

A CASE STUDY OF OCCUPATIONAL THERAPY APPLICATION IN A PATIENT WITH DEPRESSION AND HYPOACUSIS

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Abstract

We chose to present an exemplifying case-study of occupational therapy (OT) application in an adult patient with depression and hypoacusis by using the narrative interview method. We started from the principle that in each OT case-study it is important to identify the patient's previously life roles held and the activities that were fulfilled within these roles. As methodological tool, we applied the Person-Environment-Occupation Model (PEO) in a 48 years old woman, with reactive depression (after her husband's death) and congenital hypoacusis. After identifying the occupational routine and life style of the client, we established as a valid aim of OT intervention the client's return to an old hobby, the flowers photography, and we described the PEO factors that influence flower shooting performance. From a global perspective, client's occupational performance was considered as satisfactory. Her abilities and independent functional status allow her to be engaged in different daily occupations that match with her environment. After completing the PEO transaction for flower shooting, we extracted the occupational needs of the client. This client centered case study is an example of good practice, which reveals the possibility of achieving a higher level of occupational performance and to increase self-esteem for individuals with depression.

Keywords: occupational therapy, depression, hypoacusis, case study

1. INTRODUCTION

At present depression represents a major public health problem, with epidemiological impact and in whose etiopathogeny genetic factors are especially incriminated in combination with stressful experiences of daily life (Kessing, 2007). Beyond the terminological controversies, the reactive form of depression, in contrast to the endogenous one, requires a clear description of a stressful life aggressor factor that induces maladaptive disorders with long persistence over time (Paykel, 2008). Many studies have highlighted the existence of a bidirectional relationship between depression and other chronic medical conditions, among which diabetes mellitus and cardiovascular disease (Katon, 2011) or other illnesses with algetic symptoms (Madhukar & Trivedi, 2004) should be especially mentioned. Furthermore, depression is sometimes associated with sensory disorders, particularly if they have an early onset and occurs in elderly (Bernabei et al., 2011).

Among sensory impairments, hypoacusis is a common condition, often underdiagnosed in elderly adults, frequently occurring as a comorbidity of depression (Mener et al., 2013). The simultaneous presence of both types of disease, regularly in a manner of independent association (Lee et al., 2010), brings additive and intricate clinical effects, issue that concur to darken the prognosis and raise questions about the therapeutic approach.

Although about half of the cases of depression are reported after reaching the stage of elderly, currently depression is no longer considered to be a direct consequence of aging, but a manifestation of the complex interaction between ontogenetic cycle and accumulation in time of the effects of stress factors (Fiske et al., 2009).

Older adult treatment of depression, beyond the specific medication, with more or less clinically proven efficiency, today is increasingly oriented towards the non-pharmacological alternative, which is more accessible in terms of direct costs and lack of side effects.

Occupational therapy is included within this non-invasive therapeutic management, featuring a particular interest for the enlightening of clinical evidence on the real possibilities of evaluation and intervention, through the occupational therapy program that are focused on the client diagnosed with depression (Devereaux & Carlson, 1992; Hitch et al., 2015).

Regularly the patient with depression encounters difficulties in carrying out the activities of daily living, at home or at work, which cause low occupational performances (Gunnarsson et al., 2015). Therefore, occupational therapy programs have direct application in this pathology that can allow client's support in an open manner to offset occupational deficiencies in terms of efficiency and occupational performance.

The objectives of most occupational therapy programs addressed to patients with depression are represented by as self-image optimization, development of coping mechanisms against stress, improvement of social interaction skills and last but not least patient reorientation towards productive professional activity or leisure (Custer & Wassink, 1991).

Given that occupational therapy is a field in which are successfully applied the modern concepts of intervention based on clinical evidence and client/patient centred therapy, the most suitable experimental design for experimental studies within this area remains the case study or the clinical research with a single subject. These researches try to identify explanatory patterns that might help in the understanding of certain phenomena and justify the application of therapeutic protocols in a contextual situation (Backman & Harris, 1999).

Obviously, for disorders included in the psyche domain, mainly in a combination form with sensory pathology, the case study becomes a research that generates paradigms.

