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# The Panorama of Psychiatric Emergencies in Three Different Parts of Sweden

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Summary. A total of 1226 psychiatric emergencies from three socially different catchment areas in Sweden were analyzed. Data were obtained over 28 consecutive days at the beginning of 1985. Very small differences were found between urban and rural catchment areas, which is probably due to a high degree of equality for both social and medical services throughout Sweden. The largest diagnostic subgroup was patients with an alcohol problem (33%). A measure of the patients network of close relatives, yielded small differences between the diagnostic subgroups.

**Key words:** Catchment area – Sectorised psychiatry – Mental disorder – Mental health services – Emergency service – Psychiatric patient admission

During the last two decades there has been increasing interest in psychiatric emergencies all over the world. This is due to the rising number of patients requiring immediate psychiatric help and also because patients evaluated in the emergency room reflect the psychiatric morbidity and how society tries to cope with mental illness.

In Sweden, as in the rest of the Western world, the number of patients visiting the emergency room increased during the late sixties and the beginning of the seventies [1, 6, 14]. From about 1975 the number of psychiatric emergencies has been relatively constant and in Sweden has even shown a tendency to decrease [13]. As stated by many authors this increase in the sixties was connected with, and perhaps the result of, the decrease in the number of patients in mental hospitals. This deinstitutionalization wave

has left many chronically ill patients lonely in a hostile society, and they often present with their problems and symptoms to the staff of the emergency room [3, 10].

In order to make it easier for people to contact the psychiatric services, there has been a reorganisation of these services during the last few years in Sweden. The large areas from where people were previously admitted to hospital are now split into small areas (sectors) of about 60000–100000 inhabitants. Each sector has both inpatient and outpatient units and full responsibility for all psychiatric patients in its area. Most wards are short-term and located in a common psychiatric clinic all serving a specific sector. The emergency service, however, is not organised on a sectoral basis but serves all sectors.

After this new organisation psychiatric care has been studied in some sectors [7] but there has been no study in Sweden comparing several sectors or catchment areas according to their different demands on the acute psychiatric organisation. The aim of the study was to examine whether the psychiatric emergency service has to meet different problems in different parts of the country.

# Material

We have studied three catchment areas in different parts of Sweden: one in the north-east of Stockholm (Danderyd hospital) with 313000 inhabitants and consisting of an inner city and suburban population, another in Uppsala (Uppsala-Ulleråker hospital) a medium sized city and rural population of 250000 inhabitants, and finally one in the south of Sweden (Kristianstad hospital) with a small town and rural population of 138000 inhabitants.

In the catchment area of the Kristianstad hospital 19% of the people were over 65 years of age. In the other two catchment areas people over 65 years of age comprised 14%. The organisation of the psychiatric emergency service was similar in the three catchment areas. There were one or two emergency wards in each catchment area, serving all sectors in the area. The emergency service was available 24 h a day. The patients usually came directly without referral from any other doctor. In the catchment areas investigated there was no other facility for psychiatric emergency service.

Over 28 consecutive days at the beginning of 1985, 1226 patients were interviewed. Danderyd hospital received 521 visits, Uppsala-Ulleråker hospital 518 visits, and Kristianstad hospital 187 visits to the emergency service.

# Method

In all three catchment areas every visit to the emergency service during the same 4 weeks was registered. All the patients were first interviewed by a trained nurse who registered their age, sex, and social contacts. Then every patient met a doctor who was either a resident or rarely a senior psychiatrist. After the interview the physician assessed the patients symptoms using the ICD 8 and then registered the preliminary diagnosis in nine different categories. The data obtained were coded and statistically analyzed. In the statistical analysis the  $\chi^2$  test was used, where appropriate, to detect any significant differences between groups.

## Results

The panorama of mental illness that forced people to visit the emergency service is shown in Fig. 1. Alcohol was shown to be the main problem for nearly ½ of the patients. Psychosis meant acute psychosis of different origins and e.g., chronic schizophrenia. The term neurosis was used to cover problems of anxiety and phobias while depression covered both minor and major depression. The term crisis was associated with an acute breakdown due to external conflict and not associated with a mental illness. Patients with organic mental disorders were categorised as nursing problems.

A male dominance (83.5%) was found among the alcoholics but there were more women among the neurotic and depressed patients. These differences were statistically significant (P < 0.001). There was no significant difference between men and women in the patients with psychosis. For each diagnostic subgroup the differences between the catchment areas were small (Table 1).

