INTRODUCTION

It is well documented that spouses’ wellbeing and way of life is influenced by their partner’s alcohol problems. Few studies have been conducted with the main purpose of finding methods of helping the spouses to deal with the problems and improve their own wellbeing. Unilateral family therapy with spouses of uncooperative alcoholics has been performed in order to decrease drinking in the partner (Barber and Crisp, 1995; Miller et al., 1999; Halford et al., 2001).

Spouses of alcoholics are affected on many different levels. Several studies have shown that spouses of alcoholics often present significant rates of mental and physical problems, communication problems, low social activity and poor marital satisfaction (Moos et al., 1990; Halford et al., 2001). The spouses develop ways of dealing with the concomitant stress, a coping behaviour which seems to be rather uniform even though spouses of alcoholics are, of course, a heterogeneous group with varying backgrounds (Orford, 1990, 1992).

In marital therapy it has been demonstrated that alcoholics and their spouses can improve their quality of life and reduce the negative influence of the alcohol misuse (O’Farrell et al., 1985; Sission and Azrin, 1986; O’Farrell, 1992, 1993). It is, however, not always possible to offer marital therapy, partly because of the alcoholics’ insufficient motivation (Zetterlind and Berglund, 1986).

Most marital treatment studies have shown early, positive results (Orford et al., 1975; Moos et al., 1990; Orford, 1990), while long-term results have been studied to a lesser extent. In one of the few conducted studies, McCrady et al. (1991) reports that late, positive long-terms effects were found in more extensive treatment programmes rather than in less extensive ones.

The aim of the present study was to investigate whether the outcome after the first 12 months was stable after an additional year, or not. Previously, the results from the 12-month follow-up examination of the present study showed that three intervention groups (Coping Skill Training, Group Support, and Information) had all improved their coping strategies significantly and that the mental symptoms had decreased (Zetterlind et al., 2001). Both the group that received individual training in coping skills and the group that got group support showed a greater decrease in mental symptoms ($P = 0.1$) than the group that got information in one single session. There were no major differences between the three programmes regarding coping and hardship at 12 months.

MATERIALS AND METHODS

Participants

A total of 39 spouses (36 females and 3 males) were recruited to participate in the study, through clinical and public information sources. Detailed information about subject recruitment, screening and characteristics has been presented previously (Zetterlind et al., 2001). Spouses who applied for participation were evaluated in a telephone interview to confirm that they fulfilled the recruitment criteria. Inclusion criteria for the study were: spouses aged 18–60 years old, who were living with an alcoholic partner with an existing alcohol problem. Subjects were excluded if they had drinking/drug problems of their own, if there was occurrence of severe domestic violence in the relationship, ongoing psychosocial treatments or Al-Anon attendance, or if the subject showed signs of major psychiatric disorders. All participants completed the baseline data collection and the treatment programmes they were offered. One participant in the individual Coping Skills Training programme dropped out before the 24-month follow-up.

Procedure

After signing a written informed consent form and completing the baseline data collection (60 min), the spouses were randomly allocated to one of the following programmes: (i) a
single standard information session (1 h) (UZ); (ii) individual coping skills training (information session + four added sessions) (UZ); or (iii) group support (information session + 12 group sessions) (UZ, KÅ).

Treatment design

The individual standard information session. When the baseline data collection and randomization was completed, all participants attended an individual standard information session (60 min). During this session, the scores of the coping behaviour scale and the importance of effective coping strategies in alcoholic families were discussed. Finally, all participants received an information booklet.

Individual coping skills training. This programme included the standard information session (60 min) and four monthly 90-min sessions. The aim of this programme was to make the participants aware of their coping strategies and to teach them how to increase their own wellbeing, for example, through discussing their problem more easily.

Throughout the treatment program, the spouses were asked to: (i) keep diaries of critical incidences in which they noted examples of coping strategies in their daily life—these strategies were then reported and discussed at each session; (ii) carry out homework between the sessions.

