Coping Characteristics of Women Suffering from Primary Infertility

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ABSTRACT

Introduction: Infertility invokes immense stress, especially in women. Coping skills and characteristics are driven in an adaptive and maladaptive way to deal with the life stressors. The type of characteristic pulled in has a substantial impact on the individual entangled in the life situation. Study was done to know how do they cope with stress.

Material and Methods: The present study included a total of 115 female patients who registered in the Gynecology OPD for infertility treatment. 15 were excluded on the basis of Secondary Infertility, Comorbid medical/surgical illness and previous and past history or treatment for Psychiatric diagnoses. They were interviewed on Brief Cope scale, after consent. Questionnaire was explained to them in the language they understood. Data was analyzed using appropriate statistics and software.

Result: Highest mean scores was observed for Active Coping. It was followed by engagement in Religious activities and Self Distraction. Analysis between coping skills and various demographic details like Age, Education, Type of Family, Duration of Marriage, Previous treatment taken or not, Duration of ART and Number of ART failures also yielded some statistically significant results.

Conclusion: Life stressors invokes imbibed coping skills in response to the situations. Maladaptive patterns usually have negative impacts. It is important to understand the coping patterns in these women to know their maladjustments.

Keywords: Infertility; Stress; Coping Skills

INTRODUCTION

Infertility is an extremely isolating experience. In India, childless women suffer discrimination, stigma and ostracism. The stigma extends to the wider regions, to the family, including siblings, parents and in-laws, who are deeply disappointed for the loss of continuity of their family and contribution to their community. Most Women find it difficult to cope with.

Coping strategies are specific effort, both behavioral and psychological, that people use to battle out stressful events. Two main coping strategies are: Problem-focused and emotional-focused. In Problem-focused strategies, constructive actions are dragged for reducing or changing stressful circumstances. Emotion–focused strategies attempts to regulate the emotional consequences of stressful conditions and establish affective and emotional balance through control of emotion due to the stressful situations.[1] In chronic stressful events like infertility, emotion-focused strategies yield negative impact on mental and physical health outcome.[2] Though childlessness is a problem that affects both the partners of the marital unit, the woman is more affected than her husband. To the strong psychological impact of this immense stressful situation, more often, she pulls in maladaptive coping strategies.

Most researchers believe that infertility is the source, rather than the cause, of psychological distress, which require mobilization of good amount of coping resources. Omoaregba *et al* indicated that the prevalence of probable psychological distress was significantly higher among the infertile group compared with their fertile counterparts, which necessitates the use of adaptive coping skills to deal with the distress.[3]

The coping styles adopted by infertile women have been found different from normal women. Joshi et al, in their research observed that**,** fertile women were found to be higher on cognitive avoidance as compared to their infertile counterparts.[4] Apart from avoidance, the researchers also found that infertile and normal women differ on their problem focusing and problem-solving strategies. Infertile women were involved less in problem solving and seeking rewards.

In their designed Ways of Coping Scale, Schmidt et al observed frequent use of active-avoidance coping (e.g. avoiding being with pregnant women or children, turning to work to take their mind off things) among infertile women.[5] While Aflakseir, during assessing strategies of coping with infertility stress, using the same scale, showed that women with fertility problem used passive avoidance coping more frequently than other forms of coping strategies. In passive avoidance coping, the participants looked for a miracle and wished for positive changes.[6]

While studying coping mechanisms in infertile couples, it is observed that coping skills that are commonly used by both genders while undergoing ART, includes seeking medical advice and engaging in wishful thinking.[7] Infertile women however may differ in other aspects, as they use proportionately greater amounts of confrontative coping, accepting responsibility, seeking social support and escape/ avoidance when compared with men.[8]

Those women who reported poorest adaptation to IVF failure were more likely to have reported feeling a general loss of control over their lives as a result of infertility, tended to use escape as a coping strategy and reported having felt some

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responsibility for their IVF failure.[9]

Lechner et al stated that, after the recognition of involuntary childlessness, individual will feel a need for support towards accepting this definite loss and towards finding alternatives in their life without children. It could well be that the same social support is experienced very differently during the phase of treatment in comparison with the phase of definite involuntary childlessness and thus in their study they observed, women used more often a passive coping style while undergoing infertility treatment.[10]

