

Psychosocial Issues, Coping Strategies and Psychological Symptoms of Hirsute Women

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Abstract

Background: Hirsutism is one of the medical condition related to the physical appearance of the women and is extra hair growth on their body areas which are usually without hair, like chest, abdomen, face etc. Even with different coping strategies, hirsute women experience psychosocial issues which may be responsible for poor mental health.

Objective: To investigate relationship between psychosocial issues and psychological symptoms and also the role of coping strategies in managing psychosocial issues.

Methodology: Quantitative correlational research design was used to test the objective. A sample of 100 hirsute women was recruited through purposive and snow ball sampling technique. Psychosocial Issued of Hirsute Women Scale (PIHWS), Coping Strategies Scale for Hirsute Women (CSSHW) and Depression Anxiety Stress Scale (DASS-21) were used.

Results: Pearson correlation analysis showed that psychosocial factors have a positive correlation with poor psychological symptoms ($p < 0.01$). Linear regression analysis showed that both the factors of Coping Strategies were significant predictor of psycho social issues in hirsute women. Emotional Focus Coping was negative significant predictor of psychosocial issues ($p < 0.01$). Problem Focus Coping was a significant positive predictor of Psychosocial Issues of hirsute women ($p < 0.01$).

Conclusion: Our study showed that Coping Strategies' are predictor of psychosocial issues and psychosocial issues are also predictor of poor mental health.

Key words: Psychosocial issue, mental health, hirsutism, hirsute women, coping strategies, polycystic ovary syndrome, psychological symptoms.

Introduction

One of the biggest problems related to the physical appearance of the women is extra hair growth on their bodies' areas which are usually without hair, like chest, abdomen, face etc. and this condition is called hirsutism.¹ The occurrence of excessive hair growth is a significant issue for women across many cultures because even small number of hair seemed undesirable to them. This makes the women to feel "unusual" and

"unfeminine".² Mostly, it has been shown that the development of dark hairs on the upper lip and chin is more disturbing for the females due to which they seek medical treatment.³ According to a study, more than 50 percent of women in the world have unwanted facial hair.⁴ It has been studied that around 20% of females remove their facial hair at least once a week.⁵

Development of the hirsutism is due to a number of causes. The amount of the hair development is determined by the genetic makeup. The difference in hair distribution and color depend on the heredity,⁶ but the hirsutism is biological or medical condition which is caused by excessiveness of male hormone "androgens".⁷ Androgens are male hormones like testosterone that are normally responsible for excessive hair growth, heavy voice and other secondary male characteristics.⁸

The impact of hirsutism on the female is profound which may lead to the psychological distress in the female. These problems are related to self-perception, disturbances in family relationships, low confidence, shame, feeling inferiority and others. It is because when someone

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Authors Contribution

SHC & MR conceptualized the project along with literature search & statistical analysis. The data collection also done by SHC. Drafting, revision and writing of manuscript was done by MR.

is living with lifelong medical disease, different psychological and behavioral changes occur in them which may lead to the disruptions in the life. Hirsute women also face different social problems that may lead them for psychological issues as well.⁹ This condition is likely to have an intense effect on women's self-esteem, confidence, social interaction and quality of life in particular. Women with facial hair have increased personal problems.¹⁰ Patients with hirsutism experience the psychosocial issues which may be responsible for poor psychological problems.¹¹

As a human being, most of the hirsute women use different coping strategies to deal with stress and worries. Coping is actually a way to minimize and tolerate the stress and conflict. It may depend on individual difference in the type of coping style they chose. Sometime, they chose the multiple coping styles at the same time to release their stress.¹² In case of hirsutism, female use general methods of facial hair removal such as, chemical depilation, tweezing, waxing, shaving, laser and electrolysis. All methods have restrictions in terms of tolerability, effectiveness, or comfortableness and affordability.⁵ These coping strategies may reduce or increase the psychosocial issues depending on the type of strategy they use.

This current study was aimed to investigate the consequences of the condition of hirsutism in females in terms of psychosocial issues their psychological symptoms and their coping strategies which help them to come out from the psychological symptoms. For this purposed, study was designed to measure psychosocial issues, psychological symptoms of the hirsute women by using indigenous developed tools, In addition, the role of coping strategies used by hirsute women were also studied.