Group support. In addition to the standard information session (60 min), this programme contained a further twelve 90-min sessions, scheduled fortnightly over a six-month period. This was a system theoretical approach with obvious elements of cognitive behaviour therapy. At the group sessions, the participants’ thoughts and questions were combined with themes such as support in coping with the alcoholic partner and the abuse situation, communication training and reduction of personal stress. Special techniques used were: role-playing, painting, watching videos about alcohol related family problems and physical relaxation.

Measures

In both the baseline examination and in the follow-up examinations, the following self-report scales were used: Coping Behaviour Scale (Orford et al., 1975), Hardship Scale (Orford et al., 1975; Zetterlind and Berglund, 1998), Symptom Checklist 90 (SCL-90) (Derogatis, 1977; Fridell et al., 2002) and AUDIT (Saunders, 1993).

In addition to these self-report scales, a face-to-face interview was conducted during which data regarding changes in the living situation were gathered.

Coping Behaviour Scale. This was used to assess the different ways the spouse treated the alcoholic partner and the abuse problem. The scale, designed by Orford et al. (1975), contains 56 questions designed according to 10 different coping typologies: discord, avoidance, anti-drink, sexual withdrawal, taking specific action, indulgence, competition, assertion, fearful withdrawal and marital breakdown. The Coping Behaviour Scale was originally designed for wives of men with drinking problems (Orford et al., 1975). According to the authors of the scale it has been adapted a number of times to make it relevant for relatives other than spouses (Orford et al., 2001). Despite the fact that there are more recent versions, we decided to use the original scale since our target group is only spouses.

Initially, each spouse received information about her/his own coping strategy by comparing their scores with results obtained in an earlier study (Zetterlind and Berglund, 1998). The scores from the follow-up examinations were subsequently analysed.

The Hardship Scale. This was used to assess the hardship that the spouse had experienced over the last year (Orford et al., 1975; Zetterlind and Berglund, 1998).

The Symptom Checklist 90 (SCL-90). This scale is a self-assessment questionnaire that aims to assess the spouse’s own impression of how they have felt over the previous week. This test comprises 90 questions. The different sub-scales reflect different dimensions of the experience of symptoms: somatization, anxiety, depression, interpersonal sensitivity, obsessive-compulsive symptoms, hostility, phobic anxiety, paranoid ideation and psychoticism.

A Global Severity Index (GSI) for the overall mental wellbeing is also calculated. The questionnaire has been developed and standardized in the USA by Derogatis et al. (1977) and then normalized for a Swedish population, where the reference mean value is 0.55 for women and 0.36 for men (Fridell et al., 2002). In the present analysis we studied the change in mean scores for each group, as well as the proportion of transfers from high (over the Swedish mean) to low scores (below the Swedish mean).

The Alcohol Use Disorders Identification Test (AUDIT). This scale measures the spouse’s own alcohol consumption, alcohol dependence and alcohol problems (Saunders, 1993).

Follow-up examination

The subjects were contacted by telephone after 12 and 24 months and asked if they were still willing to participate in a follow-up interview. The interviewer (HH), who has personal experience from treatment of alcoholics, was not aware to which program participants had been allocated. The face-to-face interview and the four self-report scales were completed in 90 min. Data concerning changes in the living situation were obtained: marriage, relationship, employment situation, mental and physical wellbeing, own alcohol consumption and the partner’s drinking patterns.

Statistics

SPSS 11.0 for Windows has been used for statistical analysis. Wilcoxon signed rank test was used to check changes within each group, while Kruskal–Wallis, Mann–Whitney or chi-square tests were used to compare the groups.

RESULTS

The 24-month follow-up examination

All 39 spouses in the study participated in the 12-month follow-up examination and 38 completed the 24-month follow-up examination. One declined further participation. This person, who had undergone the individual programme, was still married, but found further participation too stressful for the relationship. She had high scores on all instruments on admission, and showed improvement on all instruments at 12 months. All were positive towards the follow-up examination and there were no negative reactions.

