

# STUDY OF PATIENTS ATTENDING PSYCHIATRIC DAY CENTRES IN SINGAPORE (1) EFFECTS ON ADMISSION PATTERNS (2) SURVEY OF RELATIVE'S VIEWS

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## **SYNOPSIS**

A study into the effect of 49 patients attending Psychiatric Day Centres in Singapore for at least a year shows considerable improvement both in regards to the number of hospital admissions and the length of hospital stay in weeks before and after attending the Day Centres for corresponding periods. Factors bringing about these effects are discussed. Five patients (10%) in the study, however, did not improve. These five have in common a history of intolerable behaviour in the form of aggression either towards parents or self.

## **INTRODUCTION**

Woodbridge Hospital, the only psychiatric hospital in Singapore, runs two community-based day centres. These are the Mandalay Day Centre (MDC) and the Alexandra Day Centre (ADC) which started functioning in January 1981 and April 1983 respectively. The aims of the day centres are:

- (1) to provide rehabilitation programmes and activities for discharged Woodbridge Hospital patients so as to facilitate their eventual return to live independently in the community;
- (2) to develop and instil good work habits, self-care, social and leisure skills; and
- (3) to provide day care and sheltered employment for patients who cannot be fully rehabilitated.

So far the usefulness of these day centres have not been evaluated. We report here a study of the effects of attendance at these day centres on the admission patterns of those patients who have attended the day centres for at least 1 year; in particular the effect on their number of admission and length of hospitalization before and after attending the day centres.

Each day centre is administered by a team comprising a Psychiatrist, a Staff Nurse, a Medical Social Worker, two Medical Health Servants, and an Occupational Therapist of which the last two categories of staff are full-time. Additional supporting staff includes a clerical officer, a workshop assistant and an investigator. The 2 day centres can cater for about 150 patients. Industrial work is the main activity, supplemented by social and recreational activities, educational talks and the teaching of independent living skills.

**METHOD**

Patients who have attended the day centres for at least 1 year as at 30 Sept 84 were selected for study. All their case records were traced and analysed with regards to their sex, age, diagnosis, duration of illness, period of attendance in day centres, number of admission, and the length of hospital stay before and after attending the day centres for corresponding periods. The total number of hospital admissions and the total length of hospital stay for all the patients as a group are then added up. The results are tabulated as shown.

**RESULTS**

As on 30 Sept 84, there was a total of 148 patients (MDC 90, ADC 58) attending the psychiatric day centres as shown below:

**Total Number of Patients at Psychiatric Day Centre on 30 Sep 1984**

|   | MDC | ADC | Total | %   |
|---|-----|-----|-------|-----|
| F | 33  | 29  | 62    | 42  |
| M | 57  | 29  | 86    | 58  |
|   | 90  | 58  | 148   | 100 |

From the above, 49 patients (31 from MDC, 18 from ADC) or 33% satisfied the criteria for this study. Their age and sex distribution is shown below:

**Distribution by age and sex of study group**

| Age Range | MDC |   |       | ADC |   |       | MDC/ADC |    |       | %   |
|-----------|-----|---|-------|-----|---|-------|---------|----|-------|-----|
|           | M   | F | Total | M   | F | Total | M       | F  | Total |     |
| 0-20      | 1   | 0 | 1     | 0   | 0 | 0     | 1       | 0  | 1     | 2   |
| 21-30     | 8   | 4 | 12    | 4   | 2 | 6     | 12      | 6  | 18    | 37  |
| 31-40     | 8   | 2 | 10    | 3   | 5 | 8     | 11      | 7  | 18    | 37  |
| 41-50     | 5   | 3 | 8     | 2   | 1 | 3     | 7       | 4  | 11    | 22  |
| 51        | 0   | 0 | 0     | 1   | 0 | 1     | 1       | 0  | 1     | 2   |
|           | 22  | 9 | 31    | 10  | 8 | 18    | 32      | 17 | 49    | 100 |

Of the patients studied, the majority (74%) falls within the age group 21-40 years and there is a higher proportion of male patients in the MDC group.