Methodology

Quantitative study design was used to collect data from 100 participants through purposive sampling from different laser centers, hospitals and beauty salons. In selection of the participants, only those women were selected who had excessive hair growth on chin, face, upper lips, on upper arms, abdomen, legs, lower and upper back. Those who have excessive hair growth on these areas, were included in the study. This is called visually scoring method and has been already used in assessment of the hirsute women.¹³

Data on demographic variables like age, education, marital status, qualification was collected on proforma. A newly developed scale by the investigator, "Psycho-social Issues in Hirsute Women

Scale" (PIHWS) was used to investigate the psychosocial issues in hirsute women. It is a self-report measure of 3-point rating scale and comprised on 26 items. This scale comprised of two factors. First factor is "Psychological Burden", it contains 12 items; second factor is "Social Issues", and it contains 14 items. This indigenous scale show high reliability (is the degree to which the measure of a construct is consistent, measured by Cronbach's Alpha ranges from .89) and validity (refers to the extent to which a measure adequately represents the underlying construct, measured through correlation test with an already valid scale and we used DASS-21). The two factors of newly developed scale has significant positive correlation ($p < 0.05$) with DASS-21. A scale on coping strategies, "Coping Strategies of Hirsute Women Scale (CSHWS)" was also developed by the investigator. The aim of coping scale was to identify the coping strategies that were used by hirsute women. It is a self-report measure of 3-point rating scale and comprised on 19 items that showed the main influence of coping style of hirsute women. This scale consists of two factors. First factor is "Emotional focus coping" it contains 13 items; second factor is "Problem solving coping" and it contains 6 items. In addition, Depression Anxiety Stress Scale (DASS) consisting of three factors, Depression, Anxiety and Stress¹⁴ was also used to check Psychological Symptoms of the hirsute women.

The data were analyzed with the Statistical Package for Social Sciences (SPSS, version 21.0). Frequencies and percentages of categorical demographic variables were found to assess the sample characteristics. Means and Standard Deviation of the continuous variable were obtained. Moreover, Pearson Correlation analysis was used to find any correlation among different factors of psychological symptoms. Regression analysis was used to find any predictors of psychological symptoms. Independent sample t-test and ANOVA were conducted to find out any significant difference among differ demographic variables on the dependent variables. Cohen's d value was used measure the effect size which actually indicate the standardized difference between two means.

Ethical consideration, permission from institutional committee was taken and an informed consent was also taken from the participants, then rationale of the study was explained briefly to the participants and data was collected. The comfort level of participants was considered by researcher and they have free will to participate in the study without any pressure. The participants were also informed that they have right to withdraw if they are feeling uncomfortable.

Results

The demographic variables of study participants belong to age range of 16-52 years with mean age of 28.8 years.

Table 1: frequency and percentages of demographic variables of participants. (N=100)

Variable	f (%)
Social economics status	
High	21 (21.4)
Middle	71 (71.6)
Low	08(8.0)
Marital status	
Married	53 (53.0)
Unmarried	47 (47.0)
Qualification	
Illiterate	12 (12)
Below metric	4 (16)
Metric	22 (22.0)
Above metric	62(62.0)
Occupation	
Student	40 (40.0)
House wife	44(44.0)
Job holder	16 (16.0)

Table 1, showed around 53% women were married while 47% were unmarried. Further, 12% were uneducated, 22% were below metric and 62% were above metric. The maximum (71%) of women belonged to middle socio economic group while (4%) belonged to low social economic group of society.

Correlation analysis showed that there is negative relationship between psychological symptoms and copying strategies in hirsute women which indicate that women with good coping strategies have less psychosocial issues and they have good mental health as well. There is highly positive relationship between psychosocial issues and mental health. If the psychosocial issues

increase, psychological symptoms are increased shown in Table-2.

It was hypothesized that psycho-social issues' factors (Psychological Burden and Social Withdraw) predict psychological symptoms among hirsute women. This hypothesis was tested by regression analysis (Table-3).

As shown in Table-3, linear regression analysis of predictors of psychological symptoms of hirsute women. The results showed that factors of psychosocial issues were significant positive predictor of psychological symptoms of hirsute women. The overall model was significant $F(2, 97) = 100.01, p < .001$ and the both the predictors, psychosocial burden ($\beta = .536, t = 6.987, p < .000$) and social withdrawal ($\beta = .363, t = 4.736, p < .000$) were significant positive predictors of psychological symptoms.

