

Attitudes and Beliefs Towards Methadone of Staff Working in Substance Abuse Treatment

Peter Vossenber

Summary

This study investigates the possible use of the Abstinence Orientation Scale (AO-scale), which has been developed to study the impact of attitudes towards methadone maintenance treatment (MMT) on treatment retention.

Method: participants at two conferences were asked to complete a questionnaire. Physicians who were known to work on substance abuse treatment received the questionnaire by mail.

Results: 167 persons returned the questionnaire. An AO-scale could be confirmed. Scores recorded for staff groups differed, with physicians working on MMT being least abstinence-oriented. Programme size is correlated with scores on the AO-scale. Scores on knowledge were low among social workers.

Key words: Attitudes and beliefs - Methadone Maintenance

One of the more important parameters for measuring the success of Methadone Maintenance Therapy (MMT) is treatment retention. On leaving treatment, most patients return to the use of heroin (1). In the last few years it is becoming increasingly clear that many factors influence retention. Some of these, such as the need for an adequate dose (10) are almost obvious. The capacity to deliver comprehensive services, such as vocational rehabilitation and medical services, also seems to be important (9).

As early as 1970 (9), both treatment staff and clients saw abstinence as a more desirable goal of treatment than sustained methadone treatment. A few years later (2), the same researcher found that staff viewed methadone clients as even more inferior than before to abstinent clients.

In several recent studies (3; 4) it has been shown that staff attitudes towards MMT

Paper presented at EUROPAD forum during AMTA Conference - September 26, 1998 - New York, NY, USA

Address for reprints: Peter Vossenber, MD; IVD Deventer, Brink 40 7411 BT Deventer, Netherlands

are a factor that has great impact on retention. In these studies, a distinction is made between an abstinence-oriented and a maintenance-oriented attitude. With the help of an attitude-scale, which has been developed in these studies, programmes or individual professionals can be described as more or less abstinence-oriented. A one-point shift on a five-point Abstinence Orientation Scale almost doubled early dropout from treatment (5). The scale has already been used in several countries: Australia (7), USA (6), Germany (Gerlach R., Caplehorn, JRM, 1997 unpublished manuscript).

This study investigates the possible use of the Abstinence Orientation Scale in the Netherlands. It also compares the scores that would be obtained in the Dutch sample if the US or Australian scales were used.

Subjects and method

The questionnaire contained 33 questions, taken from the Australian questionnaire. Seven questions were added by the investigator. Ten questions that provided an estimate of knowledge regarding methadone treatment were included in this questionnaire. It was distributed at two seminars, and included some items focusing on personal experience with substance abuse (other than tobacco). Because this yielded no extra information, these items were not used in the mailed version. No attempt was made to identify persons or programmes and respondents came from all regions of the country. At present, more than 60 different sites provide methadone. One question on the size of the programme was added, as were questions covering areas like experience and training.

Fifteen medical students (residents) who were completing the last six months of practical training before they obtained their medical degree, were used as a control group. With one exception, none of them had any practical experience of substance abuse treatment. All the students worked in the same hospital. All the physicians who were known to work on substance abuse treatment received the questionnaire by mail. Not all the physicians work on outpatient methadone treatment. The other respondents were attending two seminars, which were held on the same day. One seminar was organised for substance abuse treatment staff in the eastern part of the country; the second seminar was the first of its kind, and was specifically organised for nurses working on substance abuse treatment, mainly MMT. All the data were entered by the author. Analysis was then performed using Statgraphics. The preliminary results are as follows.

Results

At the time of this analysis, 167 persons had returned the questionnaire. At both seminars the response rate was approximately 50%. At the time of this presentation, 50% of the physicians working on substance abuse treatment had responded. This was before a reminder was sent to them.

On average, physicians had been working for 6.9 (SD 6.7) years on MMT, nurses 5.7 years (SD 4.2), social workers 3.3 years (SD 3.4) and other staff 3.7 years (SD 3.4). Physicians and nurses scored above average on knowledge, while social workers and

other professionals scored lower than residents (Table 1). More than half the non-medical staff think that long-term MMT damages kidneys or liver. They also think that methadone worsens depressive symptoms.