Background characteristics

Table 1 gives a description of the sample. The groups differed on several variables. Spouses who were randomly selected for
the Information Group had been in their relationships for a substantially longer period of time. The Group Support participants obtained higher scores on Hardship than the Coping Skills Training group and the Information Group, whereas the SCL-90 scores were lower for the Information group than for the other two groups. There were no significant differences between the three groups regarding distribution on gender, age, education, employment, coping scores or AUDIT. The AUDIT scores confirm that only spouses without own alcohol problems were included.

*Change during 24-months*

In Table 2 the results from the 24-month follow-up are presented along with changes between admission (Table 1) and the 24-month follow-up point.

At the 24-month follow-up there were no significant differences, on any of the scales, between the three groups. The changes (improvements) from admission to the 24-month follow-up were significant \( P < 0.05 \) on SCL-90, Hardship and Coping behaviour scale for the Group Support participants and the Coping Skills Training group. For the Information group, there were significant \( P < 0.05 \) changes on Hardship and Coping behaviour but not on SCL-90. The AUDIT scores were still low at follow-up in all three groups.

Changes in SCL-90 scores were significantly \( P < 0.05 \) larger for Group Support and Coping Skills Training than for Information. The differences in the initial scores make interpretation difficult.

In order to enable interpretation of the findings, only subjects with initial scores above 0.55 for women and 0.36 for men were analysed, 10 in the Group Support group, 6 in the Coping Skills Training group and 6 in the Information group. In the first two groups, 11 out of 16, compared with 0 out of 6 in the Information group, scored below 0.55 for women and 0.36 for men respectively at the 24-month follow-up. This difference was significant \( P < 0.05 \). No subject with initial SCL-90 scores below the means for women and men had higher scores at the 24-month follow-up.

*Changes during the first and second years, respectively*

In Figures 1–3, the results on each scale are presented separately. It is evident on all three scales that the major changes occurred during the first year. There were no significant changes during the second year, but the stability of improvement was evident.

### Table 1. Background characteristics of the study sample groups

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Group Support</th>
<th>Coping Skills Training Group</th>
<th>Information Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>n (female/male)</td>
<td>12 (12/0)</td>
<td>13 (12/1)</td>
<td>14 (12/2)</td>
</tr>
<tr>
<td>Mean age (SD)</td>
<td>46 (6)</td>
<td>48 (12)</td>
<td>47 (8)</td>
</tr>
<tr>
<td>Education 12 years or more (%)</td>
<td>5 (42)</td>
<td>9 (69)</td>
<td>7 (50)</td>
</tr>
<tr>
<td>Employment full time (%)</td>
<td>7 (58)</td>
<td>6 (46)</td>
<td>9 (64)</td>
</tr>
<tr>
<td>Years marriage, mean (SD)</td>
<td>9 (9)</td>
<td>12 (12)</td>
<td>20 (8)*</td>
</tr>
<tr>
<td>SCL-90, GSI, mean (SD)</td>
<td>1.23 (0.68)</td>
<td>0.88 (0.57)</td>
<td>0.47 (0.33)**</td>
</tr>
<tr>
<td>SCL-90, &gt;0.55 (women)/&gt;0.36 (men), n</td>
<td>10</td>
<td>7</td>
<td>6**</td>
</tr>
<tr>
<td>Hardship mean (SD)</td>
<td>27.25 (5.38)</td>
<td>19.23 (5.28)</td>
<td>21.00 (4.76)**</td>
</tr>
<tr>
<td>Coping Total mean (SD)</td>
<td>45.33 (17.09)</td>
<td>39.31 (10.33)</td>
<td>38.43 (11.73)</td>
</tr>
<tr>
<td>AUDIT mean (SD)</td>
<td>2.83 (1.95)</td>
<td>2.85 (2.15)</td>
<td>3.50 (3.84)</td>
</tr>
</tbody>
</table>

Kruskal–Wallis test; ***\( P < 0.001 \); **\( P < 0.01 \); *\( P < 0.05 \).