**Distribution by Diagnosis**

|                      | MDC | ADC | MDC/ADC | %      |
|----------------------|-----|-----|---------|--------|
| Schizophrenia        | 25  | 13  | 38      | ( 78%) |
| Mental Retardation   | 4   | 2   | 6       | ( 12%) |
| Epilepsy             | 1   | 3   | 4       | ( 8%)  |
| Personality Disorder | 1   | 0   | 1       | ( 2%)  |
|                      | 31  | 18  | 49      | (100%) |

As regards diagnoses 78% of the patients suffered from schizophrenia while a much smaller percentage from mental retardation (12%), epilepsy (8%) and personality disorder (2%).

**Duration of Illness**

|             | MDC | ADC | Total | %   |
|-------------|-----|-----|-------|-----|
| 0-5 years   | 9   | 1   | 10    | 20% |
| 6-10 years  | 9   | 6   | 15    | 31% |
| 11-15 years | 6   | 6   | 12    | 25% |
| 16-20 years | 3   | 2   | 5     | 10% |
| 21-25 years | 3   | 2   | 5     | 10% |
| 26-30 years | 1   | 1   | 2     | 4%  |
| 31 years    | 0   | 0   | 0     | 0%  |
|             | 31  | 18  | 49    |     |

80% of the patients have a duration of illness of more than 5 years and 49% more than 10 years.

**Number of hospital admissions and length of hospital stay before and after attending day centres for the corresponding lengths of time**

|       | Number of Hospital Admissions |       | Length of Hospital Stay (in weeks) |       |
|-------|-------------------------------|-------|------------------------------------|-------|
|       | Before                        | After | Before                             | After |
| MDC   | 41                            | 13    | 144                                | 37    |
| ADC   | 26                            | 9     | 154                                | 31    |
| Total | 67                            | 22    | 298                                | 68    |

For the corresponding lengths of time they have attended the day centres, the total number of hospital admission for the whole group of patients under study was reduced from 67 to 22 (p .01) and the length of hospital stay from 298 weeks to 68 weeks (p .01)

## DISCUSSION

Some form of day care have been available for patients with psychiatric disorders for about 40 years in developed countries but very little is known about either their efficiency or their efficacy (1).

Studies by Brown, Birley and Wing 1972, found that 58% of their schizophrenic patients coming from high expressed emotion (critical comments, hostility, marked emotional over-involvement by relatives) homes relapsed, compared with only 16% of the low EE (expressed emotion) group, during the nine months after discharge from the hospital (2). C E Vaughn and J P Leff 1976, in a study of the influence of family and social factors on the course of schizophrenic patients, replicated the findings of Brown et al and showed that the combination of maintenance drug therapy and reduction of face to face contact with a highly involved or critical relative will prevent relapse in nearly every instance (3). Reduced periods of face to face contact can be achieved by the patients being away from the home attending a day centre.

It is a burden to relatives having to keep an eye on psychiatrically ill patients for fear of the latter causing mischief to others or harm to themselves. They may have to sacrifice their jobs and leisure time to care for them. A heavy economical loss may be suffered by the family as a result. By sending the patients to day centres, the hardship of the relatives can be greatly reduced. An end result may be a change of their attitudes towards the patients (more supportive, more tolerant of patients' behaviour and more cooperative with the psychiatric staff). The social behaviour of the patients may improve after attending day centres because of social interaction and increased self-esteem. To many, it is like going to work and their life is more structured and meaningful. The day centres also give incentive payments according to work done and transport allowances for needy patients thereby helping to a small extent to make the patients less dependent economically on the family. The staff nurses of day centres supervise their day medicine and the compliance to drugs is also improved.

Overall, the results show considerable improvement both in regards to the number of hospital admissions and lengths of hospital stay after attending the day centres. We do not claim that this significant improvement is due solely to the attendance of day centres alone, but many factors as discussed above may be operational in bringing about this effect.

