning and have a downstream effect on relapse and psychopathology. The basic components focused during these sessions were to improve expressive behaviour (Speech content, Paralinguistic features), non-verbal behaviour (eye contact, posture and facial expression) and Receptive skills (Attention and interpretation of relevant clues, Emotional recognition). Through social skills training, the trainee targeted to improve patients negative symptoms. 7 sessions were being conducted to improve the social skills of the patient. Mild level of improvement was found in the patient in maintaining eye contact, greeting people, initiating conversation and participating in activities with others.
4. **Social Group work**: Social group work is a method of social work that helps persons to enhance their social functioning through purposeful group experiences and to cope more effectively with their personal, group or community problems (Murphy, 1959). It is a psychosocial process which is concerned in developing leadership and cooperation with building on the interests of the group for a social purpose. In this case, the main objective of the group was to provide psychoeducation, improve social interaction, work functioning, enhance their abilities to work in a team and boost their self-esteem. An open group was formed as sometimes old patients got a discharge and new patients entered in the group. Four sessions were conducted in three weeks and each session was for 45 minutes. The trainee and the occupational therapist were the facilitators of the group. During the session, participants were seated in a circle which facilitated the face to face interaction among the participants and symbolized equality among the group members. At the beginning of the session, the trainee explained the group member regarding the purpose and objective of the group. The trainee also suggested the members introduce themselves to the other members of the group, so that a rapport can be established among the members as well as with the facilitator. During the session the patient’s communication skills were found to be improved, she started participating in the discussions and able to understand the information provided by the others. Patient started understanding about symptoms and her level of insight was also increased.

5. **Family interventions**: family intervention was done with the patient’s father. During the session complete assessment was done regarding the patient’s family members, their understanding about the illness, support system and expressed emotion in the family. The trainee then explained the father regarding the prognosis of the illness and about the maintenance of the illness. Father was also educated about the illness, causes, signs and symptoms, about drug compliances and identification of early warning signs.

6. **Discharge counselling**: It is brief psychoeducation provided to the patient before getting discharged from the hospital. It strengthens the patient’s ability to reintegrate with the surrounding where he belonged earlier. In pre-discharge counselling, the following areas were focused- educated the patient about the illness, sign and symptoms, the importance of treatment and medication, barrier of treatment adherence, maintain sleep hygiene, the importance of daily work functioning, recognition of early warning signs and about
relapse prevention. Discharge counselling was provided to the patient and the family member focusing on the drug compliances, monitoring and supervising the medicine intake, engagement of the patient in work, and regular follow up in OPD.

Table-1. Pre and Post assessment scores of Life Skills Inventory, Positive and Negative Syndrome Scale, Work Behavior Inventory, Self-Esteem Scale

<table>
<thead>
<tr>
<th>Scales</th>
<th>Pre-test score</th>
<th>Post-test score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life Skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-care</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>No turbulence</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Social contacts</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>Communication</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td>Responsibility</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>Positive And Negative Symptoms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Symptoms</td>
<td>18</td>
<td>12</td>
</tr>
<tr>
<td>Negative Symptoms</td>
<td>30</td>
<td>18</td>
</tr>
<tr>
<td>General psychopathology</td>
<td>39</td>
<td>26</td>
</tr>
<tr>
<td>Work Behavior</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global assessment of work behavior</td>
<td>75</td>
<td>81</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>25</td>
<td>32</td>
</tr>
</tbody>
</table>

Figure-1: Pre and Post assessment scores of Life Skills Inventory, Positive and Negative Syndrome Scale, Work Behavior Inventory, Self-Esteem Scale

RESULTS AND DISCUSSION
In the present case study it was found that in the work behavior inventory the pre score was 75 and in the post-test score it was 81 indicating improvement in work behavior. Life-skills inventory assessment showed no changes in the domain of self-care, turbulence in pre and post-test score, in the domain of social contacts the pre score was 11 and post score was 15, in communication, the pre score was 12 and post-test was 15 and in the domain of responsibility the pre score was 15 and in post-test score it was 16, indicating changes in life skills. In self-esteem the pre score was 25 and post-test it was 32 indicating an enhancement of self-esteem. In the PANSS scale in the pre-assessment the positive symptoms score was 18, negative symptoms scale the score was 30 and in general psychopathology scale it was 39 and in post-test positive symptoms score was 12, negative symptoms scale score was 18 and in general psychopathology scale the score was 26, thus indicating reduction of symptoms in the client. The main objective of this study was to enhance the patient’s social skills and improve the work function with the help of social skills training and motivation enhancement therapy. The result of these interventions was indicated in the difference between pre and post-test scores of work behavior inventory (WBI), life skills inventory (LSI), and self-esteem scale, positive and negative syndrome scale (PANSS). Liberman and colleagues (1986) found that with social skills training (SST) there was a reduction in psychopathology and re-hospitalization and improved social functioning. It also showed reduce psychopathology after discharge. SST had better social functioning; spent less time hospitalized and had fewer symptomatic relapses. Results support the utility of SST as a psychosocial treatment for schizophrenia. Rosen and colleague (1989) have reported it is essential to study functions and disability in schizophrenia to understand impact on social skills profile of the persons with schizophrenia. Wallace and Liberman (1985) in a study found that social skills training showed significant greater acquisition, generalization, and durability of social skills; their social adjustment in the community was also significantly better. Along with that, there were fewer incidents of relapse and re-hospitalization. In another study Bell, Lysaker and Bryson (2003) reported that behavioural intervention can improve work performance in schizophrenia. The patient who received the Behavior Intervention (BI) had significantly greater improvement in the work behavior inventory (WBI) subscales in social skills, personal presentation and cooperativeness. In this case study, it was found that the patient’s social skills were improved along with better insight, awareness regarding the illness and improved work functioning.
The psychiatric social worker can play a vital role to educate, motivate and enhance the skills for recovery of the patient with schizophrenia and helps the family members to understand the illness better. Engaging of patients in vocational rehabilitation can help them to reintegrate into the community and also help them in the recovery process.

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REFERENCES