Analysis failed to confirm a Dutch Disapproval of the Drug Use scale. Factor

	Average	SD
Physicians	0.742	0.239
Nurses	0.622	0.240
Social Workers	0.410	0.235
Other Professionals	0.427	0.253
Residents	0.461	0.237
ANOVA $p < .0001$		

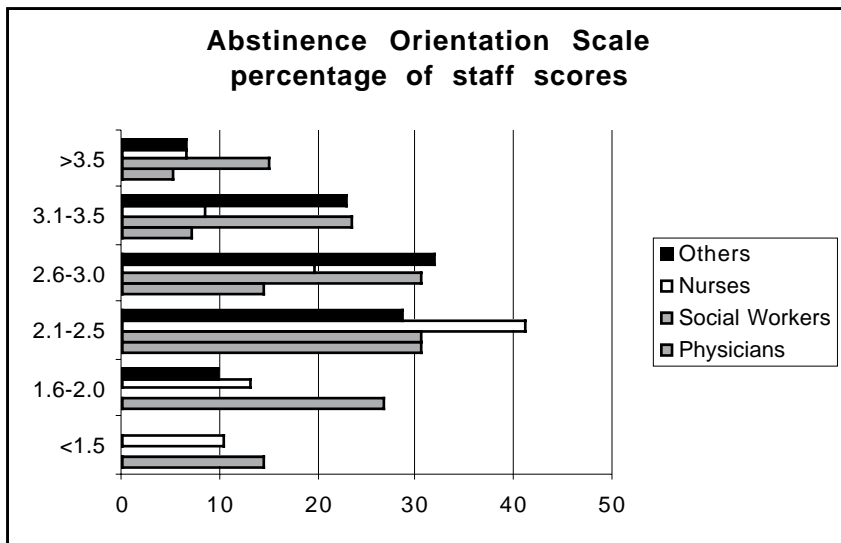


Figure 1. Scores on the Abstinence Orientation Scale: scores grouped in six classes. Lower scores indicate less abstinence-oriented

Table 2. Abstinence Orientation: six most typical statements. Score ranging: 1=disagree completely 5=agree completely				
	Physic.	Nurses	Social Workers	Other Profess.
The main goal of a clinician should be to prepare a MMT patient for a drug-free living (including no methadone): factor loading: 0.82	2.00	2.00	2.54	2.44
A maintenance patient who ignores repeated warnings to stop using cocaine should be gradually withdrawn from methadone: factor loading: 0.78	1.86	2.04	2.46	2.31
A maintenance patient who ignores repeated warnings to stop using heroin should be gradually withdrawn from methadone: factor loading: 0.77	1.81	2.25	3.00	2.28
Abstinence from all opioids (including methadone) should be the principal goal of MMT: factor loading: 0.73	2.37	2.32	3.31	2.50
A MMT patient who no longer uses heroin should be gradually withdrawn from methadone factor loading: 0.70	2.61	2.77	3.23	2.63
Someone on MMT who continues to use heroin should get less methadone: factor loading: 0.65	1.81	2.40	2.85	2.67

	Score	SD
Physicians	2.27	0.73
Nurses	2.49	0.76
Social Workers	2.97	0.56
Other Professionals	2.67	0.51
Residents	3.86	0.49
ANOVA $p < .0001$		

analysis confirms an Abstinence Orientation scale (AO-scale) consisting of 10 items (Table 2). A higher score on this five-point scale indicates a more abstinence-oriented attitude. Residents score significantly higher on this AO-scale, whereas physicians have the lowest score (Table 3 and Figure 1). Correlation of the results, using either the Dutch, German, Australian and USA scales in the Dutch sample, are between 0.91 and 0.94 (Pearson r).

There are significant differences in the scores of some medical staff on the AO-scale, which is correlated with the size of the MMT-programme (Table 4). Physicians who do not work on MMT are more abstinence-oriented than physicians who are involved in MMT. Nurses from smaller programmes are significantly more abstinence-oriented than those from larger programmes. After weighting for the number of years spent working in the field and checking for profession, knowledge has no significant correlation with the score on the AO-scale.

Discussion

The score on the knowledge questions is low among social workers and other, non-medical staff. Compared with the scores on similar questions in an Australian sample (5), where an average of 64% of participants staff gave correct answers, in this sample only physicians, with 73%, gave correct answers, scoring significantly higher than average. Social workers recorded the lowest scores on these questions. So far there has been no formal training programme for professionals who start working on substance-abuse treatment. This is true, not only of social workers, but also of nurses and physicians.