2. MATERIALS AND METHODS

For this paper we chose to present a case-study using the narrative interview method. Having in mind that for each occupational therapy case-study it is important to identify previously life roles held and the activities that were fulfilled within these roles we tried to identify as much information as possible. We met Irina when visiting one of our friends who she is neighbour with. Irina is a 48 years old woman, living alone in a two bedroom private owned flat, at second floor, with all modern facilities (current water, electricity, advanced equipment) in a quiet area of Pitesti, near Trivale forest.

In spite of her congenital hypoacusy, Irina has succeeded to live as a perfect healthy person, dealing independently with all daily life problems. She was the second child in her family and everyone had great expectations from her as she demonstrated to be an "A+" student during primary, secondary and high school. In 1982, Irina became a student at the National University of Arts in Bucharest. She was a conscientious student, highly motivated, with sense of advanced purpose. During the

faculty years she met her future husband and they immediately got married after graduation. They had their daughter (Amalia) right away and they moved in Pitesti, her husband natal town.

Away from her known environment, she easily managed to make new friends being a person with good abilities to adapt to different situations, sociable and reliable. She has been in good relationships with her neighbours and often helped them when they needed. Her family has always represented the most important aspect of her life and she tried to visit her relatives as much as possible in spite of the distance between them (110 km).

Together with her husband she used to share many domestic tasks: cooking, washing the dishes, shopping and cleaning. Being all the time at home she didn't had time to get bored as her focus was Amalia. Doing everyday homework, supervising learning tasks and participating in stimulative intellectual games (chess, Sudoku) were occupations she liked to be included in. Irina often spoiled her husband making him small surprises just to show her love. During weekends they frequent had guests over for lunch and a long walk in the park was never missed. The financial resources were never a problem in their family and they still aren't as she has a special pension after her husband death.

She strongly believes she had a beautiful life, with many precious moments and personal accomplishments. Her daughter is a medical resident in one of the best hospitals in Bucharest and made her parents really proud. Unfortunately, Irina's reality changed 11 months ago when her husband died in a tragic car accident and left her alone in a terrible suffering. We were concerned in discovering how our client's behaviours and roles were modified as consequences of her husband death.

Irina is facing with signs of depression. She lost the desire for doing things she used to do; she lost her confidence and her social role. Irina tends to stay home and avoid social interaction. She finds it hard to start or finish projects. Feelings of worthlessness are on everyday agenda: "I am not good at anything and not important to anyone". Suddenly, she remembers she has a beautiful daughter who lives in Bucharest and then trancelike staring.

When Irina was asked about the role she feels more comfortable with, her answer was: "I love being a mother and a wife. A mother I can still be ...". This ex-role as a wife represented a significant part of her identity. She remembers having at first little trouble in convincing her husband to let her stay at home, to be a mom, a perfect wife: "It is like he knew what was to come".

Trying to find out any occupation she still has desire to perform we asked questions regarding her previously getting married hobbies. "Let me show you the best photos we took during my student years. Look they are great!". This is how Irina friendly and warm talked about her major passion in life. She could spend hours talking about this subject, facilitating communication between us and conducting the interview in a pleasant manner. Irina insisted in showing me a lot of photos which she gathered in time and rigorously keeps them organized in albums with themes very well established (portraits, landscapes, static nature etc.). Looking over those photos in which she captured flowers, Irina stares and outlines a shadow of smile.

We easily notice that flower shooting is what makes her happy as she talks with passion and excitement about this field: "I get inspired by the freshness of flowers. Whether you capture them in a vase, in pots or in public space rounds we feel the positive energy every time". Irina dreamed to have a beautiful career and would have liked to be known and recognized in the art, as capturing different kinds of flowers in unusual situations.

Being a very well organised person with a strong sense of prioritization, Irina decided to give up her dream as she wanted to be the one to take care of and raise her child. This is also the reason for which she opted not having a job: "I didn't want my child to see me as a dinner invited guest".

When asked to describe a day in her life Irina told me she wakes up at 7 o'clock, without any alarm. Then she begins to independently perform all the self-care occupations: personal hygiene, dressing, eating and toileting. Around 8 o'clock she starts to prepare breakfast and enjoys drinking coffee. Meanwhile she writes down a list with those products needed to be bought for the day, activity that she finds challenging as she has to leave the house and to become more involved in community shopping. Arriving back home, Irina arranges the products according to their utility. Sometimes she engages in cooking activities, other times she does housekeeping or laundering. At 1 o'clock is lunch time and after this an hour of rest is usually her preference. A walk in the park follows in her schedule, especially when is sunny and warm outside. In the afternoon she likes reading art books and watching TV nature documentaries. She has dinner at 7 p. m., then she visits her neighbour and at half past 9 she goes to bed, not before watching a little more Discovery Channel.

