Life of Discordant Couples Living with HIV in Puducherry, India: Psychological Distress and Coping Strategies

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Abstract

A cross sectional study was conducted to examine the stress experienced by HIV infected discordant couples and their coping strategies. A total of 30 HIV discordant couples, receiving anti retro-viral therapy from a general hospital in Puducherry, were selected. Distress and coping were measured using Depression Anxiety and Stress Scale and Brief Cope scale respectively. The descriptive and inferential statistics were used for data analysis. The result reveals that majority of the respondents were experiencing moderate level of depression, stress and severe anxiety. A significant gender association was found on the level of depression between men and women. Men reported high level of depression than women. Depression was positively significantly correlated with anxiety and denial while it inversely correlated with self distraction, active coping, alcohol and substance abuse, use of instrumental support, positive reframing and acceptance. Anxiety had an inverse correlation with self blame, use of instrumental support and acceptance. Stress was significantly correlated with venting and self blame, while it was inversely correlated with self blame. Further, a significant gender and family status wise differences was observed on coping strategies. The study concludes that emphasising the distress reduction and healthy coping promotion strategies for HIV discordant couples.

Keywords: HIV discordant couple, distress and coping strategies

1. Introduction

Acquired immunodeficiency disease syndrome (AIDS) though a disease only about 30 years old now; it has evolved into a pandemic affecting millions of people worldwide. The first AIDS case in India was detected in 1986 and since then HIV infection has been reported in all states and union territories. Infection rates soared throughout the 1990s, and today the epidemic affects all sectors of Indian society, not just the groups such as sex workers and truck drivers with which it was originally associated. In India 0.23% of the population are infected by HIV/AIDS. From 2001 to 2009, there has been 96% change in the rate of infection among the population. In a country where poverty, illiteracy and poor health are rife, the spread of HIV presents a daunting challenge. In India, as elsewhere, AIDS is often seen as "someone else's problem" as something that affects people living on the margins of society, whose lifestyles are considered immoral. An estimated 1, 70,000 people die each year from HIV/AIDS in India (Sarkar; Danabalan; & Kumar, 2007; & WHO, 2007). Over the past 30 years, several interventions have been developed for preventing HIV transmission from HIV infected partners to un-infected partners.

The infection is mainly through unprotected sexual relationship which, except in few cases, HIV infected persons are heavily stigmatized in the society. HIV discordant couples are those couples where one partner is HIV infected and the other is not. When one of the spouses of an approved marriage is an infected person, the psychological distress of the uninfected partner is likely to be high due to social aversion towards the couple, anxiety about the possibility of getting the infection to self, possible infection to children and socio economic burden associated to HIV. First, in the present study, it was hypothesized that, there is a significant relationship between distress and coping strategies experienced by HIV discordant couples. Secondly, the present study hypothesized that better socio-economic status is likely to reduce level of distress experienced. Thus, current study is an attempt to understand relationships among socio-demographic variables, distress and coping strategies used by HIV discordant couples. The findings are expected to guide the clinical social work practice with the HIV discordant couples in terms of suggesting distress reduction and promotion of healthy coping strategies.

2. Method

A cross sectional study was conducted to examine relationships among socio-demographic variables, distress (depression, anxiety and stress) and coping strategies among HIV discordant couples in Puducherry. The universe of the study formed all HIV discordant couples who accessed Anti Retro-viral Therapy from the Government General Hospital at Puducherry. The eligibility for participation was guided by prior set inclusion criteria as such as respondents should be at the age of 18 years and above; one of the couple is infected and the partner is un-infected, diagnosed to have HIV and receiving treatment or help from ART centre. HIV infected persons who underwent psychiatric treatment were not considered for the study. Adhering to the prior set eligibility criteria, a total of 30 discordant couples were consecutively selected from 15th September to 16th

October, 2012. Data was analysed using descriptive and bivariate statistics in accordance with the objectives of the study.

