When Does Experience of Psychosis Result in a Need for Care? A Prospective General Population Study

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Abstract

Not all individuals with experience of psychosis develop a need for care. The present study investigated differences in coping strategies and associated levels of perceived control over psychotic symptoms, in relation to need for care status. The influence of coping on need for care was assessed in 47 individuals incident for psychosis in a general population sample of 4,722. Need for care was associated with severity of psychotic experiences rather than associated distress, mean level of control, or average number of coping strategies used. Qualitative differences were apparent, however, in that those who resorted to the strategy of symptomatic coping (a coping strategy characterized by going along with and indulging in symptoms) experienced less control over their symptoms (odds ratio [OR] = 0.79, 95% confidence interval [CI]: 0.63–0.98) and had a higher probability of need for care (OR = 6.07, 95% CI: 1.94–18.95). The results suggest that qualitative differences in self-initiated coping modify the risk for need for care and subsequent patient status in those who experience psychotic symptoms and point to the possible importance of early coping-based interventions.

Keywords: Schizophrenia, psychosis, general population, need for care, coping.


Several population-based studies have found that the prevalence of psychotic symptoms is many times higher than the prevalence of affective and nonaffective psychotic disorders (Bentall and Slade 1985; Tien 1991; Johns et al. 1998; Verdoux et al. 1998; Peters et al. 1999; van Os et al. 2000). Nonclinical experiences of psychotic symptoms are associated with clinical disorder cross-sectionally (Eaton et al. 1991; Hanssen et al., submitted) and longitudinally (Chapman et al. 1994; Kwapil et al. 1997; Poulton et al. 2000) and may in fact be at the lower end of a continuum of psychosis of which clinical disorders form the extreme (Strauss 1969; Claridge 1994; van Os et al. 2001). Given the strong associations between experiences of psychotic symptoms in the general population and "cases" of psychotic disorder, it becomes important to understand what causes some individuals with psychotic experiences to develop a need for care (Johns and van Os 2001). There is evidence to suggest that it is not so much the implausibility of the psychotic experiences and the associated degree of conviction but rather the degree of preoccupation and distress that may be related to need for care status (Bentall and Slade 1985; Kendell 1985; Young et al. 1986; Garety and Hemsley 1994; Peters et al. 1999a, 1999b).

An important determinant of need for care status in this respect may be the level of functional coping that the person mobilizes in the face of stressful (psychotic) experiences (Lukoff et al. 1984; Nuechterlein and Dawson 1984; Romme and Escher 1989; Claridge 1997). It has been suggested that the level of depression and distress associated with symptoms is driven by appraisals of controllability and rank (Birchwood et al. 1993; Birchwood and Chadwick 1997). Passive coping strategies such as isolating oneself or getting involved in nonspecific activities are reported to be unrelated to control experience, whereas symptomatic coping, characterized by going along with and indulging in the content of psychotic symptoms, diminishes the feeling of control (Carr 1988; Bak et al. 2001a). Active coping strategies—such as problem solving, help seeking, and distraction—on the other hand, are reported to generate control and improve general functioning in people with a diagnosis of schizophrenia (Boschi et al. 2000; Falloon 2000; Bak et al. 2001b). Previous studies suggested that individuals with psychiatric disorders tend to use more passive coping strategies than healthy controls do (Vollrath et al. 1994; van den Bosch.
and Rombouts 1997). People with schizophrenia, who represent the most deficient end of the continuum, display the least efficient coping strategies, such as withdrawal and avoidance in dealing with stressors, which results in poor control experiences (Nicholson and Neufeld 1992; Hultman et al. 1997; van den Bosch and Rombouts 1997).

In the present study, a general population sample was followed to identify individuals who had at least one experience of a psychotic symptom and no previous diagnosis of any psychotic disorder. It was hypothesized that only some of these individuals would display a need for care in relation to their psychotic symptoms. It was further hypothesized that need for care status would be associated with “symptomatic” coping strategies and less experience of control, whereas active coping strategies would reduce development of need for care status and increase the experience of control. To this end, a previously described method to assess coping with and experience of control over psychotic experiences was used (Bak et al. 2001a, 2001b).