Owing to the despair of the crisis and also perceiving reduction in support from others, these females refrain from sharing their feelings with others. Many women suffering from infertility, who took treatment, either by IVF or Ovulation induction medication, has been found to use isolation behaviors such as self-talk and sleeping most of the time as strategies to cope with the situational crisis.[11]

Purposeful strategies of avoidance are used in various ways. Because, infertility is conceptualized as a chronic, unpredictable psychological stress, it is identified that women appraised infertility as threatening and experiencing emotional distress, adopted avoidance of coping mechanism. Wherever possible, they chose not to enter settings where intrusive questions and critical comments are routinely encountered. Avoiding public functions and temple festivals and chooses settings that allow for invisibility, such as film showings is a common practice.[12]

Bayley et al observed that infertile women use Negative model of the self (model of self as unworthy of love; high attachment anxiety). These suffering women have been reported with significantly greater use of the coping strategies of SBA (self-blame and avoidance), in relation to their infertility when compared with their spouse.[13]

Using Brief Cope Scale in infertile women, Donkor S et al found that infertile women keep information about their infertility to themselves, using avoidance and other majority coped with religious method.[14] Joshi et al found that problem solving approach and cognitive avoidance was lesser in infertile women as compared to normal women.[15]

Gourounti et al propagate the merit of understanding of the role of control perception and coping in psychological stress of infertile women. Low perception of personal and treatment controllability was associated with frequent use of avoidance coping (denial, self-distraction, behavioral disengagement, substance use) and high perception of treatment controllability was positively associated with problem-focused coping (active coping, using instrumental support and planning).[16] In a recent study among the various coping strategies in infertile females, venting was the most common coping method that was adopted.[17]

Apart from above hackneyed observations, researchers have also found out infertile women uses mature mechanism of coping as compared to the fertile ones. In case of use of individual defenses, the infertile women use both sublimation and idealization to a greater extent as compared to the fertile women.[18] Study was done to know the stress coping mechanism adopted by infertile women.

MATERIALS AND METHODS

The study was carried out in a large tertiary care hospital situated in Pune. The Centre is furnished with all state of art technology required for In-vitro Fertilization and other interventions required for treatment of Infertility, aimed at conceiving.

Those Women suffering from Infertility who were seeking or undergoing interventions for Infertility, both Primary and Secondary, at the center were interviewed. They were selected randomly.

This cross-sectional study was conducted for one year.

Inclusion Criteria

1. All Females attending the Infertility OPD at ART center.
2. All suffering from Primary Infertility.
3. All with age 20 years and above.
4. All having education 8th class and above.

Exclusion Criteria

1. Have undergone or undergoing treatment for any Psychiatric illness.
2. Suffering from any co-morbid medical / surgical conditions.
3. All suffering from secondary infertility.

Methodology for Data Collection

After approval from Institutional Ethics Committee, a total of 115 female patients who registered in the OPD for infertility treatment were interviewed.

All patients were interviewed in the OPD, when they were waiting for their appointment. The interview took place in parts, before and after the patient visited the gynecologist. After adequate briefing, patients were asked to mark the answers on the hard copy of the questionnaires, at their own speed.

15 patients were excluded based on the factors of secondary infertility, previous psychiatric illness and co morbid medical illness.

Coping Operation Preference Inquiry Scale, BRIEF COPE Scale.[19]

It is a self-report questionnaire used to assess a number of different coping behaviors and thoughts a person may have in response to a specific situation. It is made up of 14 subscales: self-distraction, active coping, denial, substance use, use of emotional support, use of instrumental support, behavioral disengagement, venting, positive reframing, planning, humor, acceptance, religion, and self-blame. After reading a situationally-specific scenario, 28 coping behaviors and thoughts (2 items for each subscale) are rated on frequency of use by the participant with a scale of 1 (—I haven‘t been doing this at all) to 4 (—I‘ve been doing this a lot). Internal reliabilities for the 14 subscales range from 0.57-0.90.

The scale can also be further organized as (i) problem-focused coping (three subscales: active coping, planning and use of instrumental support); emotional focused coping (three

subscales: use of emotional support, positive reframing and religion); (iii) adaptive coping (two subscales: acceptance and humor); and (iv) maladaptive coping (six subscales: venting, behavioral disengagement, self-distraction, self-blame, substance use and denial).[20]

Patients were asked to give answers in reference to their Infertility. The scale has been used in Hindi in Indian studies.[21,22]

STASTICAL ANALYSIS

ANOVA and chi square tests were used with the help of SPSS software.