The following step in our research was represented by analyse of the client's situation using the PEO model of occupational therapy. We chose the Person-Environment-Occupation Model (PEO) as it is known to be a useful tool that enables the occupational therapist to observe in a comprehensive way those problems related to occupational performance (Law et al., 1996).

The PEO model defines the transactional connexion between person, occupation and environment (Strong et al., 1999). Furthermore, using this model in occupational therapy practice allows the specialist to identify the real occupational performance (Law & Dunbar, 2007) and, in the same time, empowers the client to be part of the future intervention process. The PEO model of practice studies both the person and the environment as these two elements simultaneously collaborate in circumscribing the individual's condition (Metzler & Metz, 2010). This is a client-centred practice model whose central idea focuses on person, environment and occupation, symbolized as three spheres that are strongly linked and offer a global view over the client's occupational status during life span (Christiansen & Baum, 2005).

3. RESULTS AND DISCUSSIONS

During the first month after her husband death, Irina wasn't able to do anything and all the occupations she performed before meant nothing to her. Self-care occupations were neglected and house-keeping activities didn't raised her interest at lot. Amalia's coming to stay with her for a period of two weeks, her affection and attention to the woman she precieuses most in the world played a crucial role for Irina who began to regain trust, desire for living and, step by step, got involved in daily occupational routine.

The most important step in the process of intervention with such a client is when setting goals. Only by focusing on what is important for the client during the formulation of objectives and subsequent interventions, resources and time are useful spent. To correctly define a goal it is important to have in mind which is the client's expectation of change and how this change is going to affect in a positive manner the future life. Moreover, it is essential to delimit what is intended to be achieved in general terms, and then insist on the participation and performance of the patient that will result from the occupational therapy intervention.

In Irina's case, taking into account the identified problems regarding her occupational performance, the objectives will mainly be addressed towards engaging in activities that confer pleasure and self-motivation.

In occupational therapy practice the occupational performance and occupational participation must be considered as the result of the relations between client's factors, the environment, and those occupations that are performed (Cole & Tufano, 2008). From a global perspective, Irina's occupational performance is considered to be satisfactory. Her abilities and independent functional status allow Irina to be engaged in different daily occupations that matches with her environment.

Reading art reviews, spending time in the park, walking in nature and watching flowers represents an important source of personal satisfaction within her occupational performance in spite of her depression manifestations.

As she said, Irina needs to fill the great emptiness left by her husband's death and separation from her daughter who lives in another town. Before these events, all her activities were organized around the two most important persons in her life. Knowing how essential is for Irina to get back on track and having identified her passion towards flower shooting, a way to increase her motivation and life satisfaction is to focus on all aspects that are related to this domain.

Appealing to SMART method of establishing goals, together with Irina we decided that: "in 2 weeks (T1), Irina will visit the Botanical Garden in Bucharest (S1), which will bring her a great opportunity to meet with her daughter (S2) and take 30 photos with the best flower exemplars (M1). Every 3 days (T2) until the planned visit she will participate in a one-to-one counseling session where the occupational therapist will teach her about powerlessness and manageability (S3) and then have her share what she learned in phone discussions with her daughter (R1). Before the actual visit, she will go to buy shooting instruments (M2): camera, lenses, supporting/stabilising the camera, camera body. The occupational therapist will help her if needed to document about flower shooting (A1), buy the special equipment (A2), make a list with all necessary tools (A3) and find specialty shops (A4). The level of participation in all these activities will be monitored through using consecrated depression scales, engaging in occupations assessment instruments (R2) and also by her daughter who will be constantly aware of Irina's daily participation in occupations (R3). After the visit, our client will be asked to write down a shot list with all the feelings she lived as result of engaging in this particular occupation (A5)".