Methods

Sample. The sample was formed as part of the Netherlands Mental Health Survey and Incidence Study (NEMESIS), a longitudinal study of the prevalence, incidence, and consequences of psychiatric disorders in the Dutch general population (Bijl et al. 1998a, 1998b). Subjects were interviewed on three occasions: in 1996 (T0), in 1997 (T1—assessing the period between T0 and T1), and in 1999 (T2—assessing the period between T1 and T2). A comprehensive description of the project objectives, sample procedure, response, diagnostic instrument, quality control procedures, and analyses has been provided in previous publications (Bijl et al. 1998a, 1998b). NEMESIS is based on a multistage, stratified, random sampling procedure in which 90 municipalities, a sample of private households within each municipality, and members with the most recent birthday within each household were selected. Subjects were aged 18–64 years and sufficiently fluent in Dutch to be interviewed. Persons living in institutions, including those residing in psychiatric hospitals, were not included in the sampling frame.

Composite International Diagnostic Interviews and Psychotic Symptoms. Subjects were interviewed face-to-face in their homes using the Composite International Diagnostic Interview (CIDI, version 1.1, computerized version [Smeets and Dingemans 1993]) at T0 (n = 7,076), T1 (n = 5,618), and T2 (n = 4,848). The CIDI is a structured interview developed by the World Health Organization on the basis of the Diagnostic Interview Schedule (Robins et al. 1981) and the Present State Examination (Wing et al. 1974, 1977). It is designed for use by trained interviewers who are not clinicians, and the associated computer program yields DSM–III–R diagnoses. The CIDI psychosis section (G-section) consists of 17 psychosis items concerning delusions (13 items) and hallucinations (4 items): items G1–G13, G15, G16, G20, and G21. Each item is scored as one of six separate ratings: 1, there is no symptom; 2, symptom is present but not clinically relevant (not bothered by it and not seeking help for it); 3, symptom is the result of drug use; 4, symptom is the result of somatic disease; 5, there is a true psychiatric symptom; and 6, interviewer is in doubt because there appears to be some plausible explanation for what appears to be a psychotic symptom.

T2 Assessment of Incident Cases of Psychosis. To identify incident cases of psychosis at T2, we used the following procedure. Individuals who had a diagnosis of any affective or nonaffective psychotic disorder according to DSM–III–R (American Psychiatric Association 1987) at T0 were excluded. In addition, those with such diagnoses at T1 were excluded to make sure that any prevalent psychotic cases that were missed at baseline were excluded. This resulted in the exclusion of 126 subjects, leaving 4,722 subjects at T2 (figure 1).
Clinical Reinterviews for Psychotic Symptoms at T2. The present study focused on subjects who had had at least one experience of a psychotic symptom (score 2, 5, or 6) and no previous diagnosis of any psychotic disorder at T2 (n = 191). Because psychotic symptoms may be difficult to diagnose by lay interviewers, especially with regard to their clinical relevance (Helzer et al. 1985; Cooper and Collacott 1994), clinical reinterviews were conducted over the telephone by an experienced clinician (psychiatrist, senior psychiatric trainee, or psychologist). The reinterviews were conducted using questions from the Structured Clinical Interview for DSM-III-R (SCID-I), an instrument with proven reliability and validity in diagnosing schizophrenia, to enhance reliability of the reassessment interview (Spitzer et al. 1992). If the clinician’s CIDI rating did not coincide with the rating of the lay interviewer, the lay interviewer’s rating was replaced by the clinician’s rating. These corrected CIDI ratings were then entered into the CIDI diagnostic program. The CIDI diagnoses of psychotic disorder and the presence of psychotic symptoms at T2 are thus based on the results of the clinical reinterview.

Telephone reinterviews were completed on 142 (74.3%) of the 191 subjects (the 49 subjects who could not be reinterviewed were excluded from the analysis—figure 1). In addition, 57 subjects were excluded from the analyses because they had no CIDI ratings of 2 or 5 left after reinterview, resulting in a sample of 85 subjects (figure 1).