The results show that this AO-scale is able to measure differences. The questionnaire, as used here, was not designed to measure differences between programmes. Instead,

Size of programme	Physicians n=55	Nurses n=45
less than 50 patients	1.80	3.10
50-75 patients	1.97	2.60
76-100 patients	2.00	2.43
more than 100 patients	2.99	2.21
not working on MMT	2.99	n.a.
ANOVA	p<0.001	p<0.05

differences between groups of professionals have been measured, as well as a possible correlation of AO-scores with programme size.

Social workers are significantly more abstinence-oriented than medical staff, especially physicians. In the Netherlands, much of the most intensive counselling is provided by social workers. It is quite possible that the differences in attitude found between social workers and physicians is sending a conflicting message to patients on the question of methadone.

Compared with results from a survey among New York MMT-programme (7), scores on the AO-scale among professionals in this study are quite similar. However, scores from both doctors and social workers in New York sample are 0.25-0.50 points lower than in the sample chosen in this study. This may indicate that staff in the Netherlands is more abstinence-oriented than staff in New York. A possible explanation for the slightly more Abstinence-Oriented attitude in the Netherlands may be that, until the mid-80's, most programmes were officially aiming for abstinence. This is still reflected by an average methadone dosage of less than 40 milligrams in 1997 (source: IVV), compared with an average dose of 35 milligrams in 1990 (8). In fact, there are several programmes where the maximum dosage is 70 milligrams or less (personal communications).

Physicians who are not involved in MMT seem more abstinence-oriented. This may partly be due to a lack of knowledge. Their score on knowledge is 0.58, compared with an average score of 0.74 for physicians working on MMT. Some of these physicians, however, will sometimes be dealing with patients on MMT, e.g. in inpatient treatment or as a substitute in case of the absence of the physician, who is normally in charge of the programme.

Nurses have more frequent contacts with MMT patients than doctors do. The influence of a nurse on a patient can therefore be quite important. If nurses and physicians working on the same treatment programme have a different attitude towards MMT, this may send a conflicting message to patients.

Conclusions

Despite the superior long-term results of MMT over abstinence-oriented methadone treatment, many still seem to see abstinence as a goal that should be pursued with many patients. A factor that may be influenced relatively easily is knowledge. Staff should be made more aware of the objective benefits of MMT. It also is important that treatment staff, both medical and non-medical, share a similar attitude towards MMT. Because of the important role of local authorities in the funding of MMT, they too should be provided with objective information.

References

1. Ball J.C., Ross A. (1991): Follow-up study of 105 patients who left treatment. In J.C. Ball, A. Ross Eds, *The effectiveness of methadone maintenance treatment*. Springer-Verlag, New York. pp. 176-187.
2. Brown B.S., Jansen D.R., Benn G.J. (1975): Changes in attitude toward methadone. *Arch Gen Psychiatry*. 32(2): 214-218.
3. Caplehorn J.R. (1994): A comparison of abstinence-oriented and indefinite methadone maintenance treatment. *Int J Addict*. 29(11): 1361-1375.
4. Caplehorn J.R., Irwig L., Saunders J.B. (1996): Physicians' attitudes and retention of patients in their methadone maintenance programs. *Subst Use Mis*. 31(6): 663-677.
5. Caplehorn J.R., Lumley T.S., Irwig L. (1998): Staff attitudes and retention of patients in methadone maintenance programs. *Drug Alcohol Depend*. 52(1): 57-61.
6. Caplehorn J.R.M., Hartel D.M., Irwig L. (1997): Measuring and comparing the attitudes and beliefs of staff working in New York methadone maintenance clinics. *Subst Use Mis*. 32: 399-413.
7. Caplehorn J.R.M., Irwig L., Saunders J.B. (1996): Attitudes and beliefs of staff working in methadone maintenance clinics. *Subst Use Mis*. 31(4): 437-452.
8. Driessen FMHM. (1990): *Methadonverstrekking in Nederland*, Ministrie van VWS, Rijswijk-Utrecht, NL.
9. McLellan A.T., Arndt I.O., Metzger D.S., Woody G.E., O'Brien C.P. (1993): The effect of psychosocial services in substance abuse treatment. *JAMA*. 269(15): 1953-1959.
10. Payte J.T., Khuri E.T. (1993): Principles of Methadone dose determination. In M. W. Parrino Ed. *State Methadone Maintenance Treatment Guidelines*. U.S. Department of Health & Human Services, Rockville (MD), pp. 47-56.