It was hypothesized that coping strategies are predictors of psychosocial issues of hirsute women. This hypothesis was tested by regression analysis (Table-4).

As shown in Table-4, linear regression analysis of predictors of Psychosocial Social Issues of hirsute women. The results showed that both the coping strategies were significant predictor of psycho social issues. Emotional focus coping was negative significant predictor of psychosocial issues. Problem focus coping was a significant positive predictor of psychosocial Issues of hirsute women. The overall model was significant $F(2, 97) = 214.58, p < .00$ and the one predictors, emotional coping ($\beta = -.247, t = -4.69, p < .000$) was highly significant negative predictor of psychosocial issues and problem focus coping ($\beta = .74, t = 14.12, p < .000$) was highly significant positive predictor of psychosocial issues (psychosocial burden and social withdrawal) in hirsute women.

Table 2: Summary of inter-correlations, means, standard deviations of psychosocial issue, coping strategies' factors and dass-21.

	PB	SW	PSIT	ECS	PCS	CST	Str	Anx	Dep	DASST
PB		.658**	.892***	.668***	.881***	-.493***	.758***	.737***	.737***	.778***
SW	---		.927***	-.574***	.667***	-.451***	.663***	.679***	.70***	.712***
PSIT	---	---		-.676***	.839***	-.516***	.775***	.774***	.787***	.815***
ECS	---	---	---		.559**	.968***	-.582***	.615***	-.634***	-.639***
PCS	---	---	---	---		-.334***	.734***	.679***	.717***	.743***
CST	---	---	---	---	---		-.441***	-.494***	-.505***	-.502***
Str	---	---	---	---	---	---		.848***	.913***	.964***
Anx	---	---	---	---	---	---	---		.848***	.937***
Dep	---	---	---	---	---	---	---	---		.965***
DASST	---	---	---	---	---	---	---	---	---	
M	19.13	33.69	42.82	25.35	6.55	31.89	11.51	9.68	11.60	32.80
SD	7.80	9.41	15.69	11.18	2.96	9.83	4.39	4.11	4.53	12.47

Note: M= mean, SD= standard deviation, ECS= Emotional coping strategies; PCS= problem focus coping strategies; CST= total of coping Scale, PB= psychological burden SW= social withdrawal, PSST= psychosocial issues scale Str= stress, Anx= anxiety, Dep= depression, DASST= Depression anxiety stress scale total.

Table 3: Linear regression analysis of predictors of psychological symptoms in hirsute women. (N=100)

Variable	B	SE B	β	t	p
Psychological burden	.857	.123	.536	6.987	.000***
Social withdrawal	.481	.102	.363	4.736	.000***
R ²	.673				
F	100.018				
ΔR^2	.667				

Note: ***p < .001.

Table 4: Linear regression analysis of predictors of psycho-social issues in hirsute women. (N=100)

Variable	B	SE B	β	t	p
EF coping	-172	.037	-.247	-.697	.000***
PF coping	1.95	.138	.742	14.12	.000***
R ²	.85				
F	214.58				
ΔR^2	.81				

Note: ***p < .001.

Table 5: Means, standard deviations, t and p values of the marital status of hirsute women on psychosocial scale and its factors. (N=100)

Variable	Marital Status	M	SD	t	p	95% CI LL	UL	Cohen's D
PB	Married	19.06	7.60	-.116	.908	-3.2	2.92	0.724
	Unmarried	19.24	7.99					
SW	Married	25.06	9.35	1.43	.154	-1.02	6.39	0.282
	Unmarried	22.37	9.32					
PST	Married	44.12	15.32	.79	.426	-3.71	8.71	0.162
	Unmarried	41.62	15.93					

Note: df. 98, M= mean, SD= standard deviation, PB= psychological Burden SW= social withdrawal, PSST= psychosocial issues scale.

