ORIGINAL ARTICLE

The Therapy of Aggressiveness of Persons with Mental Handicap Combined with Further Mental Diseases

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Abstract

The main purpose of the research work is to prove the link between the guided regular activation and relaxation practised by users of the Regime Community Housing (people with a mental handicap in combination of other mental diseases and aggressive behaviour) and the amount of aggressive behaviour that comes along with a crisis intervention of the caring staff. The research highlights the quantity. As a tool for gathering the research data was used the information system of the social services eQuip. From the research is obvious that when users regularly practice ventilation and they participate in the activation programs along with going through the anxiety therapy as a part of guided relaxation programs, the amount of crisis interventions of the caring staff in Regime Community Housing gradually decreases. In the research period /2014-2017/ the number of crisis intervention dropped up to 56%. As a benefit of the research is considered the increase of competencies in the area of the regulation of their own behaviour, which creates good conditions for the reduction of antipsychotic medication therapeutic doses given to individual users of the service. During the research period, the antipsychotic medication in six out of eight users was reduced by 59%.

Keywords

Behavioural therapy, applied behavioural analysis, mental retardation, psychiatric comorbidity, aggressive behaviour, ventilation techniques

1. Introduction

In 2005 the Chamber of Deputies approved the amendment of the law concerning the usage of cage beds in institutions of social services. The users of these services with specific shows of behaviour had to learn how to exist outside the protecting beds quickly, "over the night". A number of them were successful in this process of social services transformation. However, not all of them. Due to the increasing need to provide a specialized support for mentally disabled people and those with other mental diseases as well as those with aggressive behaviour who all violated the collective way of life in social institutions, the Maxov Home let registered a new social service The Regime Community Housing. The main task as well as the goal of the Regime Community Housing was to provide a high-quality life outside the protective beds for the users of this social service.

The Regime Community Housing called Maják (Lighthouse) provides at present services to 8 adult men with mental handicap combined with other mental diseases and aggressive behaviour in the age of 25 – 60 years. These users of the Regime Community Housing are tended by a 9-member team of guides (specialists in the direct care). The particularities of the target group put extreme demands to both psychological and physical capability as well as the professional competence of the tending staff, especially in the area of aggressive behaviour therapy. During the development of the Regime Community Housing service we pass from the accentuated tendency of the top fulfilling the users’ physiological needs in favour of accomplishing their higher needs, especially their self-fulfilment. We provide the support in adaptation to current conditions of everyday life. We support the highest using of conserved intellectual abilities, the advancement of self-reliance and life competences.

A. THEORETICAL BASIS

The theoretical part of this paper is aimed to the description of particularities of the research group and interventional strategies within the Regime Community Housing service.

Due to the limited abilities of the research group to reflect the key topics the theoretical part is supplemented by extracts of the perpetrator of violent criminal acts, serving at present his sentence in the increased security prison.

2. Mental Retardation, Psychiatric Comorbidity

According to the international classification of diseases the intellectual abilities of the research group range in the area of light (F70) and intermediate (F71) mental retardation (see Figure 1).

Mentally disabled people are considerably endangered by the advancement of further psychological diseases as the states of anxiety, psychosis, depression, ASD, post-traumatic stress disorder as well as defects of the personality are. The affiliated psychological defects can

become the causative factor of aggressive behaviour (Sborník přispěvků odborníků a rodičů o různých přístupech k agresivitě a problémovému chování dětí i dospělých osob s mentálním postižením - Durecová 2005, p. 16). On the other side the long-term
suppressing of irritable reactions may lead to the development of various psychological diseases.

The inverted pyramid threatens to change needs during an acute aggressive attack.

According to the international classification of diseases (ICD 10) following psychiatric comorbidity occur at the research group: specific personality disorders (F60), Autism spectrum disorders (F84) as well as hyperkinetic disorders (F90) (see Figure 3).

3. Aggressive Behaviour

What is going on when I am really enraged? I think I have to produce a huge amount of testosterone and adrenaline which means I start stammering, my heart is going to burst and basically I lose my self-control. There is no rational thinking as for instance “you cannot break a bottle at his head”, “you can kill him and go to a prison”...It is as if my brain would stop working from an inexplicable reason, it does not realise the consequences...simply the little bell saying stop, it can happen this or that, disappears1.

The following kinds of aggressive behaviour occur at the research group:

1. a verbal aggression,
2. a physical aggression,
3. an aggression against things,
4. an aggression against the person himself.

Functions of the aggressive behaviour of the research group:

1) for catching someone’s attention,
2) a defense aggression,
3) a frustration aggression,
4) limits creating,
5) self-stimulatory,
6) analgesic,
7) advantage gaining,
8) compulsive.