The group that was not reinterviewed (n = 49) did not differ from the reinterviewed group (n = 142) on the sociodemographic variables sex (odds ratio [OR] = 1.13, 95% confidence interval [CI]: 0.58–2.17), marital status (OR = 0.89, 95% CI: 0.44–1.82), employment (OR = 1.04, 95% CI: 0.35–3.05), age (in 5 categories of 18–24, 25–34, 35–44, 45–54, 55–64 years) (OR = 1.02, 95% CI: 0.78–1.34), and urbanization (five levels of urbanization defined following the standard classification of urbanization of place of residence according to the Dutch Central Bureau of Statistics [1993], based on the density of addresses per square kilometer in an area, and classified as less than 500, 500–999, 1,000–1,499, 1,500–2,499, and 2,500 or more) (OR = 1.00, 95% CI: 0.80–1.25). Furthermore, no differences were found on previous psychiatric diagnoses (defined as any lifetime DSM-III-R Axis I diagnosis) at T0 (OR = 1.30, 95% CI: 0.67–2.50) or T1 (OR = 1.02, 95% CI: 0.49–2.14) or on the personality traits neuroticism (assessed with the 14-item Groningen Neuroticism Scale [Ormel 1980]) (OR = 0.99, 95% CI: 0.93–1.05) and mastery (assessed with the five-item mastery scale [Pearlin and Schooler 1978]) (OR = 0.97, 95% CI: 0.89–1.06).

Brief Psychiatric Rating Scale. The two items on positive psychotic symptoms of the Brief Psychiatric Rating Scale (BPRS) (Lukoff et al. 1986), unusual thought content and hallucinations, were additionally scored by the clinician at T2 (range: 1, absent, to 7, very severe). Ratings of 2–3 indicate a nonpathological intensity of symptoms, and ratings of 4–7 indicate a pathological intensity of symptoms in terms of severity and functional impairment (Lukoff et al. 1986).

“Caseness” at T2. To determine which individuals with CIDI psychotic experiences at T2 were cases for treatment, we used an a priori definition of “caseness.” This definition allowed us to not only use classical criteria for allocation of patient status on the basis of functional impairment and severity (as, e.g., in DSM) but also to use a clinical judgment of need for care, as recommended for case identification in the general population (Spitzer 1998). Presence of severity and functional impairment was defined as a pathology-level score (see above) on the BPRS items unusual thought content and/or hallucinations (including one case who met this criterion just outside the 14-day period covered by the BPRS assessment).

Need for care was assessed as follows. During the interview by clinicians at T2, as much information as possible was gathered in the 22 areas of need as defined by the Camberwell Assessment of Need (Slade et al. 1996), in particular needs in the areas of psychotic symptoms and psychological distress. After the interview, a consensus meeting was organized, attended by two psychologists and two psychiatrists, during which all available information on possible need for care was presented. The four clinicians reached a consensus regarding whether there was a need for mental health care, in particular a need for care in relation to psychotic symptoms and psychological distress. Individuals discussed in the consensus meeting were thus categorized as (1) no need for care, or (2) probable or definite need for care. Those who met both caseness criteria (BPRS pathology level and clinician consensus on probable/definite need for care) were defined as a case for treatment, hereafter referred to as “need for care status.”

Assessment of Coping, Distress, and Control. Coping, subjective distress with, and perceived control over the psychotic experience were assessed using the Maastricht Assessment of Coping Strategies (MACS), a semistructured interview administered by a clinician (Bak et al. 2001a, 2001b). In the MACS, the assessment of control is used as a measurement of coping efficacy. We used the seven positive symptoms from the extended version of the MACS that matched the positive symptoms included in the CIDI G-section. The seven symptoms were suspiciousness, thought reading/broadcasting, passivity phenomena, thought insertion/interference, delusions of reference, hearing voices, and other hallucinations. During the
MACS interview, the interviewer first described the symptom to the subject in a general way, as if other people might suffer from that symptom too. The interviewer then asked the subject whether this symptom might have been present, again repeating the same description and asking followup questions to clarify if necessary. If any of the seven MACS symptoms were present, the subject was asked (1) to indicate on a seven-point Likert scale the degree of distress associated with the symptom, (2) to name all the strategies used to alleviate distress caused by the symptom, and (3) to indicate on a seven-point Likert scale the degree of control experienced over the symptom. The coping strategies were assessed by asking standard questions about what the patient did or thought when faced with the symptom. All the strategies mentioned by the patient were scored in one of five domains of coping, based on the work by Carr (1988). This method ensured that we gathered the most important self-initiated coping strategies used by the patient. On the basis of extensive pilot interviews, definitions had been prepared for these five domains and their subcategories (http://www.macsinfo.homestead.com/index.html), and examples were given for different symptoms to guide the interviewer. The five domains of coping were behavioral, social, cognitive, care, and symptomatic. The first four domains had 5, 2, 3, and 3 subcategories, respectively, and the last consisted of only 1 item (http://www.macsinfo.homestead.com/index.html), so patients’ descriptions of coping mechanisms could be scored under any of 14 different items. In a previous study, factor analysis of the 14 coping strategies revealed an interpretable pattern of correlation yielding five factors explaining 71 percent of the variance. The coping strategies distraction, problem solving, and help seeking clustered together in an active problem solving coping factor; the coping strategies prescribed medication, non-prescribed substances, and physical change clustered together in a passive illness behavior coping factor; the coping strategies shifted attention, socialization, task performance, and indulgence clustered together in an active problem avoiding coping factor; the coping strategies isolation, nonspecific activities, and suppression clustered together in a passive problem avoiding coping factor; and the fifth factor was one on which only symptomatic behavior (going along with the content of psychotic symptoms, e.g., following orders from voices or keeping a knife to defend oneself against an imagined persecutor) loaded.