Table 1 Description of PEO factors that influence flower shooting performance

PERSON	ENVIRONMENT	OCCUPATION
<ul style="list-style-type: none"> • 48 years old widow for 11 months • Functional independent • Lives alone • Congenital hipoacusy • Second child in her family • Roles played during different life stages: wife, widow, mother, friend, neighbour, student • Housewife who raised her child • Likes shooting, gardening, flowers, nature, open spaces • Difficulty in starting and finishing projects, concentrating, remembering • Confused <p><u>Personality</u></p> <ul style="list-style-type: none"> • Good abilities to adapt to different situations • Sociable and reliable • Helps the ones in need • Feeling of lose: lost the desire for doing things she used to do, lost her confidence and her social role • Conscientious student, highly motivated, with sense of advanced purpose 	<p><u>Physical</u></p> <ul style="list-style-type: none"> • 2 rooms private owned flat in the city quiet area, near the forest • Modern facilities (current water, electricity, advanced equipment) <p><u>Social</u></p> <ul style="list-style-type: none"> • One daughter • Relatives • Neighbours • Friends <p><u>Institutional</u></p> <ul style="list-style-type: none"> • Medical and social services (social assured) <p><u>Cultural</u></p> <ul style="list-style-type: none"> • University background • Artistic and scientific resources 	<p><u>Self-care</u></p> <ul style="list-style-type: none"> • Independent for all self-care activities: personal hygiene, dressing, eating, toileting <p><u>Leisure</u></p> <ul style="list-style-type: none"> • Found of flower photography • Spends time alone with her thoughts • Walks in the park • Reads art reviews and speciality books in the field of botany, especially those chapters dedicated to flowers • Watches TV documentaries in the domain of visual arts, Discovery Channel • Used to play intellectual games (chess, Sudoku) together with her daughter, do homework and supervise learning tasks <p><u>Productivity</u></p> <ul style="list-style-type: none"> • Domestic tasks: cooking and meal preparation, cleaning, washing the dishes, laundering • Goes shopping for daily products

Table 2 Analysis of the Person – Environment – Occupation transaction for flower shooting

P – O	O – E	P – E
<ul style="list-style-type: none"> • Skills/abilities for activity of flower shooting • Motivation for flower shooting • Manual dexterity • Visual acuity • Flower shooting techniques (for example, use of multiple exposure technique) • Physical resistance • Physical integrity • Concentration • Patience (for example, press the shooting button when wind stops blow) • Specialized knowledge for combining lights, backgrounds and angles • Creativity in taking photos • Intuition • Attention to details • Sense of observation • Botanical knowledge 	<ul style="list-style-type: none"> • Photo studio with modern facilities • Shooting instruments or equipment: camera, lenses, supporting/stabilising the camera, camera body • Use of different composition and angles • Natural light • Flash • Flash brackets and diffusers • Gardens, parks, landscapes • Visit floral exhibitions and greenhouses • Specialty shops • Financial resources for shopping and travelling • Photo galleries and exhibitions • Flower shooting courses, even on-line • Flower shooting workshops • Flower shooting groups discussions • Flower shooting contests • Read books, albums, catalogues and reviews on flower photography • Botanical flower atlas 	<ul style="list-style-type: none"> • Family support • Own studio/room • Access to gardens, parks • Social relationships (direct and virtual socialisation networks – Facebook, Twitter, Hi5) • Communication through participation in group discussions on the theme of flower shooting • Personal expectations • Availability of flower shooting teacher • Respect safety issues regarding flower shooting • Obtain resources for flower shooting activities • Sponsorship for her own flower shooting exhibition • Inspiring people to make a change in their lives and follow their hobbies and passions

Starting from all aspects mentioned above, the occupational therapist proposed an intervention plan, which focused on the key elements included in the SMART goal. The first step in our intervention was represented by planning a visit to the Botanical Garden in Bucharest, during which our client had a decisive role. In this lovely place, Irina had the opportunity to be close to what she likes most, to be exact beautiful flowers. Also, this was a great occasion for meeting with her daughter and to interact face-to-face as they cannot longer see each other every day. In Irina's case it was recommended to participate in therapy sessions (every 3 day until the planned visit), that offered her the chance to express her own feelings, thoughts, emotions and moods and where she was taught about powerlessness and manageability. These meetings between the client and the occupational therapist enabled the exchange of ideas on the experienced situations, allowed to practise a solution to problems that could occur, implement the coping techniques and choose the persons to who to go to in case of help or support needed.

Further, Irina was asked to draw up a list with all necessary instruments in order to successfully participate in the activity of flower shooting. Then, she went shopping for all this items, just respecting the products listed on the list. Also, the client had to pay attention to the tools required for flower shooting: camera, lenses, supporting/stabilising the camera, camera body, etc. task that lied to a better structuring of the activity and working requirements.

