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Patient Education and Counseling 57 (2005) 183–189

Patient Education and Counseling

www.elsevier.com/locate/pateducou

Coping, quality of life and psychological symptoms in three groups of sub-fertile women

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Received 20 January 2004; received in revised form 14 May 2004; accepted 17 May 2004

Abstract

The process of assisted reproductive technology (ART), surrogacy and adoption pose different physical and psychological burdens on sub-fertile populations. Sub-fertile women ($n = 176$) were assessed retrospectively by questionnaire to determine if process (undergoing ART, surrogacy or adoption) or outcome (having a successful versus unsuccessful outcome) affected quality of life, coping style and psychological symptoms. The ART group was significantly younger, had a shorter period of sub-fertility, and was least likely to have a child than the adoptive and surrogate groups. Quality of life and psychological symptoms were not significantly different between groups, although significantly higher Mental Disengagement and Denial coping strategy scores were obtained for the ART group. Social, psychological, health and functioning quality of life, and Denial coping strategies were good predictors of outcome group. Treatment specific counselling of individuals use of coping strategies early on in their in/subfertility career to cope with the reality of prolonged childlessness is indicated.

Keywords: Coping; Research; ART; Surrogacy; Adoption; Quality of life

1. Introduction

Research on in/subfertility is voluminous, and has shown that involuntary childlessness can be devastating, leaves many people unfulfilled [1–4] and can be associated with psychological distress [5–8]. However, little is known about the effects different choices to overcome in/subfertility have on the individual. The three most distinct available choices in the United Kingdom are assisted reproductive technology (ART), surrogacy and adoption. The option chosen depends on a combination of factors, including diagnosis, health, social, economic, age and time factors. Psychological factors, such as how people may cope, tend not to be addressed when the choice for ART, surrogacy or adoption is made.

1.1. Psychological symptoms

Previous reports and research into in/subfertility, have demonstrated the need to monitor the effects of these disparate choices to overcome involuntary childlessness on the individuals [9–11]. In all cases, there is great uncertainty regarding the outcome. In addition, they differ with respect to genetic link and gestational possibilities. These process specific differences are likely to have an effect on those undergoing the procedures in addition to the limitations already imposed on their options (diagnosis and other social, economic, health and time factors). Previous research of adoptive and commissioning mothers has shown that cognitive dissonance plays a role in ways of coping with a chosen procedure and the resultant outcome [1–2]. The aim of this study was therefore to evaluate the psycho-social effects of adoption, surrogacy and ART. Psychological symptoms were anticipated to be lower in those who had higher quality of life scores *and* in those who had a baby over and above coping style or procedures used.

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doi:10.1016/j.pec.2004.05.012

1.2. Quality of life

Two hypotheses were tested in relation to quality of life. Firstly, it was postulated that quality of life would be better and psychological symptoms reduced in individuals who used adaptive coping strategies. Secondly, where a positive outcome has been achieved, regardless of the option chosen, quality of life was expected to be higher. Quality of life is a difficult construct to define and measure because cultural and other personal values determine how the individual's quality of life is judged [12]. Quality of life is used here as a multidimensional construct of happiness or satisfaction, from the perspective of 'an individual's sense of well being which stems from satisfaction/dissatisfaction with areas in life that are important to her [12]'. This definition suggests a cognitive, judgmental experience rather than a judgement and evaluation of conditions in life. Quality of life was expected to be good in those who used adaptive coping strategies *and* in those who had become a family regardless of the method used.

1.3. Coping strategies

Existing research assessing coping strategies in IVF patients has demonstrated that populations using avoidance coping strategies report more psychological distress [6,13]. However, the populations studied were not homogeneous in terms of diagnosis or treatment stage. Markestad et al. [14] observed few differences during the stages of treatment apart from the early stages where psychological distress was highest in men, and Boivin [15] found few differences on psychological and interpersonal functioning. Edelmann et al. [16] also investigated coping, but they incorporated the important distinction between different IVF populations' diagnoses. However, they found little difference in coping strategies used between their different types of ART treatment groups regardless of time trying. More pronounced gender differences in a meta analyses of infertility studies have subsequently been reported [17]. Demyttenaere et al. [18] assessed coping through a desensitisation–stimulation process, linking personality and mood characteristics to pregnancy rates, but their results need further exploration as the route of these effects are not yet fully explained. Todate, studies have therefore focused on diagnostically uniform populations, populations undergoing similar treatments or who were at different stages of treatment. However, no clarification has yet been sought regarding the coping strategies used and quality of life differences in individuals choosing completely disparate options (ART, surrogacy, adoption) to overcome childlessness. It is important to determine if maladaptive coping styles are associated with any one of these procedures. If differences in coping strategies are pronounced, a cognitive behavioural model for treatment, tailored competently to the treatment option chosen would need to be developed. It was hypothesised that coping styles utilised in the three groups would differ.

2. Material and method

2.1. Design and materials

A retrospective questionnaire study was designed to obtain maximum numbers of participants co-operating in an anonymous study enquiring about the processes involved in their choice to overcome childlessness. The questionnaire included a section on socio-demographic and reproductive health issues. This was followed by standardised questionnaires measuring psychological symptoms, Quality of life and coping style. The 28 item General Health Questionnaire (GHQ) measured psychological symptoms on four separate scales, somatic complaints, anxiety, social dysfunction and depression (e.g. ''Have you recently felt that life is entirely hopeless?'', [19]).

Quality of life (QuaL) was measured on the Quality of life index [12]. This scale measures quality of life in four domains separately, health and functioning, socio-economic, psychological/spiritual and family. Each sub-scale measures satisfaction with that particular dimension (e.g. ''How important is your potential for having a child?'') and ranks them in terms of importance to the individual (e.g. ''How satisfied are you with . . .?''). This measure of QuaL was chosen because the authors have incorporated questions relating specifically to impaired health conditions affecting quality of life, e.g., cancer and renal quality of life. These items were modified to reflect childlessness and subfertility. [20].

The multidimensional COPE was chosen in this study because it was developed within the theoretical constructs of stress [21] and behavioural self-regulation [22,23]. It allows for an assessment of coping dispositions and situation specific coping tendencies [24]. As option chosen to overcome sub-fertility is largely determined by diagnosis, it was expected that a range of different coping responses may be utilised, and these were therefore measured separately. The dispositional questionnaire format was chosen because the different stages of treatment success or failure could influence situation specific tendencies, which would contaminate the results. The questionnaire consists of 53 items distributed within 14 scales. Questions reflect ways of coping, e.g. ''I get upset and let my emotions run out''. The scales measure conceptually distinct aspects of (1) problem focused coping; (2) emotion focused coping; and (3) coping responses which may be less useful. All standardised questionnaires have high reported validity and reliability (GHQ reliability = .95 [19]; QuaL reliability of the entire scale = .93 [20] and Cope, all sub-scales have acceptably high alpha's, with only 1 falling below .6 [23]), and have been used in other research [4].

2.2. Procedure

Surrogacy agencies and adoptive agencies and social services throughout the UK and several clinics offering