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A Randomized Controlled Trial Study on Effectiveness of Social Skills Training Group in Queen Mary Hospital

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Introduction

A child's ability to develop and maintain appropriate peer relationships is considered to be an important predictor of positive adult adjustment and behaviour (Cowen, Pederson, Babigan, Izzo & Trost, 1973). Autistic children are at significant risk to experience difficulty of developing appropriate social and peer interaction skills as a result of their inattention, poor eye contact, delayed in language expression etc.. These social impairments may exacerbate when they entered the puberty stage.

Method

The purpose of this study was to evaluate the effectiveness of group social skills training program in improving children and parents' perceived social skills. Forty-eight subjects were randomly assigned to three groups (social skills group-treatment, social activity group-placebo and waitlist-control group). Each group would attend a seven weeks training programs in outpatient setting. Both children and parents were invited to attend the training sessions (total 90 minutes for each session). Each parent received repeated independent assessments by the second therapist (blinded to the treatment) using Vineland Adaptive Behaviour Scales before and after the treatment session. Meanwhile, all children were asked to complete the Culture Free Self-esteem Inventory to assess their self-perceived self-esteem status in general, social and academic functions.

Results

Results showed that there was no difference among three groups in children's reported self-esteem scores. But there was a statistically significant difference ($p < 0.01$) in parent's reported social skills in treatment

group as compared to placebo group and waitlist group. All children in the treatment and placebo group reported satisfaction in the participation of the group and they desired to attend more group training in the future.

Discussion

The effectiveness of social skills training for preadolescents with autism was preliminary established. The result of the present study could be generalized to children with Attention Deficits and Hyperactivity disorder to assess their social functioning. A four to six month follow-up could be done to observe whether improved social functioning could be maintained and generalized in other setting such as schools.

The Musculoskeletal Discomforts Among Hong Kong Housewives

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Clinically, large number of housewives suffered Upper Extremities Musculoskeletal Injuries.

A randomized self reported telephone survey was done to investigate the prevalence of musculoskeletal discomfort among full time housewives by the Hand Clinic of the Prince of Wales Hospital. A Modified Nordic Questionnaire was adopted to measure the 12-month, 7-day prevalence of musculoskeletal discomforts, functional disturbance and detailed information about upper extremities. Other key questions included personal and family background.

A total of 943 full time housewives were recruited from February to June in 2001. The prevalence of musculoskeletal symptoms were 84% amongst the responders ($n=794$). In the yearly prevalence, shoulder ($n=476$, 50%), neck ($n=410$, 44%) and low back ($n=381$, 40%) rank the highest in the claim list. Elbow ($n=220$,

23%) and hand (n=336, 36%) were the next significant parts. The observations were similar in the weekly prevalence. About 50% of those with upper extremities musculoskeletal discomforts had reported functional disability in Activities of Daily Living.

Another questionnaires were then used to identify risk factors with respect to physical work characteristics, psychological and socio-economical aspects (normal control group=88 and patient group=100). Multiple regression model was used for data analysis. The results indicated that the psychological status, awkward posture, prolonged duration of the work were the 3 significant predictors of symptoms with the importance level in that order.

The third and the last part of the study involved Ergonomics On-Site Evaluations and video-recording of 3 patients with tennis-elbow identified during the survey. Particular work posture, duration of work, pace and habit in carrying out the most forceful housework were additionally assessed.

Numerous housewives are having different degree of musculoskeletal disorders. House work stress is a significant predictor to Upper Extremities Musculoskeletal Injuries. On individual case assessment, it was found that housewives often pushed themselves to limits. Ergonomics program including education on proper position of body parts especially the at risk areas like the elbow, use of suitable equipment, restructuring of daily life schedule and attention to psychological status should be promoted as primary prevention measures.

Pilot Outcome of Hair Dressing Junior Training Program for People with Substance Abuse in Kwai Chung Hospital

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“Former drug abusers are often surprised at how much free time they have once they abandon a drug lifestyle.” (Walters, 1994, p.80). Work, therefore, is inevitably a vital component of life after they quit drugs. But many recovering substance abusers entering the labour force for the first time may be confronted with poor, inadequate,

or unrealistic concepts of what work is and who they are and can be as workers (Engelhart, Robinson, & Carpenter, 1992). Employment is often seen by substance abusers as foreign and unknown, creating feelings of inadequacy and fear. And many of them have missed the chances to develop effective coping skills and to make mistakes in less significant vocational responsibilities in their earlier life (Neff, 1977). Thus, there is obviously a demand on vocational rehabilitation for the recovering substance abusers.