Table 6: Means, standard deviations, t and p values of the marital status of hirsute women on coping scale and its factors. (N=100)

Variable	Marital Status	M	SD	t	p	95% CI LL	UL	Cohen's d
ECS	Married	25.17	12.47	-.235	.815	-4.99	3.93	0.048
	Unmarried	25.69	10.05	-.232	.817	-5.05	4.00	
PCS	Married	6.48	2.68	-.193	.848	-1.29	1.06	0.043
	Unmarried	6.60	3.18	-.195	.846	-1.28	1.05	
CST	Married	31.65	11.09	-.342	.746	-4.57-4.57	3.28	0.065
	Unmarried	32.30	8.67	-.324	.746		3.28	

Note: ECS = emotional coping strategies; PCS = problem focus coping strategies; CS T = total of coping scale.

Table 7: Means, standard deviations, and p values of the age of hirsute women on psychosocial scale and its factors. (N=100)

Factors	Age								F	p
	16-21 (n=21)		22-25 (n=30)		26-35 (n=26)		37-52 (n=23)			
	M	SD	M	SD	M	SD	M	SD		
PB	17.80	8.68	20.03	6.53	19.12	6.97	19.28	9.34	.333	.801
SW	21.42	21.44	22.93	6.30	6.36	7.19	23.62	11.28	1.15	.333
PSIT	39.23	19.70	42.96	11.46	45.48	11.94	42.91	19.46	.603	.614

Note: M= mean, SD= standard deviation, PB= psychological Burden SW= social withdrawal, PSST= psychosocial issues scale

It was hypothesized that marital hirsute women experience more psychosocial problems as compared to unmarried women shown in Table-5.

As shown in Table-5, means, standard deviations, t and p values of the marital status of hirsute women on psychosocial scale and its factors. The results showed that there was no significant mean difference in marital status on the basis of psychosocial issues of in hirsute women.

It was hypothesized that there is no significant difference of coping between married and unmarried hirsute women shown in Table-6.

As shown in Table-6, means, standard deviations, t and p values of the marital status of hirsute on coping Scale and its factors. The results showed that there was no significant mean difference among hirsute women on different marital status.

It was hypothesized that there would be significant difference in age category on the basis of their psychosocial problems shown in Table-7.

Table 8: Means, standard deviations, and p values of the age of hirsute women on coping scale and its factors. (N=100)

Factors	Age								F	p >
	16-21		22-25		26-35		37-52			
	(n=21)	(n=30)	(n=26)	(n=23)	M	SD	M	SD		
ECS	26.38	3.62	25.43	2.78	24.12	2.31	26.04	3.15	.577	.631
PCS	5.80	21.44	6.66	6.30	6.88	7.19	6.70	11.28	.184	.907
CST	32.19	9.70	32.10	7.91	31.00	9.83	32.75	12.31	.133	.940

Note: M= mean, SD= standard deviation ECS= Emotional coping strategies; PCS= problem focus coping strategies; CS T= total of coping scale

As shown in Table-7, means, standard deviations, t and p values of the age of hirsute women on psychosocial issues Scale and its factors. As above table shows that there is no significance relationship between age group of hirsute women. The problem is existing in every age group.

It was hypothesized that there would be significant difference in age category on the basis of their coping strategies shown in Table-8.

As revealed in Table-8, means, standard deviations, F and p values of the age of hirsute women on coping Scale and its factors. As above table shows that there is no significance relationship between different age group of hirsute women.

It was hypothesized that there would be relationship between occupation and psychosocial in hirsute women shown in Table-9.

As revealed in Table-9. Means, standard deviations, F and p values the results shows there is no significant relationship between occupation and psycho social issues

It was hypothesized that there would be relationship between education and psychosocial in hirsute women as shown in Table-10.

Table-10 showed Means, standard deviations, t and p values. It showed that there were difference in psychosocial issues of hirsute women on the basis of their education level, it was found that the women whose education above metric perceived more psychosocial problems as compare to only metric qualification hirsute women.

Table 10: Means, Standard deviations, t and p values of the education of hirsute women on psychosocial scale and its factors. (N=50)

Variable	Education	M	SD	t	p	95% CI LL	UL	Cohen's d
PI	Metric	16.20	6.06	2.31	.024*	-9.51	-.17	0.67
	Above metric	21.31	8.80	2.27		-9.64	-.58	
SI	Metric	21.76	8.63	-2.07	.186	-8.87	1.74	0.39
	Above metric	25.27	9.27	-2.05		-8.78	1.78	
PSIT	Metric	37.96	22.96	2.12	.050*	-17.27	.01	0.43
	Above metric	46.59	16.41	2.09		-17.43	.17	

Note: M= mean, SD= standard deviation, PI= psychological issue SI= social issue, PSST= psychosocial issues scale

There would be significant relationship between education and coping in hirsute women as shown in Table-11.