RESULTS

In the present study most prevalent coping pattern was Active Coping followed by Religion and Self Distraction (Fig 1, Table 1). During statistical analysis with age groups, significant values were observed for Denial. Among the women with differences in their educational status, the coping patterns which had significant statistical values were Denial and Humor. Venting was significant when types of family were observed and was more prevalent in the Extended family. When considering Humor in relation to duration of marriage, statistical significance was observed (Table 2).

Among those who had taken any kind of treatment or not, before attempting ART, significant difference was observed in Active coping, Denial and Humor, as far as mechanisms of coping were concerned. Statistical difference was also evident for the domain Positive reframing, i.e. these women also view this stressful situation in a more favorable light. Also, higher mean scores were observed for infertile females who had taken other treatment before ART and thus a mix pattern of all; problem focused, emotion focused, adaptive and maladaptive coping mechanism is apparent in these females.

During analysis of coping patterns with duration of ART, significant difference was observed for Denial and Self-Blame (Table 3). While Denial was prevalent, irrespective of increasing or decreasing duration of treatment, prevalence of Self- Blame seems to have a positive correlation with duration of ART. Significant values were noted when analysis done for coping patterns namely Self-Distraction, Using Instrumental Support and Religion and number of ART failures (Table 4).

Brief cope	Mean	SD
Self-Distraction	4.44	1.77
Active coping	5.18	1.83
Denial	3.18	1.35
Substance Use	2.27	0.94
Using Emotional Support	3.42	1.36
Behavioural Disengagement	3.21	1.35
Venting	3.71	1.82
Using Instrumental Support	3.95	1.67
Positive Reframing	4.26	1.56
Self-blame	3.72	1.61
Planning	4.04	1.43
Humor	2.13	0.42
Acceptance	4.25	1.42
Religion	5.03	1.58