2.1. Measurements

For the present study, a socio-demographic schedule was developed that contained the variables such as gender, age, religion, educational qualification, occupation, income, place of birth and family type in order to examine the socio-demographic characteristics of HIV discordant couples.

Depression Anxiety and Stress Scale (Lovibond & Lovibond,1995) was used to measure the distress. It was a 21 items instrument with four point Likert type rating and has three sub-domains to measure the negative emotional states of depression, anxiety and stress. The DASS-21 contains seven items which is divided into three subscales with similar content. Depression scale assesses hopelessness, dysphoria, self deprecation, devaluation of life, lack of interest or involvement, inertia and anhedonia. Anxiety scale assesses skeletal muscle effects, autonomic arousal, subjective experience of anxious affect and situational anxiety. Stress scale is viewed as sensitive levels of chronic non-specific arousal. It assesses nervous arousal, irritable or over reactive, difficulty relaxing, being easily upset or agitated and impatient.

Brief-cope scale by Carver (1997) was used to validate with acceptable reliability and validity on various populations. It is a 28-item self report measure of problem-focused versus emotion-focused coping skills. It consists of 14 sub-domains viz., self-distraction, active coping, denial, substance use, use of emotional support, use of instrumental support, behavioural disengagement, venting, positive reframing, planning, humour, acceptance, religion, and self-blame.

2.2. Data analysis

The preliminary data analysis was performed using frequencies, percentage and measures of central tendencies especially mean, range and standard deviation. Further, associations and correlation were studied by using cross tabulation, chi-square test and Pearson's correlation. Independent sample t' test was performed to examine the significant difference of coping strategies across socio-economic variables.

3. RESULTS

Socio-demographic profile

Table 1 shows the socio-economic profile of the respondents. The mean age of the respondents was 40.27 (SD=8.74), with a range from 25 to 64 years. The gender distribution was almost equal (women 53.3% and men 46.7%). Majority of them (66.7%) were living in nuclear families. About 53.3 % of them were doing unskilled labour, 36.7% of them were not working due to either ill health or lack of interest in going for job. Merely 10% of them were in service professional sector employment. About 60% of them belonged to low income families.

Table 1shows the socio-economic profile of the respondents

Variables	n (%)
Gender	
Female	14 (46.7%)
Male	16 (53.3%)
Age (years) mean (SD); range	40.27 (8.74); 25-64
Educational status	
Illiterate	5 (16.7%)
Primary school	9 (30%)
Secondary school	11 (36.7%)
High school	3 (10.0%)
Degree	2 (6.6%)
Family type	, ,
Nuclear	20 (66.7%)
Extended	10 (33.3%)
Employment status	` '
Skilled labour	3 (10.0%)
Unskilled labour	16 (53.3%)
Unemployed	11 (36.7%)
Monthly income	` '
Up to 5000	18 (60.0%)
5000-10000	9 (30.0%)
Over 10000	3 (10.0%)

Table 2 shows the descriptive analysis of the sub-domains of distress level of the respondents such as depression, anxiety and stress. Descriptive analysis reveals that the mean score on depression was 16.73 with a SD of 4.11 scores ranged from 6 to 26. Similarly, the analysis shows that the scores on anxiety ranged from 4 to 22 with a mean of 16.33 and a SD of 3.44. On the other hand, the descriptive analysis revealed the mean score on stress

was 20.80 with a SD of 2.44 scores ranged from 16-26. It indicates that the distress level which means depression, anxiety and stress of the respondents varies according to the living condition and support from the family and others. They responded as there is nothing interesting about life as they often view life as meaningless. Many of them did not disclose their HIV status to their families and friends due to the fear of stigmatization and discrimination.