See more about the most frequent antecedents (see Figure 4).

B. STRATEGY OF INTERVENTION

4. Applied Behavioral Analysis

The ABA is strictly individually composed therapy coming out of the principles of behaviourism teaching and behaving. With the help of this method we can observe and evaluate the behaviour of the target group and teach them new behaviour. We can understand the behaviour if we assess in details the set of circumstances before and after the monitored behaviour. The ABA is defined as a therapy using the systematic methods, tools, techniques and strategies that help to reduce the inappropriate behaviour and replace it with alternative (meaningful / socially accepted / convenient) behavior.

The Applied Behavioural Analysis supposes that certain behaviour is activated by factors preceding it and kept on by factors following it (Možný, Praško, 1999, p. 25)

So that any particular aggressive behaviour (B = behaviour) may occur, certain initiators (A = antecedents) must precede to it. So that the identical particular aggressive behaviour would repeat in future, it must be followed by those consequences (C = consequence) which bring some advantages / benefits to the man that motivate him to repeat this aggressive behaviour in the same antecedents. The therapy of aggressive behaviour is based on the elimination of these starters/antecedents and the change of the consequences so that the aggressive behaviour would stop to bring any advantages.

4.1 Analysis of Behaviour

When defining the aggressive behaviour the therapist avoids to subjective judgements. He/she defines the behaviour in such way so that it would not be any doubt about its occurrence and intensity. It means that instead of the term “very aggressive user”, he/she defines the aggressiveness in a particular way – „the user kicks, bangs with his head into the domestic appliances”. For these purposes the key guide assembles the individual scale of aggressiveness of the particular user.

The individual scale of aggressiveness of the particular user of the Regime Community housing.

Further the therapist keeps statistical records of the frequency of the aggressive behaviour occurrence (e.g. twice in an hour, 3 times in a week). He/she assesses also the time of aggressive behaviour (e.g. he/she registers and statistically processes the place where the aggressive behaviour occurs more frequently.)

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1 An extract of the correspondence of the perpetrator of the criminal violence act, at present sentenced in the higher security prison.
He/she makes the functional analysis with the help of the MAS (Motivation Assessment Scale) (Durand 1990, p. 45).

4.2 Individual plan

When I sleep wrongly, I eat badly, I am bored the whole day having nothing to do, I am dependent on the tablets or I am a smoker and have no cigarettes... and thousands of further details... how can I feel? A man in a prison wakes up already pissed off because since the time when he last time ate the maintenance food another 12 hours have passed³.

Based on the functional analysis of the behaviour the therapist makes out an individual plan of prevention and crisis behaviour plan.

The preventive planning includes also providing the primary needs (regime), time planning, sleep hygiene, ventilation techniques, relaxation techniques, working out/firming up etc.

The crisis plan is an exact instruction how to deal during the aggression manifestation.

5. Ventilation of Accumulated Tension

In therapy of aggressiveness of people with mental handicap combined with further mental diseases and heavy troublesome behaviour we can use with a significant success the principle of controlled ventilation. The aim of the controlled ventilation is to get rid of the excess pressure out in an active way, causing neither any harm nor any injury (Pešek, Práško, Štipek 2013, p. 179).

For the therapy of the aggressive behaviour of people with mental handicap the key to the success is the widest possible range of ventilation techniques. Every person should be provided by an appropriate treating. During the research period the guides offered to the users the following activation programs: sports, cleaning, maintenance, gardening, farming wood, paper mill, soap works, kitchen. The answer of effectivity of ventilation techniques in preventing the aggressiveness can be found at the majority society, respectively at persons without any mental handicap, e.g. at perpetrators of criminal acts².

Always you must have the brutes as far from you as possible. To have all those dudes busy working as much as possible, making out whatever from whatever material... you can receive five apple boxes and make out little houses!, a heap of old newspapers and make out something of the paper!, therapy of smiling, dancing etc. etc. Physical fatigue operates the best... running races, ball games...⁴.

6. Relaxation

The controlled relaxation improves the self-managing abilities and therefore it is widely used also by healthy population in the therapy of mental states connected with anxiety.

The fear and anxiety are in many cases the basic reason of aggressive behaviour at persons with mental handicap. The aim of the relaxation is to improve the self-control (development of abilities and capabilities needed for self-control).

Cautela and Groden (1978) have created special relaxation program for mentally handicapped persons the aim of which is to learn the self-control by using relaxation methods in stress situations⁵.

7. Self-regulation

It is very important so that even the people with mental handicap would learn to control their own behaviour, to adopt effective ways of managing aggressive impulses and thus decrease their being dependent on other persons and external circumstances.

Generally it is supposed that people with mental handicap miss cognitive abilities and social opportunities to learn the self-management. Kanfer (1971) defines the self-regulation as keeping certain behaviour without any immediate support of the surroundings.