As revealed in Table-11, means, standard deviations, t and p values of the education of hirsute women on coping Scale and its factors. The results indicated that there was a significant mean difference among women with different qualifications. To sum up, the results illustrated that the women who had above metric degree, showed a significant mean difference on emotional focus coping, problem solving coping, and total of coping scale as compared to women who had metric degree.

There would be significant relationship between socio economics status and mental health of hirsute women shown in Table-12.

Table 9: Means, standard deviations, and p values of the occupation of hirsute women on dass and its factors. (N=84)

Factors	Occupation				F	p >
	Students (n=40)		House wives (n=44)			
	M	SD	M	SD		
Stress T	10.57	4.40	12.36	4.23	3.55	.063
Anxiety T	9.17	3.91	10.36	3.98	1.95	.166
DepT	11.25	4.45	12.18	4.39	.92	.338
DASST	31.00	12.06	34.91	12.03	2.208	.141

Note: M= mean, SD= standard deviation, DASST= depression anxiety stress scale

Table 11: Means, standard deviations, t and p values of the education of hirsute women on coping scale and its factors. (N=50)

Variable	Education	M	SD	t	p	95% CI LL	UL	Cohen's d
EC	Metric	29.08	9.98	-2.34	.025*	.995	14.43	0.67
	Above metric	21.36	12.85	-2.28		.860	14.57	
PC	Metric	5.84	2.49	-1.34	.044*	-3.16	-.041	0.60
	Above metric	7.45	2.84	-1.33		-3.19	-.031	
CST	Metric	34.96	8.85	-2.01	.042*	.332	11.8	0.64
	Above metric	28.81	10.18	-1.98		.230	11.97	

Note: M= mean, SD= standard deviation ECS = emotional coping strategies; PCS = problem focus coping strategies; CS T = total of coping Scale

Table 12: Means, standard deviations, and p values of the socioeconomic status of hirsute women on dass and its factors. (N=100)

Factors	Socioeconomic Status						F	P
	High n=21		Middle n=71		Low n=8			
	M	SD	M	SD	M	SD		
StressT	10.91	4.75	11.7	4.17	15.50	4.07	3.89	0.02
AnxietyT	9.19	4.62	9.54	3.93	11.25	3.65	1.79	0.17
DepT	10.19	5.03	11.28	4.20	16.00	3.74	4.52	0.01
DASST	31.00	13.94	31.99	11.66	43.75	10.96	3.65	0.03

Note: M= mean, SD= standard deviation, DASS= depression anxiety stress scale.

Table 13: Means, standard deviations, t and p values of the socioeconomic status of hirsute women on coping scale and its factors. (N=100)

Factors	Socioeconomic Status						F	P
	High n=21		Middle n=71		Low n=8			
	M	SD	M	SD	M	SD		
ECS	28.62	11.91	25.80	10.03	13.88	11.95	5.68	.005
PCS	5.43	2.99	6.76	2.85	7.63	3.65	2.29	.107
CST	34.10	10.31	32.56	9.00	21.50	10.61	5.62	.005

Note: M= mean, SD= standard deviation ECS = emotional coping strategies; PCS = problem

As shown in Table-12 means, standard deviations, F and p values of the education of hirsute women on coping Scale and its factors. The results indicated that there was a significant mean difference among women with different socio economics status. The results showed that there was a significant mean difference among women who belongs to high, middle socioeconomic or low belongs to different designations on one factor of DASS, at $**p < .01$. The overall results indicated highly significant for all factors of DASS.

There would be significant relationship between Socioeconomic and coping in hirsute women shown in Table-13.

As shown in Table-13, means, standard deviations, t and p values of the economics status of hirsute women on coping Scale and its factors. The results indicated that there was a significant mean difference among women with different socio

economics status. The results showed that there was a significant mean difference among women who belongs to high, middle socioeconomic or low belongs to different designations on one factor of coping scale, at $**p < .05$. The only PS namely problem focus strategies have no significant relationship. The overall results indicated highly significant for all factors of coping scale.