In the material from all areas were there 55% men and 45% women. Young people had a greater tendency to seek immediate psychiatric help. More than half of the patients (51%) were below 50 years of age but only 8.2% were over 65 years of age. On the other hand those over 65 years of age, when they come to the emergency service, were to a greater extent (70%) admitted to hospital. This tendency was consistent in all three catchment areas. Among all

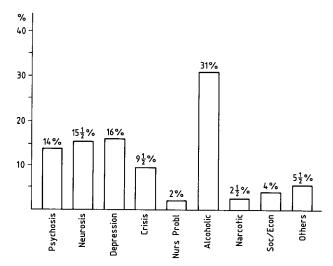


Fig. 1. Preliminary diagnosis of 1226 psychiatric emergency patients

Table 1. Preliminary diagnosis for each catchment area

|                          |                 | Catchment area |                                 |                   |
|--------------------------|-----------------|----------------|---------------------------------|-------------------|
|                          |                 | Dan-<br>deryd  | Upp-<br>sala/<br>Ulle-<br>råker | Kristian-<br>stad |
| Preliminary<br>diagnosis | Psychosis       | 15.7           | 13.2                            | 14.7              |
|                          | Neurosis        | 16.4           | 17.3                            | 6.5               |
|                          | Depression      | 17.0           | 16.3                            | 15.2              |
|                          | Crisis          | 6.8            | 10.2                            | 10.3              |
|                          | Nursing problem | 1.6            | 1.2                             | 5.4               |
|                          | Alcoholic       | 32.0           | 29.5                            | 33.7              |
|                          | Narcotic        | 2.5            | 2.2                             | 3.3               |
|                          | Social economic | 3.5            | 4.4                             | 4.9               |
|                          | Others          | 4.5            | 5.7                             | 6.0               |
|                          |                 | 100%           | 100%                            | 100%              |

patients the admissions to hospital were close to 50% with some differences between the areas: 68% of the patients in the Kristianstad region were admitted to hospital due to their emergency visit, while in the Uppsala-Ulleråker region only 41% of the emergency patients were admitted. The Danderyd region showed an admission rate of 48% of the patients.

Approximately ½ of the patients had a family of either husband/wife or children. In order to get a quantitative measure of how close the friends or relatives were, only those who the patient saw regularly and had seen during the previous week were included. Only 12.5% of the patients had no close relationship to relatives and friends and were forced to claim social workers or hospital staff as their closest relationships. These figures were approximately the same in the capital area as in the rural areas.

The majority of the patients coming to the emergency service were not there for the first time. Only ½ of the patients were registered as first visitors. Even here the differences between the areas were very small. In the Uppsala-Ulleråker region senior psychiatrists and experienced residents comprised 55% of those working in the emergency room, while in the Kristianstad region they amounted to only 14%.

## Discussion

The overall impression of the study was the great homogeneity in the spectrum of acute psychiatric problems in different parts of Sweden. The same observation was noted recently in a study from Iceland [12]. In Sweden social background factors are similar over the country. This reflects the high level of equality in welfare and psychiatric and medical services to be found in the Swedish society. But there are, of course, some differences. The distribution of qualified doctors is not equal over the country. Specialists have a tendency to accumulate in the large cities and university towns, e.g., Uppsala. As mentioned before, in the Uppsala-Ulleråker region, there are many more senior psychiatrists and experienced residents working in the emergency room than there are in the Kristianstad region. This inequality could explain why more patients were admitted to hospital in the Kristianstad region (68%) than in the Uppsala-Ulleråker region (41%). As shown by Mendel and Rapport [9], and others, inexperienced personnel have a tendency to hospitalize more of the patients than their senior colleagues.

The high ratio of repeaters (80%) among the emergency patients is consistent with earlier Swedish studies [13], but in contrast with many American studies where the number of emergency room repeaters was between 15% and 20% [10]. One explanation for this difference is the organisation of the emergency service. In Sweden there are only one or two emergency units in each catchment area and there are no private alternatives for the patient who needs immediate psychiatric help. In the United States on the other hand the patient with economic resources has a choice between different treatment alternatives. This gives a false high ratio of first visitors in each emergency setting. Another explanation could be the different populations coming to the psychiatric emergency unit in Sweden than in the United States. One-third of the patients coming to the psychiatric emergency unit in Sweden had problems with alcohol and drugs. This kind of patient has difficulties in relating to an outpatient program and is therefore mostly seen as a repeater in the emergency unit. In

contrast many psychiatric emergency units in the United States are closed to alcohol and drug addicts.

In Sweden it is possible for a patient to see a specialist at his own request without referral from a G.P. In reality though the waiting lists for specialists are very long and therefore people come to the emergency room in the first place. This has become the main entrance to the mental services in Sweden as in many other countries [3, 10, 12].