### Table 2. Results at the 24-month follow-up and changes from initial admission to 24-month follow-up

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Group Support</th>
<th>Coping Skills Training</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCL-90, GSI, 24-month follow-up, mean (SD)</td>
<td>0.60 (0.57)</td>
<td>0.30 (0.32)</td>
<td>0.45 (0.49)</td>
</tr>
<tr>
<td>Change SCL-90, GSI, from initial admission to 24-month follow-up, mean (SD)</td>
<td>-0.63 (0.63)b</td>
<td>-0.51 (0.41)b</td>
<td>-0.16 (0.02)**</td>
</tr>
<tr>
<td>Improved at 24-month follow-up (SCL-90; GSI &lt; 0.55(w)/0.36(m) of those with GSI &gt; 0.55(w)/0.36(m) on admission), n</td>
<td>6/10</td>
<td>5/6#</td>
<td>0/6*</td>
</tr>
<tr>
<td>Hardship 24-month follow-up, mean (SD)</td>
<td>19.41 (8.46)</td>
<td>15.67 (4.12)</td>
<td>17.57 (6.10)</td>
</tr>
<tr>
<td>Change Hardship from initial admission to 24-month follow-up, mean (SD)</td>
<td>-7.83 (9.87)a</td>
<td>-2.92 (4.68)a</td>
<td>-3.43 (5.35)a</td>
</tr>
<tr>
<td>Coping Total 24-month follow-up, mean (SD)</td>
<td>24.75 (14.75)</td>
<td>21.50 (14.21)</td>
<td>24.07 (11.92)</td>
</tr>
<tr>
<td>Change Coping Total from initial admission to 24-month follow-up, mean (SD)</td>
<td>-20.58 (19.11)a</td>
<td>-17.50 (12.69)b</td>
<td>-14.36 (13.57)b</td>
</tr>
<tr>
<td>AUDIT, 24-month follow-up, mean (SD)</td>
<td>2.58 (2.07)</td>
<td>2.42 (1.78)</td>
<td>2.79 (2.67)</td>
</tr>
<tr>
<td>Change AUDIT from initial admission to 24-month follow-up, mean (SD)</td>
<td>-0.25 (2.01)</td>
<td>-0.08 (1.38)</td>
<td>-0.71 (1.82)</td>
</tr>
</tbody>
</table>

Kruskal–Wallis test; ***\( P < 0.001 \); **\( P < 0.01 \); *\( P < 0.05 \).

Wilcoxon; Changes 0–2 measurements; \*\( P < 0.05 \); \#\( P < 0.01 \); \#\( P < 0.001 \).

#One subject did not attend the 24-month follow-up.
Stability of cohabitation

At the 24-month follow-up examination, 30 of the spouses were still in their relationships while 9 had separated (4 in Group Support group, 4 in the Coping Skills Training group and 1 in the Information group). Hence, divorce rate tended to be commoner in the treatment groups than in the information group ($P < 0.1$). Among those who had undergone divorce, 8 out of 9 had high initial scores (over mean) on SCL-90, GSI, compared with those who were still married, among whom 14 out of 30 had high initial scores ($P < 0.05$). There was no difference between those who got divorced and those who did not undergo divorce, concerning improvement in the SCL-90 score (4/8 vs 8/14). There was no correlation between divorce and a long/short duration of marriage.

Improvement of alcoholic partner’s abuse pattern

Of the 38 participants, 16 reported that their alcoholic partners had improved significantly by the 24-month follow-up. Improvement in the partner had occurred for 6 (50%) spouses in Group Support group, 5 (42%) in individual Coping Skills Training and 5 (36%) in individual Information. The differences were not significant.

Seven of the 22 spouses, whose alcoholic partners did not cut down on their drinking, had got divorced by the 24-month follow-up. Among the 16 spouses who reported that their alcoholic partners had improved, only two had got divorced. The difference was, however, not significant.