In view of the service gap in vocational rehabilitation for substance abusers in Hong Kong, occupational therapists in Kwai Chung Hospital have initiated a vocational training course named “Hair Dressing Junior Training Program” for the recovering substance abusers.

“If one is to give up a pleasurable or reinforcing activity, such as drug use..., then one must find a suitable replacement.” (Walters, 1994, p.80). The use of hairdressing as vocational rehabilitation is in fact a favourable substitution. It is particularly suitable for the young abusers with low educational level as hairdressing industry is considered to be fashionable, trendy and manageable to these young abusers.

Methodology

In July 2001, a hairdressing salon workshop “Hair Basic” was setup in Kwai Chung Hospital. The training course of “Hair Basic” was an 8-week modular-based training program, which included six to eight trainees in each course. A group of professional hair stylists were invited to train and prepare the trainees (the recovering substance abusers) to work as juniors in the hairdressing industry. The development of the modular-based training program was tailor-made for the trainees with regular evaluation sessions.

Multidisciplinary team members were involved in this programme. Regular urine toxicology and psychiatric consultation was conducted by the Substance Abuse Assessment Unit of Kwai Chung Hospital. And after the training programme, all the trainees were followed by job hunting and coaching by the Supported Employment Service of Kwai Chung Hospital.

Outcome and Conclusion

There were totally fifteen participants recruited in the programme. Two of them had dropped out from the

programme. All of them have history of substance misused. Their age ranged from 16 to 30, and six of them were male and nine were female. Pre- and post-intervention levels of self-efficacy were measured by the Self-Efficacy Inventory – Chinese Version (Hamid & Tse, 1999).

The overall attendance rate of the trainees was 94%. Twelve out of the fifteen (80%) had been staying away from drugs (July 2001 to the time this paper was written). Nine (60%) had successfully got a job as junior in different salons, and four of them were able to maintain the job for more than two months. There was no significant difference in self-efficacy before and after the training course ($t=-0.200$, $p=0.066$).

To conclude the finding, the attendance rate of the trainees was higher than expected and the dropout rate was unexpectedly low. Although not statistically significant, the self-efficacy was in fact improved. Moreover, the employment rate of our trainees was better than the overall employment figure of the substance abusers in Hong Kong (60%: 43.1%). And the length of job maintenance was much longer than expected.

This pilot project has definitely indicated a favourable new service mode of occupational therapy for the substance abuser and further study on its outcome is recommended.

Vocational Outcomes of Individuals with Mental Illness Participating in an Individualized Supported Employment (SE) Program of Kwai Chung Hospital

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Supported employment (SE) has emerged in recent years as a viable employment service alternative for people with mental illness. It is broadly defined as a form of employment for disabled persons which allows them to work in an integrated open setting with on-going support service and to have access to all the usual benefits of having a job such as income at market rate and job security (Social Welfare Department, 1998). Unlike traditional train-place model of vocational rehabilitation in which a person is trained to “get ready”

for competitive job, SE model emphasizes a “place-train” model in which the client is rapidly placed in competitive employment setting and the necessary support is provided as needed (Danley & Anthony, 1987). Literature review demonstrated SE could enhance vocational outcomes of mental patients in the areas of employment rate, job retention rate, job tenure and their earnings (Danley et al., 1994; Drake et al., 1994; Drake et al., 1996; Bond et al., 1997a). In Hong Kong, although supported employment has been in operation in for more than 10 years, the program focus is mainly on group model such as mobile crew and small business approach. Not much is known about its outcome and applicability of individualized approach in local context. According to the Annual Report 2000 of the New Life Psychiatric Rehabilitation Association, of the 238 mentally ill people receiving SE service, only 36 (15.1%) were placed in competitive job under an individualized placement scheme. The majority of the people were involved in simulated business (30.3%) and mobile crew program (54.6%).

The objective of this paper is to report on the vocational outcomes of people with mental illness participating in an individualized SE program of the Supported Employment Service of the Kwai Chung Hospital (KCH).