All 85 individuals were interviewed with the MACS, with the exception of 2 individuals who could not complete the interview (total: 83 individuals—figure 1). The MACS assesses coping as a means to reduce distress associated with psychotic symptoms. According to this paradigm, coping has meaning only in the presence of a symptom generating at least minimal distress. Therefore, of the 83 interviewed individuals, only the individuals with symptom observations that were associated with at least minimal presence of symptom distress (i.e., score of 2 or higher on the Likert scale) were included in the analysis. A total of 47 individuals (need for care: n = 19; no need for care: n = 28) had at least one symptom observation associated with minimum distress (figure 1).

Statistical Analysis

Individual level. In the file of 47 person observations, logistic regressions were used to study the associations between need for care status and (1) number of MACS symptoms present per subject (mean = 1.9, standard deviation [SD] = 1.0, range 1–5); (2) mean distress score (for each subject, the average distress score per symptom present was calculated; mean = 3.8, SD = 1.9, range 1.25–7); (3) mean number of coping strategies per subject (per subject, the average number of coping strategies per symptom present was calculated; mean = 1.8, SD = 1.1, range 0–4); (4) mean level of control (for each subject, the average control score per symptom present was calculated; mean = 3.4, SD = 2.4, range 1–7); and (5) intensity of psychotic symptomatology, defined as the BPRS scores on unusual thought content (mean = 3.2, SD = 1.6) and hallucinatory behavior (mean = 2.6, SD = 1.6).

Coping observation level. Analyses of coping were conducted with the Stata statistical program (STATA Corp 2001) and have been described elsewhere in detail (Bak et al. 2001a, 2001b). A data file was constructed in which each of the 47 subjects included in the study contributed 14 × 7 = 98 observations: one for each of the different combinations of 14 original coping strategies and 7 symptoms of the MACS. These observations will hereafter be referred to as “coping observations.” This was the most detailed level of analysis possible as the MACS assesses for each different symptom whether or not an individual uses any of the 14 coping strategies. Thus, for each of these 98 combinations, patients could have a score of either 0 (indicating that they did not use the coping strategy for the symptom) or 1 (indicating that they did use the coping strategy for the symptom). The binary coping variable, indicating the presence or absence of coping, was the dependent variable in the analyses. Additional variables included coping type (the five coping factors as described above), need for care status (1 = need for care, 0 = no need for care), level of control (scored on seven-point Likert scale), and level of distress (scored on seven-point Likert scale). The file thus contained 47 subjects × 98 = 4,606 observations. Of these, 938 were associated with at least minimum distress.
Effect sizes were expressed as ORs with a 95 percent CI from the logistic regression model predicting the presence of coping. Model contributions of independent variables and interactions were assessed by Wald test. The presence of coping was investigated in relation to coping type and need for care diagnosis along the lines of the hypotheses specified above, as was the relation between coping type and the experience of control. As observations were clustered within individuals, the CLUSTER and ROBUST options were used in the Stata logistic regression analyses (Bak et al. 2001a, 2001b). The CLUSTER option combined with the ROBUST option allows for the use of observations that are not independent within clusters (in this case, within individuals) and obtains the Huber/White/Sandwich estimator of variance instead of the traditional variance estimator. These procedures result in standard errors that are adjusted for clustering within persons.

Results

Individual Level. Need for care status was not associated with gender (OR = 0.4, 95% CI: 0.11–1.26) or age (five categories: OR = 0.96, 95% CI: 0.58–1.60) at the individual level. Number of symptoms and both BPRS items discriminated between presence and absence of need for care when each was examined separately (table 1). Mean level of distress, mean number of coping strategies used, and mean level of control were not related to need for care status. When all were entered jointly into the equation, only BPRS unusual thought content and BPRS hallucinatory behavior independently predicted need for care status (table 1).