Three of the eight spouses with high initial scores whose alcoholic partners improved, had scores below the mean at the 24-month follow-up, compared with eight out of the 13 with high initial scores whose partners did not improve. The difference was again not significant.

DISCUSSION

The focus of this paper has been stability of early improvement after 24 months, in the mental health and wellbeing of spouses of alcoholics. There are three main findings of the present study: (i) the results on all scales were stable from the 12-month to the 24-month follow-up; (ii) those with high scores on SCL-90 (over the mean) who participated in either of the treatment groups improved more regarding psychiatric symptoms than those who only attended...
the information session; (iii) the divorce frequency after 24 months was higher among those with initial scores above the Swedish mean than it was among those with initial scores below the mean.

The strengths of the study are that valid instruments were used and that the follow-up frequency was very high. There are, however, some weaknesses to consider in the analysis. A larger sample would have increased the power. The groups were somewhat skewed in terms of initial values on some of the scales. This could have been avoided by using stratification or quota sampling instead of pure randomization. Due to the initial differences between the groups, we chose to make a secondary analysis of a sub-sample, which only included spouses who had positive scores on the SCL-90 scale at admission.

We have compared the spouses with the corresponding group reported by Orford et al. (1975). The mean number of affirmative answers in our group was 7.7 on the 10-item Hardship scale, compared with 4.2 in the English sample. This indicates that our spouses had at least the same severity of Hardship as the English spouses. The mean number of affirmative answers in the Coping Behaviour Scale was 26.8 and 23.5, respectively, in the 56 item instrument, thus indicating few differences. The number of spouses with mental health symptoms, defined as SCL-90 scores above the Swedish mean, was 22. However, spouses with major psychiatric disorder were excluded. The sample’s characteristics are similar to those described by others, for example, Moos et al. (1990). We regard the sample as representative of spouses of alcoholics in general, excepting the exclusion of those who themselves were substance misusers.

The results on the various instruments were generally stable from 12 to 24 months. Most of the improvement occurred during the first year. Contrary to McCrady et al. (1991) we could not find any late, positive long-term effects. A possible reason for this difference is that we worked only with spouses, whereas the above authors worked with marital therapy with focus on the family pattern as a whole.

In the literature there are indications that very short intervention could influence coping mechanisms (Sisson and Azrin, 1986). Moos et al. (1990) and Friedman (1991) have reported that there was no definite relation between changes in coping behaviour and improved mental wellbeing. Our results suggest that there might be different effects on coping skills compared to psychiatric symptoms. It might be enough with one single session to improve coping behaviour, whereas several sessions may be needed to help improve mental wellbeing.

The total divorce frequency after 2 years was 23%, which is in line with the frequencies in earlier studies (Berglund and Tunving, 1985; Moos et al., 1990). In the present study, the divorce frequency was highest during the first year. There was a significant correlation between initial psychiatric symptoms and divorce. The frequency of improved results was the same among those who underwent divorce as it was among those who remained in their relationships. The higher scores on SCL-90 in those with future divorces, compared with those without divorce, could perhaps indicate differences in severity of marital discord leading to increases of mental symptoms.

Divorce during the study could be seen as a failure, but it could also be seen as a result of successful treatment, giving the participants the strength to leave their dysfunctional relationships (Halford et al., 2001). In previous studies a positive relationship between no divorce and improvement of the alcoholic’s drinking pattern has been documented (Moos et al., 1990). We found the same tendency, but it did not reach significance, possibly due to the small sample size.

In conclusion, it can be established that all three intervention programmes were associated with lasting improvements between admission and the 24-month follow-up. The results do, however, show some differences in the effects of the three programmes, suggesting that these may be advantages to the two treatment groups over the information group, regarding coping behaviour and psychiatric symptoms.

Acknowledgements — This study was supported by grants from the Swedish Council for Planning and Coordination of Research, the National Institute of Public Health, the Council for Health Care Research in South Sweden, Lund University, and the Psychiatric Services, Malmö University Hospital. Agneta Öjehagen gave valuable comments on the work.

REFERENCES


