# MOBILE CRISIS TEAM IN THE BRUSSELS REGION: FACTS AND FIGURES

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#### **SUMMARY**

Background: A reformation of psychiatry was set up in Belgium with the establishment of mobile crisis teams.

Subjects and methods: We performed a retrospective analysis of the patients referred to the mobile team "Pharos" in the period between December 2013 and December 2018.

**Results:** The number of patients is growing over the years and the most common referral reasons are suicidal thoughts and depressive mood. We have a high percentage of inclusions, maybe because the main referrers are GPs. Alcohol withdrawal at home is feasable and safe.

Conclusion: Many psychiatric crisis situations can be managed at home with support of mobile teams, but further research is needed to provide evidence on outcome and cost effectiveness.

Key words: mobile team - outcome - alcohol withdrawal at home

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#### INTRODUCTION

Since 2011 a reformation of psychiatry was set up in Belgium, with the establishment of mobile crisis teams. These teams provide short term, intensive home treatment to people who are experiencing acute mental health problems. Mobile teams can help to reduce the number of hospital admissions per year and offer a safe alternative to the traditional in-patient model with significant cost savings (Sjolie et al. 2010).

The mobile crisis team "Pharos" started in november 2013 and is located in the Brussels region. The territory they cover is situated in the north, west and south of Brussels (a region called "Halle-Vilvoorde") and includes 500.000 inhabitants. The team is multidisciplinary, consisting of a psychiatrist, a psychologist, a social worker and different bachelors and masters having experience in mental health care. Patients must be referred to the team by a doctor (e.g. general practitioner (GP), psychiatrist). Patients must always be informed and willing to cooperate with the team. The number of interventions varies depending on the severity of the crisis and the maximum treatment duration is 4 weeks. Our team works 6 days/7, but there is a 24h telephone permanence. At the time of the first demand patients are analyzed in terms of intervention indications: is there a psychiatric crisis? Is the patient 16 years or older? Is the patient living in the area served by Pharos? Is the patient willing to cooperate? Often a second analysis is done during a home visit. Whether or not a patient will then be included, is discussed in team.

The last few years we also proceeded to assisted alcohol withdrawal at home. This involves psycho-

social support, substitute medication regimens and daily monitoring of the patient (to check for symptoms of withdrawal and subsequently advise on use of medication). We also aim to refer patients to ambulant treatment for relapse prevention. Patients referred to Pharos for an alcohol detoxification must meet eligibility criteria. Severe withdrawal (delirium tremens, seizures in the past), abuse of other substances, absence of a carer, severe health problems and serious psychiatric illness (such as an acute psychosis) are contraindications. Literature on management of alcohol detoxification in the community is scarce, but it shows that detoxification at home is safe, is cheaper than residential care and it increases acceptability of treatment (Nadkarni et al. 2017, Stockwell et al. 1991). There seems to be no difference in efficacy in home detoxification in comparison to inpatient care (Stockwell et al. 1991).

Since literature on mobile teams is rather scarce we present the following facts and figures of the Pharos team.

## **SUBJECTS AND METHODS**

We performed a retrospective analysis of the patients referred to Pharos in the period between December 2013 and December 2018. The following items were analyzed: number of patients, percentage of inclusions, person who refers, reason for referral, ratio male-female and outcome. Secondly we performed an analysis of the patients referred for alcohol withdrawal at home in the period August 2018 until April 2019. Ratio male-female, safety and completion rates were analyzed.