After the visit where our client had taken photos together with her daughter, she continued to be monitored by using the depression tests, satisfaction measurement tools or other specific instruments, just to be sure that she regained her life independency.

Going to flower exhibitions, participating in flower shooting contests, taking part in flower shooting discussions groups are just a few other possibilities that our client can get involved in. Establishing goals like this one on a short period of time emphasises a present client centred approach (Salls et al., 2009) in order to live the future in a better way.

It is obvious how much her life style changed due to her husband death, especially if we start from Irina's own affirmation that she used to do many tasks and activities as a couple, as a strong and cohesive team. Now she feels that she has to face all these problems and duties by herself, but in the same time she began to appreciate having her mind occupied with other thoughts than sadness and regrets.

Irina has an organised life style and tries to get more and more active through performing occupations that require both physical as well as intellectual aspects. After we explained how major and damaging the depression consequences are, Irina started to pay more attention to her health and became aware that her life has not ended. In present, Irina spends a lot of her time at home, reading a lot of literature (especially art reviews, books or everything that is new in gardening flowers) and watching documentaries in the domain of visual arts. Additionally, she begin to like being in open spaces, to enjoy the beauty of nature mainly during spring time when everything comes back to life and "I feel like myself again".

4. CONCLUSIONS

The intervention based occupational therapy programs is especially recommended for adults with depression as it focuses on activities and those unique observed skills and abilities in the context of a comprehensive approach that includes: assessment, problem identification and analysis of occupational performance, planning and program implementation, monitoring client behaviour, and documentation as a precondition for evidence-based practice. Moreover, occupational therapists are encouraged to acquire skills in mental health screening and intervention for adults with depression, particularly when it comes to those cases of association with other morbidities.

The activity of the occupational therapist involved in working with clients/patients with depression and hypoacusis extends towards counseling and development of therapeutic education programs, which actually constitute the starting point for gaining independent living. All these merge to that optimal situation in which the needs are not satisfied abnormal or in unusual ways and do not become unconscious motivations that will regulate the entire person life.

Being an important part in the development of professional practice, reflection provides a useful feedback on how successfully a given task has been completed and enriches experience through improvement of one's potential.

In order to collect the necessary information and also to create a positive experience for our client, we used the nondirective interview, with open questions, without leading Irina's answers in a specific way. Using this approach allowed us to get more detailed data as well as a higher active participation. We tried to establish an interpersonal relationship and a mutual understanding in order for the client "to be herself". In this respect and for a better observation of her behaviour in natural conditions, we chose as discussion place the Irina's living environment.

From the very beginning we explained Irina what is the aim of this interview and that all the aspects discussed are confidential. The interview took approximately one hour and a half, Irina being communicative and open. Although we tried to note as much information as possible, sometimes Irina's tendency to deviate from the subject and complain about her present life imposed asking twice the same question. Furthermore recording the interview played a significant role in writing down this case-study without missing any relevant facts.

Knowing how important it is to gain the client's trust, we tried to maintain a spontaneous and direct eye contact. We used a friendly tone and even direct contact when Irina talked about things that made her cry (the loss of her husband, the distance between her daughter and her). In this way we felt that we can assure the client of our truly interest in her case and our availability in helping her to develop the occupations she likes to perform. During the interview we observed sadness in

Irina's eyes when talking about her losses, but also hope in her voice in those minutes allocated to discussions about taking photos. It is clear that her active participation in this occupation transform herself in a happier person as her face turns into a smile when talking about it. Irina perceived us as a calm, good listeners and comfortable persons to be with as she told us at the end of our meeting: "I hope we will meet soon as you know how to talk to me".

Regarding our own behaviour and feelings we observed that good communication skills are essential in these circumstances and that empathy is a quality needed when working with people. Additionally, from this experience we have a lot of things to learn as we have high expectations and a strong desire for continuous professional development. Having a list of questions written down facilitates the interview and also helps not to forget important domains we want to focus on as: a short presentation of the client, the principal occupations in different stages of life, the present occupations (self-care, productivity and leisure) that create client's life roles.

We conclude that Irina's case is an example for many persons that find life hard and that everything is possible when you have proper help. Occupational therapy has multiple benefits in people's lives, including to achieve a higher level of occupational performance and to increase self-esteem for individuals with depression.

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