However, it is noted that 5 patients (10%) in the study did not improve after attending the day centres. Looking into their case notes, the only outstanding and common feature among them is a history of intolerable behaviour in the form of aggression towards parents (3), outrage of modesty of woman (1), and repeated suicidal attempts by jumping out of the windows (1). This suggests that patients with features of aggression either towards others and self may not be suitable for rehabilitation by attending psychiatric day centres.

## (2) SURVEY OF RELATIVES' VIEWS

### SYNOPSIS

84% of the relatives of patients who have attended Psychiatric Day Centres in Singapore for at least a month as on 1st Sept 1984 rated improvement in the patient's behaviour at home through a semi-structured questionnaire. No identification of the patients or relatives was required in order to minimise the tendency of the respondents to give favourable replies. Patients who improved were reported to be happier, sleeping better, have a better standard of personal hygiene and were more helpful at home. The study suggests that lack of volition and drive through prolonged mental illness is responsible for the lack of progress after attending the day centres. 11% of the relatives reported no improvement and 1% worse but practically all would still advise the patients to continue attending the day centres. Suggestions by relatives for the improvement of day centres were also asked for.

## METHOD

Patients who have attended the Mandalay and the Alexandra Day Centres (MDC & ADC) for at least a month as on 1st Sept 1984 were selected for the study. Semi-structured questionnaires were given to them to take home for their relatives to fill in regarding their assessment of patient's behaviour and their views about the usefulness of the day centres. Patients were requested to return the completed survey forms by dropping them into the collection boxes provided in the day centres. The identities of patients or relatives were not asked for so that they would feel free to express their opinions. It is an attempt to find out the relatives' assessment of the changes in patients' behaviour at home and the reasons, if any, for their deterioration or lack of improvement. We also asked for suggestions on how the day centres can be improved.

## RESULTS

Out of a total of 153 patients attending our day centres as on 1st Sept 1984, 132 patients had attended for more than 1 month and were selected for the study.

Out of the 132 questionnaires sent out, 103 completed ones were returned; making a response rate of 78%. The information obtained were analysed and tabulated as follow:

**Table 1**  
Total number of patients at Psychiatric Day Centre on 1.9.84

|        | MDC | ADC | Total | %    |
|--------|-----|-----|-------|------|
| Female | 34  | 30  | 64    | 42%  |
| Male   | 66  | 23  | 89    | 58%  |
|        | 100 | 53  | 153   | 100% |

**Table 2**  
Relationship of relatives who responded

| Respondents | MDC | ADC | Total | %    |
|-------------|-----|-----|-------|------|
| 1) Father   | 10  | 5   | 15    | 15%  |
| 2) Mother   | 20  | 6   | 26    | 25%  |
| 3) Children | 3   | 0   | 3     | 3%   |
| 4) Brother  | 12  | 12  | 24    | 23%  |
| 5) Sister   | 18  | 10  | 28    | 27%  |
| 6) Others   | 3   | 4   | 7     | 7%   |
|             | 66  | 37  | 103   | 100% |

The relatives who filled up the questionnaires were mainly the parents (40%) and the siblings (50%) and only 3% were the children of patients.

**Table 3**  
Length of attendance at day centres

|                     | MDC | ADC | Total | %   |
|---------------------|-----|-----|-------|-----|
| 1) less than 1 mth  | 0   | 0   | 0     | 0   |
| 2) 1 — 3 mths       | 11  | 4   | 15    | 15  |
| 3) 4 — 6 mths       | 9   | 9   | 18    | 17  |
| 4) 7 — 9 mths       | 1   | 4   | 5     | 5   |
| 5) 10 — 12 mths     | 10  | 5   | 15    | 15  |
| 6) more than 1 year | 35  | 15  | 50    | 48  |
|                     | 66  | 37  | 103   | 100 |

More than 2/3 (68%) of the patients surveyed have attended the day centres for at least 6 months.