#### **RESULTS**

The total number of patients referred to Pharos in the period December 2013 until December 2018 was 1530, of which 1256 were included (82%). 274 patients were excluded or were seen once and orientated to other (mental) health services. Reasons for exclusion were mostly lack of cooperation of patients, living outside the area served by Pharos, chronicity of the pathology and absence of a crisissituation, elevated risk of agression and acute suicidal behavior in which safety at home cannot be guaranteed. During the years the number of patients kept growing: 179 in 2014, 287 in 2015, 333 in 2016, 344 in 2017 and 369 in 2018. The sex ratio was 37% males versus 63% females. Main referrers are GPs (40%), emergency psychiatrists (16%), psychiatrists working at the psychiatric unit in a general hospital (7.5%), ambulant psychiatrists (7.5 %) and psychiatrists working in a psychiatric hospital (4.5%). Other requests come from psychologists, social services, families, patients,... So most of the referrals (53%) come from outside the mental health sector. Main reasons for referral are suicidal thoughts (29%), depression (28%), adaptation disorder (15%), alcoholabuse (14%) and psychosis (8%). After or during treatment by Pharos 15% of the patients needed to be hospitalized: 4% in a psychiatric hospital, 10% in a psychiatric unit of a general hospital and in 1% forced hospitalization was necessary. The other 85% of the patients were referred to their GP (13%), to an ambulant psychiatrist (13%), ambulant psychologist (10%), mobile team for chronic treatment at home (7%),... About 5% had no further follow-up. In 10% of the cases the treatment by Pharos was aborted unilateral by the patient. In 90% treatment stopped in mutual agreement.

From August 2018 to April 2019 twentyfour patients were referred and included for alcohol withdrawal at home. Nine were female (37.5%) and fifteen were male (62.5%). Mean age was 48 years. Two patients were excluded after the first home visit because of insufficient motivation. One patient was advised to do an inpatient detoxification. Twelve patients completed the detoxification and were abstinent after treatment completion by Pharos. Seven patients continued drinking and two patients were hospitalized at the psychiatric unit of a general hospital because of relapse during treatment by Pharos. None of these patients experienced severe detoxification related adverse effects. So alcohol withdrawal at home seems to be feasable and safe as already concluded in previous studies (Nadkarni et al. 2017, Stockwell et al. 1991).

## **DISCUSSION**

The number of patients is growing over the years, which could mean that the need for home treatment is high. GPs are now more accustomed with the mobile teams which make them refer more patients. It could also indicate a good patient and referrer satisfaction.

Patient satisfaction was high in our population in concurrence with several other studies.

Some of our patients did not accept an inpatient treatment but completed detoxification at home, which points out the importance of giving certain eligible patients this possibility. It will increase acceptability of treatment and will lead to a greater number of patients to be reached. This seems to be the case not solely for alcohol dependence, but for other psychopathology aswell.

Our care rate is relatively high (82% inclusions), probably because the demand comes from the health sector (mostly GPs or psychiatrists). They can make a good estimation on the kind of intervention needed. A study by Deschietere et al. found that most of the inclusions in their mobile team were requested by the health sector. When the requests came from patients, their families or other non health care workers the inclusion rates were lower (Deschietere 2019).

The most common referral reasons were suicidal thoughts (29%) and depressive mood (28%) and main referrers are GPs (40%). This is in line with a retrospective study of the activities of a home-based crisis team in North Cork that showed low mood as the most common referral reason (40%) and GPs as the most important referrers (56%) (Lalevic et al. 2019).

The male/female ratio in our population was 37%/63%. It is well known that woman are more likely to use mental health services than men. The ratio male/female for alcohol withdrawal at home was 37.5/62.5 %. This is in line with a review of Nadkarni et al. that showed a predominance of males in almost all studies (Nadkarni et al. 2017). 50% of our patients completed detoxification and were abstinent. The review of Nadkarni showed detoxification completion rates from 50% to 100%. They did not conclude on effectiveness because of the heterogeneity of outcome measures (Nadkarni et al. 2017). In our population abstinence was only evaluated in a clinical interview at the end of treatment, so we cannot make any conclusions on the outcome. Neither was there a longer term follow-up to evaluate if abstinence was sustained. Randomised controlled trials with formal outcome measures and long term follow-up are needed to evaluate on the effectiveness of community detoxification.

## **CONCLUSION**

We can conclude that many psychiatric crisis situations can be managed at home with support of mobile teams, but further research is needed to provide evidence on outcome and cost effectiveness.

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Conflict of interest: None to declare.

### Contribution of individual authors:

Liesbeth Santermans managed the literature search, data interpretation and she wrote the article.

Nathalie Vanderbruggen, Dieter Zeeuws & Cleo L. Crunelle reviewed the manuscript.

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