The self-regulation includes two sub-categories:

- self-monitoring⁶;
- self-teaching⁷.

Despite the fact that the majority of persons with developmental defect cannot produce the ability of self-regulation independently, it is proved that they can learn this ability (Koegel, Fea, 1993).

8. Pharmacotherapy

In the past the aggressive behaviour in people with mental handicap has been considered as one of the characteristic features of this disease. “Due to the brain damage they behave like that” and therefore those people “were treated” by sedatives and limitations, so that they could injure neither themselves nor the others. The results of such “treatment” were poor and the consequences for the man’s life often terrifying (Šebor 2005, p. 15).

The pharmacotherapy is a supplementary treatment used for correcting the behaviour disorders. Psychiatric examination and the following therapy by psychiatric drugs are aimed above all to influence the aggressive behaviour; if it could not be satisfactorily coped by psychological means.

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² An extract of the correspondence of the perpetrator of the criminal violence act, at present sentenced in the higher security prison.
³ Vágnerová (2004, p. 813) states that the criminal perpetrator behaviour is usually typical for its ruthlessness, aggressiveness in enforcing their own aims. They miss the ability of self-control. They tend to react impulsively. They have no scruples. They react impulsively in load situations.
⁴ An extract of the correspondence of the perpetrator of the criminal violence act, at present sentenced in the higher security prison.
⁵ 44% of Groden Centre clients have learnt how to relax with verbal support within ten years, 31% of clients have learnt to relax independently to any verbal support (Schopler, Mesibov 1997, p. 18).
⁶ Self-monitoring = monitoring of someone’s own behaviour (Schopler, Mesibor 1997, p. 106).
⁷ Self-teaching deals with a verbal instruction to oneself which supports, manages and keeps certain behaviour (O’Leary, Dubey, 1979).
To people with mental handicap most often the anti-psychotic drugs are administered having mainly the calming effect. Neuroleptics in higher doses decrease the initiative, motivation, deepen the lack of interest and generally restrain the psychic performance. Long-term using of neuroleptics leads to a decrease of cognitive performance and following ability to learn anything new.

The tablets operate simply…you are stupefied and apathetic….when you have high dosage. You feel relaxed and weak. In prison I have seen dudes impaled at the wall by a tooth-brush sharpened to a spike, because the doctor only decreased their doses. All opium derivatives are addictive which means that to stop using the drugs from day to day may break your brain up, I don’t recommend it in any case8.

C. RESEARCH PART

In years 2014 – 2017 I accomplished an extensive research focused on the verification of the basic hypothesis: “Regular involving of the service users into activation and relaxation programs naturally decreases the number of aggressive demonstrations of their behaviour, resp. the crisis intervention of the accompanying staff.”

9. Research Sample

There were all 8 users of The Regime Community Housing involved into the research; the individuals with mental handicap combined with other mental diseases and aggressive behaviour aged from 25 – 60 years.

10. Research Method

The research data were gathered by the guides and continuously processed and evaluated through a special information system for social services eQuip (www.e-quip.cz) to which the direct care staff currently recorded the data on involvement the observed users into activation and relaxation programs as well as all crisis intervention in Regime Community Housing. A detailed register of observed phenomena arose, serving as the basis for an assessment of provided services effectiveness. The managed involving of the service users into the activation and relaxation programs have been negotiated by a contract both with the users as well as their caretakers (each service user participated during the research period in all regular activation and relaxation programs that he has chosen in cooperation with the key worker). In accord with the Crises Plan the guides were writing down each aggressive manifestation of the service users into the eQuip system according to the required statements.

11. Analysis and Interpretation of Measurement Results

The red line of No. 1 graph shows the decrease of crisis intervention in years 2014 – 2017, counted in hours at the left axis. The blue column graphs depict the increase of provided activation and relaxation programs during the research period, counted in hours at the right axis10.

The number of offered activation and relaxation programs corresponds with the total amount of hours of the offered programs; while some programs take place concurrently, resp. the guides advertise several programs of which the user can select in the same moment. The offer of activation and relaxation program was increasing exponentially during the research period11.

The decline of the provided activation programs volume in 2017 indicates that the volume of offered programs in the given conditions reached its peak12 in 2016. In connection with the increase of competences of the users in the area of influencing their own behaviour and a parallel raise of their independency in basic life capabilities the demand for satisfying higher needs grew up. The offer of activation programs preparing the users for the school attendance has reduced.

The research proved that the regular ventilation of accumulated excitement in the form of involving the users into activation programs and the users’ anxiety therapy in a form of their engagement into managed relaxation program reduces the volume of crisis intervention in the Regime Community Housing service.