**Table 4**  
Regularity of attendance

|                    | MDC | ADC | Total | %   |
|--------------------|-----|-----|-------|-----|
| 1) 6 days a week   | 48  | 27  | 75    | 73  |
| 2) 4-5 days a week | 12  | 10  | 22    | 21  |
| 3) 1-3 days a week | 3   | 0   | 3     | 3   |
| 4) Don't know      | 3   | 0   | 3     | 3   |
|                    | 66  | 37  | 103   | 100 |

94% of the patients surveyed attended the day centres for more than 3 days a week.

**Table 5**  
Improvement

|                   | MDC | ADC | Total | %   |
|-------------------|-----|-----|-------|-----|
| 1) Greatly        | 17  | 15  | 32    | 31  |
| 2) Some           | 36  | 19  | 55    | 53  |
| 3) No improvement | 8   | 3   | 11    | 11  |
| 4) Worse          | 1   | 0   | 1     | 1   |
| 5) Don't know     | 4   | 0   | 4     | 4   |
|                   | 66  | 37  | 103   | 100 |

53% considered there was some improvement and 31% rated patients as greatly improved after attending the day centres. However, 11% thought that there was no improvement and 1% was said to be worse.

**Table 6**  
Areas of improvement

|                                  | MDC | ADC | Total |
|----------------------------------|-----|-----|-------|
| 1) Sleeps better                 | 29  | 21  | 50*   |
| 2) More helpful at home          | 22  | 13  | 35*   |
| 3) Improved personal hygiene     | 22  | 15  | 38*   |
| 4) More productive               | 20  | 10  | 30    |
| 5) Enjoying himself or herself   | 18  | 12  | 30    |
| 6) More communicative            | 18  | 10  | 28    |
| 7) Happier                       | 28  | 22  | 50*   |
| 8) Less talking/laughing to self | 12  | 4   | 16    |
| 9) Less disturbing               | 16  | 8   | 24    |
| 10) Others                       | 3   | 3   | 6     |

The most frequently reported areas of improvement (as marked with asterisks) were that patients became happier, they slept better, their personal hygiene improved and they became more helpful at home.

**Table 7**  
Reasons for no improvement/worse

|                                      | MDC | ADC | Total |
|--------------------------------------|-----|-----|-------|
| 1) Dislike going to day centre       | 5   | 1   | 6     |
| 2) Not taking medicine               | 3   | 2   | 5     |
| 3) Not keen to work                  | 7   | 0   | 7*    |
| 4) Lazy                              | 9   | 3   | 12*   |
| 5) Bad influence from other patients | 3   | 0   | 3     |
| 6) Low pay at day centres            | 5   | 3   | 8*    |
| 7) Irregular attendance              | 6   | 0   | 6*    |
| 8) Day centres too far               | 6   | 1   | 7*    |
| 9) Others                            | 4   | 0   | 4     |

Laziness, low rate of monetary incentives at day centres, lack of keenness to work and distance of day centres from patients' homes were the main reasons reported by the relatives to account for the 12% of patients with no improvement after attending the day centres.

**Table 8**  
Knowledge of objectives of day centres

|     | MDC | ADC | Total | %   |
|-----|-----|-----|-------|-----|
| Yes | 50  | 34  | 84    | 82  |
| No  | 16  | 3   | 19    | 18  |
|     | 66  | 37  | 103   | 100 |

82% of the relatives reported that they knew the objectives of the day centres.

**Table 9**  
Would relatives advise patients to continue with day centres

|     | MDC | ADC | Total | %   |
|-----|-----|-----|-------|-----|
| Yes | 65  | 37  | 102   | 99  |
| No  | 1   | 0   | 1     | 1   |
|     | 66  | 37  | 103   | 100 |

Practically all relatives would advise the patients to continue to attend day centres.

**Table 10**  
Desirability of more day centres for Singapore

|            | MDC | ADC | Total | %   |
|------------|-----|-----|-------|-----|
| Yes        | 59  | 34  | 93    | 90  |
| Don't know | 7   | 3   | 10    | 10  |
| NO         | 0   | 0   | 0     | 0   |
|            | 66  | 37  | 103   | 100 |

90% of the relatives were positive about the desirability of more day centres for Singapore. No one was negative but 10% reported they did not know.