Table 2 shows the distress level of the respondents

Distress	N	Range	Min-Max	Mean	SD
Depression	30	20	6-26	16.73	4.11
Anxiety	30	18	4-22	16.33	3.44
Stress	30	10	16-26	20.80	2.44

Table 3 shows the sub-domain wise descriptive analysis of the key concepts of coping strategies such as self distraction, active coping, denial, substance use, use of emotional support, use of instrumental support, behavioural disengagement, venting, positive reframing, planning, humour, acceptance, religion and self blame. Descriptive analysis shows that the mean score on active coping was 3.13 with a SD of 0.93 scores ranged from 2 to 4. Result suggests that most of the respondents often kept themselves busy in work and other activities while they also tend to watch television, movies and relied on sleep to keep them engaged. Descriptive analysis reveals that the scores ranged on denial ranged from 2 to 5 with a mean of 4.43 and a SD of 0.67. The score indicates that the discordant couples refusing to accept the present condition, which is considered as a reversely coping method. Use of emotional support indicates the assistance and support from others. The analysis shows that the mean score on use of emotional support was 6.96 and a SD of 0.55 scores ranged from 6-8. Venting describes the expression of negative feelings. The mean score on this was 4.26 and a SD of 0.44 scores ranged from 4 to 5. The result suggests that, through expression of negative feelings they may have better coping with their life. Planning includes the strategies to come out the present situation in their life. The descriptive analysis reveals that the mean score on planning was 6.27 with a SD of 0.7 ranged from 5 to 8. It indicates that planning has given healthy coping. Religion viewed as spiritual beliefs, prayer and meditation. The mean score on religion was 7.93 with a SD of 0.25 ranged from 7 to 8. The result suggests that the religious belief has high level of coping with the present situation of the respondents. Present study shows that the mean score on self blame was 5.56 with a SD of 0.5 ranged from 5 to 6. It is evident that the HIV discordant couple have reported criticising by themselves.

Table 3 coping strategies used by the respondents

Coping strategies Coping strategies	N	Range		Mean	SD	
Self distraction	30	3	2-5	2.80	0.99	
Active coping	30	2	2-4	3.13	0.93	
Denial	30	3	2-5	4.43	0.67	
Substance use	30	1	2-3	2.26	0.44	
Use of emotional support	30	2	6-8	6.96	0.55	
Use of instrumental support	30	3	2-5	2.90	0.66	
Behavioural disengagement	30	1	2-3	2.26	0.44	
Venting	30	1	4-5	4.26	0.44	
Positive reframing	30	3	2-5	3.20	0.96	
Planning	30	3	5-8	6.27	0.70	
Humour	30	3	2-5	3.36	0.99	
Acceptance	30	3	2-5	2.83	0.83	
Religion	30	1	7-8	7.93	0.25	
Self blame	30	1	5-6	5.56	0.50	

Table 4 shows the tabulation and association between gender and depression. The analysis revealed that among male, 62.5% (n=10) reported high level of depression and 37.5% (6) reported low level of depression. Among female, 85.7% (n=12) reported less level of depression and 15.3% (2) reported high level of depression. Chisquare test for association reveals statistically significant association between gender and depression ($X^2=8.084$; df:3 & p<.05).

Table 4 shows the ci	ross tabulation	and association	between	gender	and depression	
Criterion Variable	Denression	\mathbf{X}^2	df	Siσ	_	

Criterion V	<u>ariable Depression</u>	X²	df	Sig.	
Gender	less [%] high [%]				
Male	6 [37.5] 10 [62.5]	8.084	3	.05	
Female	12 [85.7] 2 [15.3]				

Table 5 shows the correlations between depression, anxiety and stress and sub-domains of coping. Depression was significantly correlated with anxiety (r=.633 & p<.01). Result suggests that when depression was high in

HIV discordant couples anxiety was also higher. Depression was inversely correlated with self distraction (r=.669 & p<01). It indicates that higher the depression, lesser would be the self distraction of HIV discordant couples. Depression was further inversely correlated with active coping (r=-.366 & p<.05) with a direction that higher the depression of the respondents, they are less likely to use active coping as a coping strategy. Depression was significantly correlated with denial (r=.4 & p<.05). The relationship shows that higher the depression of HIV discordant couples better would be the coping strategy as a denial. Depression was inversely correlated with substance use (r=-.37 & p<.05). It implies that higher the depression of HIV discordant couples was likely to associate with the reduced substance use. Finally, depression was significantly inversely correlated with use of instrumental support (r=-.478 & p<.01), positive reframing (r=-.509 & p<.01) and acceptance (r=.546 & p<.01). The result suggests that when the HIV discordant couples have higher the depression, lesser would be the use of instrumental support, positive reframing and acceptance.