Coping Observation Level. In the combined group of need for care and no need for care subjects, significant associations were apparent between the presence of coping and coping type (the five coping factors—χ² = 74.54, df = 4, p < 0.001), indicating that different coping types were used with different frequencies. In both the need for care and the no need for care group, symptomatic coping was the most common strategy, followed by active problem solving and without need for care independent of their differences in severity of symptoms. Additionally, it could be argued that symptomatic coping might have different effects in terms of experience of control in the group of subjects who develop need for care versus those who do not. How-

The presence of coping was not associated with perceived control (OR = 1.05, 95% CI: 0.97–1.13) and this remained so after adjustment for distress (OR = 1.05, 95% CI: 0.98–1.12). However, the association between the presence of coping and the experience of control differed as a function of coping type (coping type × control interaction term: χ² = 19.24, df = 4, p < 0.001). Stratified analyses per coping type (table 3) revealed that symptomatic coping was negatively associated with control (OR = 0.79; 95% CI: 0.63–0.98), whereas active problem solving was positively associated with control (OR = 1.28, 95% CI: 1.10–1.49).

Discussion

Severity of psychotic experiences rather than mean level of distress, mean level of perceived control, and average amount of coping per se distinguished between those with and without need for care. Qualitative differences in the five main coping types were apparent, however, in that symptomatic coping was used more frequently in the need for care group. Symptomatic coping was associated with less and active problem solving with more perceived control over the psychotic experience.

The fact that average levels of distress and experienced control are not related to patient status seems counterintuitive but occurs because average levels do not take into account the fact that different symptoms may be associated with different levels of distress and different coping mechanisms that vary in their effects on experience of control. The underlying dynamics between symptoms, distress, and control were more accurately revealed by analyses at the much more detailed level of coping per coping mechanism and per symptom. For example, a person might have several symptoms and report functional coping and high levels of control for most of them. However, he or she might have one very distressing symptom for which nonfunctional coping is used, resulting in low experience of control and need for care status. The mean level of control would be high for this subject, while he or she would still be in the need for care group.

It could be argued that symptomatic coping was more often used in the patient group because the patient group had more severe psychotic experiences. However, the interaction between need for care status and coping factor was not reduced and remained similarly highly significant after adjustment for both BPRS psychosis items. The use of coping strategies therefore differed between those with and without need for care independent of their differences in severity of symptoms. Additionally, it could be argued that symptomatic coping might have different effects in terms of experience of control in the group of subjects who develop need for care versus those who do not. How-
Table 1. Association between need for care status (no need for care: \( n = 28 \), need for care: \( n = 19 \)) and independent variables

<table>
<thead>
<tr>
<th>Association With Need for Care Status</th>
<th>Univariate</th>
<th>( \chi^2 (1) )</th>
<th>( p )</th>
<th>Multivariate</th>
<th>( \chi^2 (1) )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total symptom score (range: 1–5)</td>
<td>2.89 (1.37, 6.09)</td>
<td>7.76</td>
<td>0.005</td>
<td>0.03 (0.00, 1.37)</td>
<td>3.23</td>
<td>0.072</td>
</tr>
<tr>
<td>Mean distress score (range: 1.25–7)</td>
<td>0.99 (0.73, 1.35)</td>
<td>0.00</td>
<td>0.956</td>
<td>0.99 (0.48, 2.05)</td>
<td>0.00</td>
<td>0.98</td>
</tr>
<tr>
<td>Mean coping score (range: 0–4)</td>
<td>1.37 (0.77, 2.42)</td>
<td>1.14</td>
<td>0.286</td>
<td>0.21 (0.02, 1.87)</td>
<td>1.94</td>
<td>0.164</td>
</tr>
<tr>
<td>Mean control score (range: 1–7)</td>
<td>0.96 (0.75, 1.24)</td>
<td>0.08</td>
<td>0.776</td>
<td>1.32 (0.71, 2.47)</td>
<td>0.76</td>
<td>0.382</td>
</tr>
<tr>
<td>BPRS unusual thought content (range: 1–7)</td>
<td>3.35 (1.69, 6.63)</td>
<td>12.05</td>
<td>0.001</td>
<td>28.46 (1.69, 480.43)</td>
<td>5.39</td>
<td>0.02</td>
</tr>
<tr>
<td>BPRS hallucinatory behavior (range: 1–6)</td>
<td>2.53 (1.52, 4.21)</td>
<td>12.65</td>
<td>0.000</td>
<td>20.93 (1.51, 290.03)</td>
<td>5.14</td>
<td>0.023</td>
</tr>
</tbody>
</table>