#### Suggestion for improvement of day centres

There are 17 and 13 relatives from MDC and ADC respectively who put forward the following suggestions:-

- more social activities by day centres e.g outings to zoo and places of interest (10)
- more transport allowance (5)
- more job placements for patients in open market (5)
- more incentive for work done at day centres (5)
- more exposure to different jobs at day centres (4)

#### DISCUSSION

Results show that 84% of the patients' relatives rated improvement in the patients' behaviour at home. Although this is the subjective impression of the relatives, we had intentionally made the questionnaire anonymous so that the tendency for the relatives to give favourable answers is reduced.

Patients who improved were reported to be happier, sleeping better, have a better standard of personal hygiene and were more helpful at home. This may in turn modify the relatives' attitudes favourably towards them and the professional staff at any centres.

Of the 12 relatives who reported there was no improvement or worse after attending the day centres, all gave the reason of laziness. Only 8 relatives complained about the low pay at day centres. The results indicate that lack of volition and drive as a result of the prolonged mental illness is an important factor for the lack of progress. Perhaps, the aim for this group of patients in rehabilitation may have to be directed

towards an arrest of further mental and social deterioration.

It is interesting to note that although 12 relatives considered that the patients had not improved only one would advise the patient not to continue attending the day centre. This may sound paradoxical at first. But it is only logical to deduce that relatives all the more would like these patients to attend day centres so that they are relieved of the burden of having to care for them during the day and that they can go out to work as a result.

#### CONCLUSION

The results of the two studies show that patients do improve considerably after attending psychiatric day centres both with regard to their admission patterns and their behaviour at home as reported by the relatives. It augurs well for the development of more community-based day centres in future in Singapore.

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**SURVEY ON MANDALAY DAY CENTRE (MDC)**  
(To be filled by one of patient's relatives)

**General Instructions:**

Please write your responses CLEARLY   
 Please ensure that ALL QUESTIONS are answered.  
 Please read questions CAREFULLY before answering.  
 Thank you very much for your co-operation.

1. Relationship to patient:

- father
- mother
- children
- brother
- sister
- Others .....  
(please specify)

2. How long has this patient attended MDC?

- less than 1 mth
- 1 to 3 mths
- 4 to 6 mths
- 7 to 9 mths
- 10 to 12 mths
- more than 1 year

3. Has the patient been attending MDC regularly?

- 6 days a week
- 4-5 days a week
- 1-3 days a week
- Don't know

4. Do you think that patient has improved after attending MDC?

- improved greatly
- some improvement
- Don't know
- no improvement
- has become worse

If patient has some improvement or improved greatly answer Question 5, Don't answer Question 6.

If patient has no improvement or has become worse, answer Question 6, Don't answer Question 5.

5. If patient has some improvement or improved greatly, what are some of the areas that he/she has improved in? (You may tick more than one answer).

- He/She is sleeping better now
- He/She is more helpful at home
- His/Her personal hygiene has improved
- He/She feels that he/she is more productive now
- He/She is enjoying himself/herself now
- He/She is talking more to relatives/friends now
- He/She is happier now
- He/She is not talking/laughing to himself/herself
- He/She is not disturbing other people now
- Others  
(Please specify) .....

6. If the patient has no improvement or is becoming worse after attending MDC, could you explain why? (You may tick more than one answer).
- He/She does not like to go to MDC
  - He/She is not taking his/her medicine
  - He/She is not keen to work
  - He/She is lazy
  - He/She is learning bad habits/influence from other patients
  - The pay at MDC is not good enough
  - His/Her attendance is not regular
  - MDC is too far from home
  - Others  
(Please specify) .....
7. Do you know the aims and objectives of MDC?
- Yes
  - No
8. Would you continue to advise the patient to come to MDC?
- Yes
  - No
9. Do you have any suggestions on how to improve the Day Centre?
- .....
- .....
- .....
10. Do you think that Singapore should have more Day Centres such as MDC/ADC?
- Yes
  - No
  - Don't know