Anxiety was inversely correlated with self distraction (r=-.422 & p<0.5) which implies that higher the anxiety of the respondents, they are less likely to use self distraction as a coping strategy. Anxiety was further inversely correlated with use of instrumental support (r=-.408 &p<.05) and acceptance (r=-.412 & p<.05). The relationship shows a direction that higher the anxiety was likely to reduce the use of instrumental support and acceptance of the HIV discordant couples. Stress was significantly correlated with venting (r=.427 & p<.05). It indicates that higher the stress experienced by the HIV discordant couple venting coping would be higher. But stress was inversely correlated with planning (r=-.372 & p<.05) with relationship a direction that higher the stress of HIV discordant couples was likely to reduced planning as a coping strategy. Finally, stress was significantly correlated with self blame (r=.404 & p<.05) which implies that higher the stress higher would be the coping used as self blame.

Self distraction was significantly correlated with active coping (r= 0.620; & p<.01). Self distraction showed a significant correlation with substance abuse (r= .431; & p<.05) with a direction that when respondents use self distraction more frequently, they are likely to frequently use substance as a coping strategy. Finally, self distraction was significantly correlated with use of instrumental support (r= .648 & p<.01), behavioural disengagement (r=.585 & p<.01), positive reframing (r=.727 & p<.01) and acceptance (r=.871 & p<.01). The result suggests that those respondents who use self distraction are also likely to use instrumental support, behavioural disengagement, positive reframing and acceptance. Active coping was inversely correlated with denial (r=.365 & p<.05). Active coping was further, significantly correlated with use of emotional support (r=.406 & p<.05), use of instrumental support (r=.523 & p<.01), positive reframing (r=.544 & p<.01) and acceptance (r=.647 & p<.01). The relationship shows a direction that when respondents use active coping more frequently, they are likely to frequently use positive reframing.

Denial and positive reframing were inversely correlated (r= -.402 & p<.05). Substance use was significantly correlated with behavioural disengagement (r=.489 & p<.01), humour (r=.389 & p<.05) and acceptance (r=.490 & p<.01). It implies that higher the frequency of substance use coping higher would be the coping of behavioural disengagement, humour and acceptance. But substance use and self blame were inversely correlated (r= -.385 & p<.05). Use of emotional support and positive reframing were significantly correlated (r=.4 & p<.05). Similarly, use of instrumental support was significantly correlated with behavioural disengagement (r=.440 & p<.05), positive reframing (r=.520 & p<.01) and acceptance (r=.594 & p<.01). It indicates that those respondents who use instrumental support as a coping strategy, they are also use behavioural disengagement positive reframing and acceptance as a better coping strategy. Behavioural disengagement and acceptance were significantly correlated (r=.582 &p<.01). Positive reframing and humour were significantly correlated (r=.602 & p<.01). The relationship shows a direction that those respondents who use positive reframing more frequently, they are likely to frequently use humour as a coping method. Finally, planning and humour were significantly inversely correlated (r= -.499 7 p<.01) with a direction that those who frequently use planning as a coping strategy, they are less likely to use humour as a coping strategy.