The present program was developed on the basis of the Job Coach Model (Wehman, 1986) and the principles of the Individual Placement and Support (IPS) Model (Becker & Drake, 1994). Critical elements of the present SE program included :

- 1) job development: base on patient’s preferences and choices, to solicit job placements in employment establishments using various marketing strategies such as cold call, presentation in seminars and employer interview;
- 2) job placement: to prepare and arrange for job entry;
- 2) on-job-training: to apply behavioural strategies to teach job skills on-site and to insure that job training matches individual learning style;
- 3) on-going supports: to provide time unlimited follow-along support services on and off the work site.

Operationally, the provision of the above services was coordinated by a job coach. The job coaches were registered Occupational Therapist in Hong Kong with at least one year clinical experience in the rehabilitation of

people with mental illness. To ensure optimal follow-up supports, telephone contact would be provided for at least twice per week in the initial 3 months of placement. Thereafter, supports would be provided at least once per month.

A total of 627 patients with mental illness were referred to the SE service, KCH from May 1995 to December 2000. The patients were referred from various major psychiatric clinics in the Hospital Authority. Three hundred and sixty five (58.2%) were male, and two hundred and sixty two (41.8%) were female. The mean age was 36.5 years old with a range from 17 to 60 years old. The majority of the participants were single (83.4%), only 10.8% were married. A primary diagnosis of schizophrenia was given for 458 (73.0%) participants, affective disorders (manic or major depression) was given for 86 (13.7%) participants, and the remaining 83 (13.2%) had non-psychotic diagnoses of alcoholism, anxiety disorders, mental retardation, personality disorders, and obsessive compulsive disorders. Concerning the highest education achieved among the 627 participants, 113 (18.0%) attained primary education or below, 167 (26.6%) were Form 1 to Form 3, 262 (41.8%) studied to Form 5, and 85 (13.6%) were up to post-secondary level or above.

Of the 627 participants, 389 (62.0%) obtained competitive employment. The mean job tenure was 139 days. The mean salary was \$4,703 for full-time jobs and was \$2,490 for part-time jobs. The majority of participants (62.2%) could sustain their job placement for more than 30 days, 80 (20.6%) participants could work for more than six months, and 35 (13.1%) could maintain the job for more than one year. The rate of employment in the current study was slightly higher, but the job retention rate was lower than in similar overseas studies (Bond, 1997b). This study provides evidence to support the use of individualized SE program to enhance the vocational outcomes of people with mental illness.

Premature Infants and their Fine Motor Development

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Overseas evidence shows that deficits in perceptual, fine motor and visuo-motor functioning between 5 and 11 years have been reported in many studies of VLBW children (Robertson et al., 1990; Saigal et al., 1990; Marlow, 1993). It was also reported that VLBM children at school age, despite having normal intelligence and neurological functioning, were at risk of minor dysfunction (Goyen, 1998).

Having interest to understand the local picture, we conducted a need assessment to study the development of fine motor and visuo-motor functioning of the premature children born in Tsan Yuk Hospital and Queen Mary Hospital. The children born prematurely (<37 weeks) and followed up at the Neonatal Clinic at QMH during the period from September to December 1999, at age between 3 to 6 years are recruited into this study.

Key Assessment Tools Used in this Study

- Fine Motor Function: Peabody Developmental Motor Scales (PDMS-FM)
- Visuo-Motor Function: Developmental Test of Visuo-Motor Integration (VMI)

Demographic Data

- Total 36 subjects
- Sex distribution : Boys 18
Girls 18

Age (Years)	No. of subjects
3 - 4	16
4 - 5	13
5 - 6	3
6 - 7	4

Categories of subjects by Birth Weight	% of the total subjects
Extreme Low Birth Weight (<1000 g)	47%
Very Low Birth Weight (1000-1499 g)	31%
Low Birth Weight (1500-2499 g)	19%
Birth Weight (>2500 g)	3%

Results

Raw score in Peabody Developmental Motor Scale – Fine Motor

	Total subjects recruited	No. of subject score below the norm	No. of subject score above the norm
3-4 years old	17	15	2
4-5 years old	12	12	0
5-6 years old	3	3	0
6-7 years old	4	3	1

Raw score in Developmental Test of Visuo-Motor Integration (VMI)

	Total subjects recruited	No. of subject score below the norm	No. of subject score above the norm
3-4 years old	17	5	12
4-5 years old	13	0	13
5-6 years old	3	0	3
6-7 years old	4	0	4

Discussion

Results showed that 86% of the subjects scored lower than the mean in the PDMS-FM, while 78% of the subjects scored higher than the mean in VMI. Preliminary conclusion is that fine motor functioning seems to be significantly affected for the premature children as they develop. It indicates that there is a need for early screening and intervention of this group of children in the areas of fine motor development.