Table-1: Coping characteristics in Infertile Women

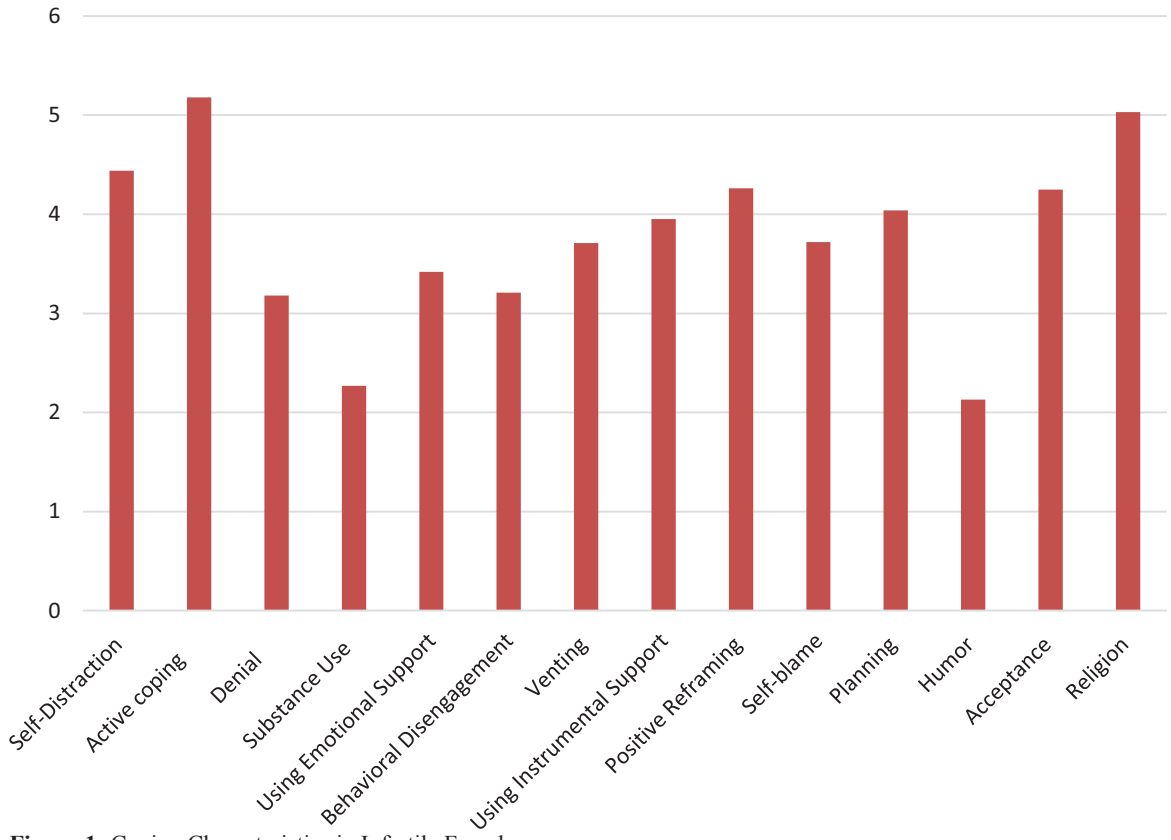

Figure-1: Coping Characteristics in Infertile Female

Brief cope	Duration of marriage(years)										*P*-value
	1 - 2 (n=9)		3 - 4 (n=31)		5 -6 (n=24)		7 - 8 (n=16)		> 8 (n=20)		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Self-Distraction	4.4	2.1	4.1	1.5	5.0	1.8	4.6	1.9	4.2	1.8	0.300
Active coping	4.4	1.4	5.3	1.8	5.3	1.8	5.1	1.8	5.2	2.1	0.787
Denial	3.0	1.7	3.2	1.3	3.6	1.5	3.0	1.1	3.0	1.3	0.538
Substance Use	2.0	0.0	2.4	1.1	2.5	1.4	2.1	0.3	2.2	0.5	0.519
Using Emotional Support	3.2	1.3	3.5	1.3	3.4	1.3	3.6	1.5	3.4	1.5	0.983
Behavioral Disengagement	2.9	1.3	3.6	1.4	3.3	1.5	2.5	0.8	3.2	1.4	0.111
Venting	3.2	1.6	3.7	1.9	3.8	1.6	3.8	1.9	3.8	2.1	0.938
Using Instrumental Support	3.6	1.7	3.9	1.8	4.1	1.4	3.8	1.7	4.1	1.8	0.904
Positive Reframing	3.9	1.6	4.2	1.7	4.2	1.4	4.9	1.6	4.2	1.6	0.527
Self-blame	3.2	0.8	3.5	1.9	3.7	1.2	4.1	1.7	3.9	1.9	0.660
Planning	3.8	1.3	4.0	1.4	4.3	1.4	4.3	1.8	3.8	1.4	0.748
Humor	2.1	0.3	2.3	0.7	2.0	0.2	2.0	0.0	2.1	0.2	0.038
Acceptance	3.8	1.4	4.3	1.3	4.2	1.3	4.6	1.7	4.2	1.6	0.774
Religion	4.6	0.9	4.6	1.6	5.4	1.8	5.3	1.4	5.2	1.6	0.331

Table-2: Correlation of Coping Patterns with Duration of marriage.

Brief cope	Duration of treatment(years)						*P*-value
	< 1 (n=48)		1 - 2 (n=29)		> 2 (n= 23)		
	Mean	SD	Mean	SD	Mean	SD	
Self-Distraction	4.27	1.71	4.38	1.63	4.87	2.03	0.403
Active coping	5.04	1.79	4.86	1.66	5.87	2.01	0.109
Denial	3.56	1.54	2.66	0.94	3.04	1.15	0.013
Substance Use	2.17	0.78	2.45	1.33	2.26	0.62	0.449
Using Emotional Support	3.44	1.38	3.24	1.21	3.61	1.53	0.628
Behavioral Disengagement	3.25	1.36	2.93	1.22	3.48	1.47	0.338
Venting	3.67	1.72	3.52	1.77	4.04	2.10	0.573
Using Instrumental Support	3.85	1.56	3.72	1.65	4.43	1.88	0.270
Positive Reframing	4.13	1.57	4.14	1.55	4.70	1.55	0.315
Self-blame	3.35	1.30	3.83	1.49	4.35	2.14	0.047
Planning	3.81	1.38	4.10	1.29	4.43	1.67	0.224
Humor	2.17	0.48	2.10	0.41	2.09	0.29	0.699
Acceptance	4.00	1.47	4.34	1.29	4.65	1.43	0.180
Religion	5.10	1.59	4.66	1.61	5.35	1.50	0.265

Table-3: Correlation of Coping Patterns with Duration of taking ART.

