

Adjustment Outcomes in Chinese Patients Following One-Month Recovery From Severe Acute Respiratory Syndrome in Hong Kong

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Abstract: This study aimed to examine the short-term adjustment outcomes including distress, self-esteem, and quality of life among Chinese patients after 1-month recovery from severe acute respiratory syndrome (SARS) in Hong Kong and to investigate the predictive abilities of a set of selected variables on the outcomes. At 1-month recovery, 100 SARS survivors (mean age = 37; 66 women) and 184 community subjects completed self-administered questionnaires. In the General Health Questionnaire-28, 61% of the SARS survivors were identified as distressed cases under a conservative cutoff score of 6. Compared with the community sample, SARS survivors had significantly more distress and poor quality of life. Being a healthcare worker, severity of SARS symptoms, steroid dosage, and social support accounted for a portion of variances of different measures. Early psychiatric screening and intervention may be beneficial for the adjustment of SARS survivors after short-term recovery. Future research on the long-term impact of SARS is recommended.

Key Words: Severe acute respiratory syndrome, outcome studies.

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DOI: 10.1097/01.nmd.0000147169.03998.dc

Severe acute respiratory syndrome (SARS) is caused by a novel strain of coronavirus that has affected 29 countries, with more than 8400 cases reported in 2003 (Peiris et al., 2003; SARS Expert Committee, 2003). In Hong Kong, the first case was identified in February 2003. In a period of 4 months, the number of SARS cases rapidly accumulated to 1755, with 299 deaths (SARS Expert Committee, 2003). In June, the World Health Organization removed Hong Kong from its list of areas with local transmission of SARS. Although this achievement signified that all known chains of person-to-person transmission of the SARS virus were broken (SARS Expert Committee, 2003), the residual impact of SARS on the survivors appeared significant for several reasons. First, contracting SARS can be a traumatic experience. For instance, the case fatality ratio is approximately to 17%

(SARS Expert Committee, 2003). Physical symptoms are highly debilitating in the acute phase, and social support is lost because of strict infection measures and isolation. Prominent distress and poor quality of life (QOL) may persist after the short-term recovery. Second, as carriers of this new, highly contagious, and lethal disease, SARS survivors tend to experience prejudice, alienation, and social repulsion. The self-esteem of SARS survivors may be adversely affected. Finally, massive doses of steroid are frequently applied to combat the cytokine storm and reduce the inflammatory responses in the treatment of SARS (Lee et al., 2003). Steroid-related mental disturbances during the acute and convalescent phases could be excruciating (Sirois, 2003), thus possibly worsening the recovery process.

The present investigation aimed to evaluate the adjustment outcomes including distress, self-esteem, and QOL of the SARS survivors 1 month after recovery. In addition, we attempted to examine the predictive abilities of a set of demographic, clinical, and social variables for the outcomes.

METHODS

Procedure and Participants

We short-listed a cohort of 308 Chinese adult SARS survivors who attended the Post-SARS Clinic of the Princess Margaret Hospital, Hong Kong, during April and May 2003. They were invited to participate in the study over the telephone. However, we later excluded 25 patients from the list because the novel coronavirus associated with SARS was not found in their arrays. Eleven patients were further removed from the pool for their incorrect or incomplete addresses. In June 2003, postal questionnaires were mailed to 272 potential participants. For comparison with the health status of the SARS patients, 200 community subjects from various sources were invited into the study.

Measures

Three outcome measures were used. First, the General Health Questionnaire-28 (GHQ-28) was used to gauge the level of distress. Four 7-item factors—somatic symptoms, anxiety-insomnia, social dysfunction, and severe depression, which measure different aspects of psychological distress—can be derived from the GHQ-28 (Goldberg and Hillier, 1979). Second, the Rosenberg Self-Esteem Scale was used to measure the level of self-esteem (Rosenberg, 1965). Third, the World Health Organization Quality of Life Measure Abbreviated version (WHOQOL-BREF), consisting of 28 items with 5-point Likert responses, was used to assess the quality of life (QOL) of four domains: physical QOL, psychological QOL, social relationship QOL, and environment QOL (WHOQOL Group, 1998). The Chinese versions of these scales had satisfactory psychometric properties (Chan, 1995; Leung et al., 1997; Zhang and Norvilitis, 2002).