Subsequent to this study, we have developed a 12 sessions-group training program on the fine motor skills for the very low birth weight children identified to have motor delay at the age of three. Activities are standardized which include eye hand coordination, grip and pinch strengthening, in-hand manipulation and bilateral arm and hand use. Weekly structured home program is used. Parents and their children are greatly encouraged to participate so they can practice those activities at home. We have tried out a few groups and the feedback from parents and children is extremely good. They appreciate the atmosphere of the group and the sharing among parents.

We are planning to further study the effectiveness of this newly developed group training program. At the moment, a pilot project is being conducted to fine-tune the content of the training program. To obtain a larger database for clinical trial, we would like to invite more settings to join the study in order to provide more evidence base support for our occupational therapy treatment in fine motor development for premature children.

Occupational Therapy Outcome in Cardiac Rehabilitation Service (Phase II)

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There are more than 3,000 people die of coronary artery disease yearly in Hong Kong. In patients surviving AMI, apart from medical and revascularization therapy, a comprehensive Cardiac Rehabilitation Program (CRP) also plays a significant role.

In United Christian Hospital, Occupational Therapy Department began to provide CRP service in 1995 on a small scale only. In 1999, the overall Cardiac Rehabilitation Service in the hospital was improved. After that, Occupational Therapy became an integral part of the Cardiac Rehabilitation Service.

In the CRP, we mainly serve the group of patients surviving from AMI, Occupational Therapy Services in Cardiac Rehabilitation consists of two phases. Cardiac Rehabilitation Phase I (CRPI) begins during the early stage of patients' recovery in the hospital. The Phase II Program (CRPII) is conducted on outpatient basis.

After an episode of AMI, patients may experience decrease functional abilities, change of life expectation, change of lifestyle, persistent anxiety and many other psychosocial changes. All these would directly affect patients' confidence to return to their previous life roles such as a housewife or a worker, etc. Therefore, the goals of Occupational Therapy in the CRPII would include decreasing health risk behaviours, assisting in lifestyle maximizing functional capacity, reducing anxiety level as well as increasing confidence so as to empower patients to resume satisfactory and productive life roles with better quality of life.

The structure of CRPII is in a group format with six patients. Each group consists of two sessions per week for a period of four weeks. The content consists of psycho-educational lecturette and skill practice in the areas of the cardiac pathology, emotion coping, life-style redesign, energy conservation, work simplification, relaxation skills training and stress management. There are also discussion and sharing so as to develop social support among the patients.

In order to assess the effectiveness of the CRP II Services for the patients with AMI, a program evaluation was conducted. A total of 142 patients were referred to CRPII for Occupational Therapy Services from 7/00 to 6/01. There were 37 patients who could not complete the program due to refusing or defaulting treatment, while a total of 105 patients had completed the whole program. Out of the 105 successful participants, 73% of cases were male and 27% were female. (mean age: 67.76, SD=11.16 years)

The Short-Form (SF-12) was used to assess patients' quality of life before and after the program. It is a generic outcome measure of health status. It measures eight health concepts which are grouped into 2 domains: the Physical Component Summary (PCS) and the Mental

Component Summary (MCS). The PCS includes physical functioning, role limitations due to physical health problems, bodily pain, general health, vitality (energy/fatigue) while the MCS involves social functioning, role limitations due to emotional problems, and mental health (psychological distress and psychological well being). Besides, a patient satisfactory survey, consisting of 10 questions, was also adopted to measure the degree of patient's satisfaction towards the program contents and knowledge gained.

After completing the Occupational Therapy Program for CRPII, the result of SF-12 showed that there was significant improvement in both physical health (mean score of PCS increase from 45.472 to 48.540) and the mental health (mean score of MCS increase from 47.388 to 53.142) of patients ($p < 0.05$). Besides, as showed by the satisfaction survey, there were 94% of patients who felt satisfied with the program.

The findings concluded that the Occupational Therapy Program for CRPII was able to increase patient's knowledge in cardiac disease, reduce their anxiety level, increase their confidence to cope with future life with significant improvement in their quality of life.