Table 2. Presence of coping related to coping type and need for care status

<table>
<thead>
<tr>
<th>Coping type</th>
<th>No Need for Care (( n = 28 )), ( n (%) )</th>
<th>Need for Care (( n = 19 )), ( n (%) )</th>
<th>( \chi^2 (1) )</th>
<th>( p )</th>
<th>OR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active problem solving</td>
<td>91 (84.26)</td>
<td>17 (15.74)</td>
<td>69 (74.19)</td>
<td>24 (25.81)</td>
<td>2.15</td>
</tr>
<tr>
<td>Passive illness behavior</td>
<td>107 (99.07)</td>
<td>1 (0.93)</td>
<td>90 (96.77)</td>
<td>3 (3.23)</td>
<td>1.02</td>
</tr>
<tr>
<td>Active problem avoiding</td>
<td>134 (93.06)</td>
<td>10 (6.94)</td>
<td>117 (94.35)</td>
<td>7 (5.65)</td>
<td>0.23</td>
</tr>
<tr>
<td>Passive problem avoiding</td>
<td>93 (86.11)</td>
<td>15 (13.89)</td>
<td>85 (91.40)</td>
<td>8 (8.60)</td>
<td>1.44</td>
</tr>
<tr>
<td>Symptomatic</td>
<td>23 (63.89)</td>
<td>13 (36.11)</td>
<td>7 (22.58)</td>
<td>24 (77.42)</td>
<td>9.62</td>
</tr>
<tr>
<td>Total</td>
<td>448 (88.89)</td>
<td>56 (11.11)</td>
<td>368 (84.79)</td>
<td>66 (15.21)</td>
<td>3.46</td>
</tr>
</tbody>
</table>

Note. — CI = confidence interval; OR = odds ratio.

\(^1\) For example, the fifth row relates to "symptomatic coping." In those with no need for care, out of 36 possible symptomatic coping observations, coping was present in 13 observations (36.11%). In subjects with need for care, out of 31 possible symptomatic coping observations, coping was present in 77.42% of the observations (\( n = 24 \)). The OR of these two probabilities is 6.07, indicating that those with need for care were 6.07 times more likely to use symptomatic coping, where possible, compared to the other group.
Table 3. Association between presence of coping and control, stratified by coping type

<table>
<thead>
<tr>
<th>Association Between Coping and Control¹</th>
<th>χ² (1)</th>
<th>p</th>
<th>OR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active problem solving</td>
<td>9.73</td>
<td>0.002</td>
<td>1.28 (1.10, 1.49)</td>
</tr>
<tr>
<td>Passive illness behavior</td>
<td>0.43</td>
<td>0.51</td>
<td>1.18 (0.72, 1.92)</td>
</tr>
<tr>
<td>Active problem avoiding</td>
<td>1.19</td>
<td>0.28</td>
<td>1.10 (0.93, 1.30)</td>
</tr>
<tr>
<td>Passive problem avoiding</td>
<td>0.67</td>
<td>0.41</td>
<td>0.93 (0.79, 1.11)</td>
</tr>
<tr>
<td>Symptomatic</td>
<td>4.53</td>
<td>0.03</td>
<td>0.79 (0.63, 0.98)</td>
</tr>
</tbody>
</table>

Note.—CI = confidence interval; OR = odds ratio.

¹ Interaction term coping factor × control: χ² = 19.24, df = 4, p < 0.001.

ever, a post hoc analysis investigating the relation between coping strategy and experience of control in relation to need of care status revealed no significant association (χ² = 1.56, p = 0.21), indicating that symptomatic coping resulted in a decrease in control in both groups.

The current findings suggest that a coping strategy characterized by going along with and indulging in symptoms, yielding less experience of control, discriminates between those with and those without need for care in the context of psychotic symptoms. These findings are in agreement with previous work by Birchwood and colleagues, who showed that anxiety and depression in relation to psychotic illness are associated with perceived controllability and feelings of subordination to "omnipotent" voices (Birchwood et al. 1993; Birchwood and Chadwick 1997). A symptomatic coping strategy of going along with the content of psychotic experiences may give rise to low perceived controllability and depression and thus contribute to the development of need for care. Such a mechanism may also operate in individuals about to relapse with a psychotic episode, as evidenced by reports of an increase in depression and hallucinations in the month before relapse (Tarrier et al. 1991).