Table 5 shows the distress correlates of coping strategies

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Depression	1															
Anxiety	.633**	1														
Stress	.200	.049	1													
Self distraction	669**	422°	.011	1												
Active coping	366 [*]	356	.072	.620**	1											
Denial	.400*	.201	.158	326	365	1										
Substance use	370°	148	075	.431*	.076	.173	1									
Use of emotional support	290	282	030	.361	.406*	326	.175	1								
Use of instrumental support	478**	408	034	.648**	.523**	130	.209	.272	1							
Behavioural disengagement	333	148	.239	.585**	.322	.060	.489**	.175	.440*	1						
venting	221	148	.427*	.200	.158	.286	023	101	.093	.148	1					
Positive reframing	509**	312	071	.727**	.544**	402*	.191	.400	.520**	.351	.032	1				
Planning	049	359	372*	032	076	.126	135	.115	.063	135	226	.226	1			
Humour	068	.264	011	.042	275	.164	.389°	.085	.005	072	.082	079	499 ^{**}	1		
Acceptance	546**	412"	.068	.871**	.647**	233	.490	.359	.594**	.582**	.215	.602**	116	.117	1	
Religion belief	150	131	.200	.218	.039	.174	.161	.228	.164	.161	.161	085	286	.236	.272	1
Self blame	008	073	.404*	.027	.200	239	385°	.070	238	.071	.223	.114	070	221	.068	234
*S	Significant at .05	level; & **S	ignificant a	at .01 level												

Table 6 shows the differences of gender and family status in the use of coping strategies. Independent sample t' test reveals that there was a significant difference between gender and self distraction (t=2.105 & p<.01). Men

used self distraction more frequently as a coping (mean=3.125) than women (mean=2.105). Similarly, active coping as a coping strategy was most frequently used by men (mean=3.437) than women (mean=2.785). This mean difference was statistically significant at .05 level (t=2.047 & p<.05). Finally, self blame was significantly differed between gender (t=2.262; & p<.05) wherein men used self blame more frequently (mean=5.75) than men (mean=5.357). Result suggests that men used self blame more frequently as a coping strategy.

The analysis shows that there was a significant difference between family status and self distraction (t= -2.326 & p<.01). The respondents who belongs to joint family were used self distraction more frequently as a coping strategy (mean=3.4) than nuclear family (mean=2.5). The mean difference shows that the respondents with joint family reported high level of active coping (mean=3.7) than the respondents with nuclear family (mean=2.85). This mean difference was statistically significant at .01 level (t= -2.847 & p<.01). Family status further, significantly differed between behavioural disengagement (t= =2.822 & p<.05). The analysis reveals that behavioural disengagement as a coping strategy was more frequently used by the respondents who belongs to joint family (mean=2.6) than nuclear family (mean=2.1). Finally, there was a significant difference between family status and acceptance of the respondents (t= -2.763 & p<.01). the respondents who were in joint family more frequently used acceptance as a coping strategy (mean=3.4) than nuclear family (mean=2.55) which indicates that the respondents who were living with joint family getting high level of acceptance as compared to nuclear family.

Table 6 shows the differences of gender and family status with coping strategies

Gender	Ma	Male		ale	t'	df	sig	
	N	Mean	N	Mean				
Self distraction	16	3.125	14	2.428	2.105	28	.01	
Active coping	16	3.437	14	2.785	2.047	28	.05	
Self blame	16	5.750	14	5.357	2.262	28	.05	
Family status	Nuclear		Joint		ť'	df	sig	
	N	Mean	N	Mean				
Self distraction	20	2.50	10	3.40	-2.326	28	.05	
Active coping	20	2.85	10	3.70	-2.847	28	.01	
Behavioural	20	2.10	10	2.60	-2.822	2 28	.05	
Disengagement								
Acceptance	20	2.55	1	0 3.40	-2.76	3 2	8 .0	

4. Discussion

First, the key findings of the study are summarized in order to provide a coherent view of the distress and coping strategies used by the discordant couples. Second, a focused effort is made to discuss the key thematic areas and associated findings in the context of existing empirical studies. Third, it discusses the implications of the current study findings to clinical social work practice by way of suggesting distress reduction and healthy coping promotion activities. Finally, the study concludes by highlighting the limitations of the present study.

The psychosocial impact of HIV infected people has prompted a wealth of research on psychological issues. There are few empirical studies reveals that HIV discordant couples reported high level of distress as compared to both partners are HIV positive (Elwin et.al, 2006 & Eyavo et al, 2010). Studies found that antiretroviral therapy has reduced the risk of transmission HIV among discordant couples (Reynolds et.al, 2011 & Allen et.al, 2003) similarly; more effective treatment of HIV discordant couples may likely to reduce the transmission of the HIV infection (Wafaa et.al, 2011; Sturdevant et al, 2001).