Discussion

The present study focused on the culture specific psycho social issues faced by hirsute women and their coping style to decrease their stress. In order to regard the cultural appropriation, a culture specific tool was developed for which factor analysis revealed a two factor solution namely, "Psychological burden and social issues". Current study found that there is highly negative

relationship between psychosocial issues, psychological symptoms and coping strategies. Women with hirsutism face psycho-social issues but if they use effective way of coping, they resolve their issues and have good mental health.

In the current study, investigator used visual scoring method for the selection of the participants for study. For this purpose, those women were selected who had excessive hair growth on chin face, upper lips and asked for hair growth on upper arms, abdomen, legs and lower and upper back. This is called visually scoring method and has been already used in assessment of the hirsute women¹³ and different studies have already been conducted by using the method.¹⁵ However, there are some other methods for the assessment of hirsutism through microscopic and photographic techniques but with limitations in use and cost.

The current study revealed that hirsutism has negative impact on mental health. The indigenous scale of current research refers two factors named: *Psychological Burden* and *Social Withdrawal*. The scale indicated that hirsute women face psychological problem e.g. aggression, frustration, comparison, jealousy etc. and social issues like lack of socialization, avoiding gathering, difficulties in making friends etc. The social and psychological problems occur at the same time when women perceive inferior in front of other women and she faces financial issues because of costly treatment and extra use of cosmetics etc.¹⁶ Women with hirsutism mostly became fearful in certain situations such as mixing with people at work, meeting strangers, making friends, going into shops or to parties. These anxiety-provoking situations lead them to psychological issues likely to elicit avoidance that may in turn induce further anxiety and discomfort.¹⁷

Our data on psychological symptoms and coping strategies in hirsute women showed novel results for the first time in perspective to Pakistani culture. Although there are some studies which show a link between mental health and hirsutism but these studies reflect a perception of western hirsute women. However, in Pakistan there were not studies on psychological, social issue and coping strategies in hirsute women. Studies suggest that women with hirsutism in South Asians have poor psychological symptoms due to psychosocial issues.¹⁸ This study revealed that in spite of quality of life, self-related health status is also affected badly by the hirsutism. Quality of life, intensity of psychosocial issue depends on severity level of hirsutism.

The regression results showed that psychosocial issues are positive predictor of mental health. In which the first factor named Psychological

Burden is indicated as a significant predictor of mental health. Studies have indicated that women with hirsutism became sad, lack of socialization, avoidances, inferiority complex which may lead to major psychological symptoms related problems like depression, anxiety etc.¹⁹ Patient with hirsutism have more psychosocial issues and social problems as compare to normal population so their physical as well as psychological symptoms are affected.

The current study results showed that there was no significant mean difference in age, education marital status and occupation on the basis of psychosocial issues of hirsute women. A study by Barth and his fellow showed no significant difference on different demographic variable due to severity of hirsutism in any age group, working or non-working women or marital status. The other findings indicate that, there is no statistically significant difference between the total score and mean score of different aspects with age and marital status.²⁰ However, socioeconomic status has significant different effect on psychological symptoms and coping strategies. Women with low socioeconomic status are more prone to stress and have less ability to cope. This may be due to the fact that women with low socioeconomic status may not have finances to manage their hair growth through advance procedure including laser therapy and are more prone for psychological symptoms including stress, anxiety and depression. Education has significantly different effect on coping abilities, highly educated women have more ability to cope as compared to less educated women. This might be due to the fact that in the local culture, educated women have awareness about the issues and coping strategies as compared to less educated women and can manage their issues through medical treatment or other problem focused strategies.

The current study revealed that there is a significant relationship between psychosocial issues, coping strategies and psychological symptoms in hirsute women. Novel results of the current study evidenced for the first time that Coping Strategies' factors are predictors of psychosocial issues and psychosocial issues are also predictors of poor mental health. Study can be implicated in spreading awareness about the impact of hirsutism among the endocrinologists, dermatologists and mental health professionals to develop counselling and psychological services for the hirsute women. Further, the current study opens new avenues for future researches in the related areas including i.e. impact of psychological intervention on the psychosocial issues and psychological symptoms among the hirsute women.

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