8 An extract of the correspondence of the perpetrator of the criminal violence act, at present sentenced in the higher security prison.
9 2013 – the year of establishing the service was intentionally not included into the research due to several factors distorting the investigation: an extreme adaptation crisis (the users’ adaptation to a new group and environment, receiving new users, new team of guides) enforced global decreasing of neuroleptic medication of the users due to a lack of the medication in the market.
10 The length of relaxation programs as well as the crisis intervention has been recorded in the eQuip system in minutes (e.g., the usual length of calming breathing training oscillates between 10 – 20 minutes). For the research purposes we transferred the results to a common unit/h.
11 In 2014 the guides offered to users only 2 activation and 1 relaxation programs, in 2015 they offered 5 activation programs and 2 relaxation ones, in 2016 they advertised 12 activation and 4 relaxation programs.
12 Generally we can say that the quantity of the advertised programs has been replaced by the quality and the stress has been laid on increasing the extent of the user involvement. Certain programs have been reduced involuntarily due to withdrawal of the guides vouching the program realisation. Only those programs in which the users were interested strongly were kept (i.e. there were at least a half of the service users involved).
process includes even the adjustment of therapeutic dosage of antipsychotic drugs. Involving the users into activation programs operates as an alternative to antipsychotic medication. The planned (by the psychiatrist) and managed gradual reduction of therapeutic doses of antipsychotic drugs increases the user possibilities in the area of his activation.

The research proved that involving the service users into activation and relaxation programs and the directly following increase of their competencies in the area of regulating their own behaviour creates the suitable conditions for reducing the therapeutic doses of antipsychotic medication.

12. Conclusion

The regular involvement of the users of the Regime Community Housing Majík service into the activation and relaxation programs reduces the volume of aggressive acts in their behaviour, respectively the crises intervention of the accompanying staff. In years 2014 – 2017 the crisis intervention has been reduced totally by 56%.

During the therapeutic process we could observe the growth of the user competences in the area of regulation of their behaviour and thus their ability to overcome adaptation crises has increased.

The growth of competencies in the area of regulating their own behaviour created suitable conditions for reducing the therapeutic doses of antipsychotic medication of individual users of the service. In cooperation with a psychiatrist Peterová Z.MD. we succeeded to reduce the volume of the antipsychotic medication for six users of the service from total number of eight persons by 59%.

The growth of competencies in the area of regulating their own behaviour started the enhancement of independency of the users in basic life capabilities and their following demand for satisfying of their higher needs – by this the main target, i.e. to increase the quality of life of the service users has been fulfilled.

According to my opinion the aggressiveness cannot fully disappear, especially when we admit its connection with the temperament. However, I believe that it is possible to transfer it into a socially acceptable form, which is not dangerous.

At the end I would like to say my thanks to the entire team of guides persistently participating in the research. Then, above all, to Peter Svoboda who was a driving force of therapeutic changes and Bc. Jiří Samek who processed data of the research part.

References


Historically (2005 – 2014) in cooperation with the psychiatrist the volume of therapeutic doses of antipsychotic medication of Mrss. Z., S., N. reduced totally by 83%.
Figure 1. Representation of the degrees of mental retardation at the investigated group.

Figure 2. The pyramid of affiliated needs of the research group.

Figure 3. Representation of comorbidities at the research group.
**Figure 4. Aggressiveness system model of the research group.**

- **THE MOST FREQUENT ANTECEDENTS:**
  - unsatisfied need, boredom, dissatisfaction, uncertainty, frustration, fear, pain, inadequate demands of the environment... (5% crisis situations – compulsive aggression)

- **PHYSIOLOGY:**
  - heart rate, muscle tension, sweating, tremor

- **THOUGHTS:**
  - "He doesn’t notice me.", "I want ...", "I don’t want ...", "The pain will never stop.", "He always wants something.", "He criticizes me."

- **AGGRESSIVENESS SYSTEM MODEL**
  - of SRR Lighthouse users

- **EMOTIONS:**
  - annoyance, anger, anger, rage, fury, rabidity

- **BEHAVIOUR:**
  - verbal aggression, shouting,バス語, accusation, criticizing, blaming, scolding, physical violence aimed at surrounding things or persons, self-harming

- **THE MOST FREQUENT CONSEQUENCES:**
  - immediate positive consequences – catching attention, venting the tension, satisfaction from managing the situation, feeling of victory
  - immediate negative consequences – refusal, arrangements limiting the motion, self-depreciating thoughts ("I am a monster.") feeling of guilt, compassion, impotence
  - long-term positive consequences – avoiding duties, higher attention of environment
  - long-term negative consequences – worsened relations to others, stress from unsolved conflicts

**CITATION:**