In this study the patients were categorized in broad diagnostic groups by the doctor in the emergency room, according to the ICD 8 diagnostic system. This diagnostic system, though criticised, was still used in Sweden. In a separate paper we will validate the diagnostic groups used here according to the DSM-III. However it has been shown by other authors that broad diagnostic grouping is sufficient for emergency assessment and triage [5]. But one must be aware of the risk that this preliminary judgement becomes a permanent diagnosis which will follow the patient. It has been shown in many studies that there is a strong association between diagnosis and disposition decisions for the patient [4].

The increase in admissions to hospital during the last two decades, is, in part, due to shorter average stays [1, 6, 14]. Also the panorama of mental illness in the emergency room has shifted. During the sixties and the beginning of the seventies the main interest was in crisis intervention and neurosis [2, 11] but during the last 10 years there has been a increasing number of chronically ill patients coming to the emergency service. In a survey from Danderyd hospital in 1975 ½ of the patients coming to the emergency service were classified as neurotic and only 25% of all patients were admitted to hospital (personal communication). However, 10 years later nearly 50% of the emergency patients were admitted to hospital and only approximately 16% were diagnosed as neurotic.

Another factor contributing to high admissions is the increasing problem of abuse. In Sweden the psychiatric clinics have the chief responsibility for the treatment of severe psychiatric complications created by alcohol and drug abuse. For approximately ½ of the patients alcohol abuse was the main problem. This group was dominated by men. This explains why there were more men coming to the emergency service than women which is in contrast with most American studies. This has been discussed by other authors in Sweden [6, 13].

A further factor behind the increasing demands on the emergency service is the great awareness now-adays of emotional problems and the readiness to look for help to solve such problems. This is especially true among the young generations which are overrepresented in the emergency room [8, 11]. The

picture previously described of a patient after deinstitutionalization, sitting alone in a room with few contacts with society, must in our study be modified. Of the patients with a preliminary diagnosis of psychosis, 88% had close relationships with relatives or friends, while the old person with nursing problems had in 22% of the cases, a professional closest to him.

The real problem is then the responsibility placed on the relatives or friends. When they can no longer cope with the patient's behavior, he is brought to the hospital and often admitted. Former studies have proved that if a relative of the patient asks for admission, the patient is nearly always admitted [3]. On the other hand, if given the right support, the relatives can be of much help in the treatment of the patient.

## Conclusion

It is evident that there are only small differences in the panorama of psychosocial problems all over Sweden. Compared with other countries the psychiatric emergency services in Sweden take great responsibility for patients with severe alcohol and drug problems which can explain the dominance of males among the patients in the emergency room.

The staff of the emergency room is in the frontline of psychiatric treatment. They also have responsibility for the evaluation of patients with suicidal or aggressive behavior. Their assessment will influence future treatment of the patient. It is therefore necessary to continue research in the emergency room setting, and provide support and education of the emergency staff.

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## References

- 1. Bassuk E, Gerson S (1978) Deinstitutalization and mental health services. Sci Am 238:46-53
- Blais A, Georges J (1969) Psychiatric emergencies in a general hospital outpatient department. Can Psychiatr Assoc J 14:123-133
- 3. Gerson S, Bassuk E (1980) Psychiatric emergencies: an overview. Am J Psychiatry 137:1-11
- Khuri R, Wood K (1984) The role of diagnosis in a psychiatric emergency setting. Hosp Community Psychiatry 35
  (7):715-718
- Lieberman PB, Baker F (1985) The reliability of psychiatric diagnosis in the emergency room. Hosp Community Psychiatry 36 (3):291-293
- Lindelius R, Wode-Helgodt B (1973) Emergency duty in a psychiatric department. Läkartidingen 70:1056–1060
- Lindholm H (1983) Sectorized psychiatry. Acta Psychiatr Scand [Suppl] 67 (No. 304)
- 8. Lundin T (1978) A psychiatric ward for short-term therapy. Läkartidningen 75:228-232
- Mendel W (1969) Rapport S. Determinants of the decision for psychiatric hospitalization. Arch Gen Psychiatry 20: 321-328
- Nurius P (1983) Emergency psychiatric services: a study of changing utilization patterns and issues. Int J Psychiatry Med 13:239-254
- 11. Satloff A, Worby C (1970) The psychiatric emergency service: mirror of change. Am J Psychiatr 126:1628–1632
- Skúlason S, Zoega T, Petursson H (1985) Psychiatric emergency clinics in Iceland 1983. Nord Psyckiatr Tidskr 39:247-252
- 13. Wistedt B (1979) Emergency Duty in a Psychiatric Clinic. Nord Psykiatr Tidskr 33:599-607
- Östman O (1983) Descriptors of the function of mental health services. Examples from Sweden. Proceedings from a Swedish Medical Research. Council Symposium, pp 81– 95

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