Brief cope	Number of ART failure								*P*-value
	0 (n=7)		1 (n=20)		2 (n= 54)		>2 (n= 19)		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Self-Distraction	3.00	1.00	4.60	1.50	4.76	1.84	3.89	1.73	0.036
Active coping	4.14	1.21	5.50	1.70	5.33	1.78	4.79	2.18	0.251
Denial	2.57	0.98	3.25	1.55	3.26	1.38	3.11	1.20	0.639
Substance Use	2.71	1.89	2.15	0.49	2.24	0.99	2.32	0.67	0.583
Using Emotional Support	3.14	1.21	3.10	1.21	3.61	1.43	3.32	1.38	0.471
Behavioral Disengagement	3.29	1.25	3.30	1.49	2.98	1.27	3.74	1.41	0.209
Venting	3.29	1.98	3.30	1.38	3.70	1.79	4.32	2.19	0.322
Using Instrumental Support	2.29	0.49	4.30	1.66	4.02	1.69	4.00	1.63	0.044
Positive Reframing	2.86	1.21	4.55	1.43	4.41	1.58	4.05	1.54	0.064
Self-blame	3.43	1.13	3.40	1.64	3.80	1.59	3.95	1.84	0.686
Planning	3.14	1.21	4.15	1.27	4.22	1.62	3.74	0.93	0.207
Humor	2.29	0.76	2.10	0.31	2.06	0.23	2.32	0.67	0.086
Acceptance	3.43	1.51	4.45	1.43	4.20	1.53	4.47	0.96	0.359
Religion	3.43	1.13	5.55	1.57	5.31	1.58	4.26	1.10	0.001

Table-4: Correlation of Coping patterns with Number of ART failures

DISCUSSION

Active coping, which can be stipulated as exerting efforts and taking actions, to remove or circumvent the stressor is the commonest coping mechanism among these infertile women (Table 1). While increasing engagement in religious activities and distraction from perceived stress of infertility also seems to be a prevalent pattern among the infertile women seeking and undergoing ART. It is apparent that problem focused coping and emotion focused coping are prevalent among infertile women, which is similarly observed in other studies, respectively.[23,24] Maladaptive coping pattern in the form of Self Distraction is also observed, which is consistent with other study.[25] Thus, in the present sample a mix pattern of prevalence of coping mechanisms is observed.

Denial was evident in all age groups and highest scores were found for infertile females of age 26-30 yrs. Probably these women continue to attempt to reject the reality of their infertile status.

Denial and Humor, both seems to have a positive correlation with education, as the education increases prevalence of both patterns increases. This suggests that education probably has mixed relationship with both maladaptive and adaptive coping strategies, respectively.

Venting involved increased awareness of one's emotional distress and discharging them on to relatives and others. Constant criticism from a greater number of relatives, as in Extended families, might amplify the agony and letting out emotions seems to be in response to stigmatization. Riessman stated, although much support is not gathered from the relatives and frequent quarrels occasionally leads to hostile environment.[26]

Humor was evident in all groups with different marriage duration, however marginally more common among those who are married for 3-4 years. It seems pattern of making joke about this stressful event is also prevalent among infertile women, irrespective of number of years of marriage. Among infertile women, Self- Blame has been common. "There is something wrong with me" is a common statement.[26,27] With the present observation it is apparent that as the time passes, tendency to criticize themselves increases while undergoing ART (Table 3).

While distracting oneself from the stress of bearing infertility seems to occur after 2 ART failures. Seeking assistance, information and advice about overcoming infertility and Engagement in religious activities is observed to be became prevalent in those who once had a failed result of ART.

CONCLUSION

Coping characteristics are also of prime importance for Women with agony of Primary Infertility. It's a well-known fact that Psychological Stress affects bodily functions and responses, it will be prudent to know the coping skills and patterns of these women to understand how they are dealing with stress, specially not in a maladaptive way.

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