Active coping, in agreement with the initial hypothesis, was positively associated with control. However, contrary to the initial hypothesis, no differences were found in the frequency of use of active coping between those with and without a need for care.

Methodological Issues. These results should be interpreted in the light of several potential limitations. The data were cross-sectional, so no firm conclusions can be drawn about the direction of effects in associations between distress, coping, and perceived control. Distress related to symptoms, coping, and experience of symptom control are dynamic entities with within- and between-day fluctuations that cannot be captured by a cross-sectional instrument (Delespaul 1995; Sayer et al. 2000). Although it is therefore difficult to establish the true direction of effects in the association between distress, coping, and control, the assumed effect of coping on control has face validity. A prospective study capturing the moment-to-moment variation of coping and control would be necessary to validate the present findings and establish the direction of effects. Such a study would be very difficult to carry out, however, given the problems of prospectively identifying individuals who will develop a need for care in relation to psychotic symptoms.

The interview was not ideal as assessments of coping and symptoms were carried out over the telephone and nonverbal expressions were not observed. Nevertheless, the results of the current investigation, especially with regard to the negative association between symptomatic coping and control, and the positive association between active problem solving and control, were similar to previous face-to-face interview findings with the MACS in a sample of patients with psychotic illness (Bak et al. 2001a, 2001b).

Conclusion. Despite the above limitations, this study has several strengths. As far as we are aware, it is the first to test the hypothesis of differences in coping between "patients" and "nonpatients" in the context of psychotic symptoms in a longitudinal population-based study. Although the findings are a long way from contributing to efforts at early intervention (McGorry et al. 1996), there is a suggestion that both presence of psychotic experiences and the way individuals interact with these experiences are important in producing a need-for-care psychotic disorder.

Appendix. Vignettes of Cases Indicating No Need for Care (A) and Need for Care (B)

Case A. Case A was a 58-year-old woman. She had been a widow for 4 years. During the clinical reinterview, she...
reported that she was hearing voices 2–3 times a week and that she had the feeling that some of her thoughts had predictive value. For example, she would warn people of an unpleasant event about to befall them, and they would later tell her that what she predicted came true. During an encounter with police officers a year before, she had become convinced that her daughter would experience some accident in the near future. This prediction also came true. During the interview, she mentioned that she regularly heard her deceased husband and that his remarks also had predictive value. She was convinced that there are people who are “media-mimical,” or sensitive to picking up information from supernatural sources, and that she was one. She further stated that she was very sensitive and easily smelled all sorts of things, without a special meaning. She had a part-time job as a secretary. She had good friends and regularly looked after her daughter’s two children.

The BPRS ratings were delusions 4 and hallucinations 3. We concluded that there was no need for care related to the psychotic experiences. The intensity and frequency appeared rather strong, but no major impact on the subject’s general functioning or quality of life was apparent.

Case B. A 28-year-old man said that he had been hearing and reading other people’s thoughts and feelings for one and a half years. He was convinced that this was a common ability present in all people but that he was special in that he had discovered how to use this gift. He had developed it to a higher level, so that he now was able to open several chambers in his head or make several internal connections in his brain. This enabled him to do several tasks at once, like watching television on three different channels or listening to three records simultaneously, and to read a book page by just glancing at it. He said that he sometimes received a number from the television and that this number referred to a program he was intended to watch. Although he regarded his experiences as part of a gift, he was also worried because he could not be certain whether someone else would read his thoughts or would be transmitting thoughts to him. He also sometimes experienced troublesome bodily sensations, feeling like someone or something was grabbing at him. He described this experience as being immobilized and therefore unable to move and said that he attempted to push these sensations away using his brain power. Because of this, he avoided public places and eye contact with other people. He found it impossible to work, although he would have liked to. He said he had no difficulties in taking care of his house and meals. He had some social contacts but no close friends, although he would have liked to have a good friend. He preferred to live alone because other people annoyed him.

The BPRS ratings were delusions 6 and hallucinations 4. He received a need for care diagnosis because of the degree of the psychotic experiences and their impact on needs and quality of life, such as avoiding social contact, not feeling able to work, and being isolated.

References


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