In the present study, found that majority of the respondents were experiencing moderate level of depression and stress, whereas, they were experiencing severe anxiety as they were discordant and infected with HIV. They responded as there is nothing interesting about life as they often view life as meaningless. Many of them did not disclose their HIV status to their families and friends due to the fear of stigmatization and discrimination. Study reported that HIV discordant couples were very concerned about protecting their children from the stigma associated with HIV (Suderam et.al, 2008)

A significant gender association was found on the level of depression among men and women. Men have high level association of depression than women. The correlation analysis revealed that depression was significantly correlated with anxiety. Depression was further inversely significantly correlated with self distraction, active coping, substance use, use of instrumental support, positive reframing and acceptance whereas depression was significantly correlated with denial. Anxiety was significantly inversely correlated with self blame, use of

instrumental support and acceptance. Stress was significantly correlated with venting and self blame, while it was inversely correlated with self blame. Self distraction was significantly correlated with active coping, use of instrumental support, behavioural disengagement, positive reframing and acceptance.

On the other hand active coping and denial were significantly inversely correlated. Active coping was significantly correlated with use of emotional support, use of instrumental support, positive reframing and acceptance. Denial was significantly inversely correlated with positive reframing. Substance use was significantly correlated with behavioural disengagement, humour and acceptance, while it was inversely correlated with self blame. Use of emotional support and positive reframing were significantly correlated. Use of instrumental support was significantly correlated with behaviour disengagement, positive reframing and acceptance. Behaviour disengagement and acceptance were significantly correlated. Similarly, positive reframing and humour were significantly correlated. Finally, planning was significantly correlated with humour. Analysis showed that, a significant gender differences were found on coping strategies used by men and women. The analysis revealed that men used self distraction, active coping and self blame more frequently than women to cope with the distress and everyday life challenges associated to HIV infection. On the other hand, a significant family status differences were found on coping strategies. The differences showed with a direction that the respondents who were living with joint family used more frequently self distraction, active coping, behavioural disengagement and acceptance as compared to those who living with nuclear family.

Reshmi and Sekar (2012) found that both married women and widows undergo tremendous amount of psychological distress due to stigma that affect their coping self-efficacy and perception of social support from family and friends. Similarly, a study found that HIV infected persons were not willing to disclose their HIV status to the family members due to the fear of stigma and discrimination, separation from marriage, rejection by family members and friends. Furthermore, loss of job, loss of financial and social supports from relatives and close friends. The resultant effects of these consequences are experiencing of psychological distress which may affect the health status of the HIV infected people (Oluyemi et.al, 2013). Consistently, the present study found that HIV discordant couples experienced heightened level of distress especially anxiety. In addition, existing evidence base suggest that these couples experienced psychological distress, poor emotional adaptation, excessive use of alcohol and drugs (Rispel, et al., 2009; & Collini & Obasi, 2006). However, there is little evidence that detailed the psychological distress and associated disabilities experienced by HIV discordant couple from Indian socio-cultural context.

On the other hand, psychosocial support including instrumental and emotional supports is critical to the psychological health and wellbeing of discordant couples. Evidence suggest that both married women and widows with HIV, who are working currently and living in the joint family are having less discrimination from their families. They perceive fewer stigma and less perceived stress which results in higher coping and more perceived social support from family, friends and others. Thus, having employment, regular income and family support are found to cope effectively with everyday life challenges in India (Reshmi & Sekar, 2012). Studies found that better family support may likely to reduce the psychological distress among HIV discordant couples ((Elwin et.al, 2006 & Eyavo et. Al, 2010).

Further, the current study showed the gender based difference on the coping pattern such as higher amount of self distraction, active coping and self blame. This result shows the culturally unique issues in coping which are gender specific therefore rationalize the needs for more specific gender specific examination of the problems of HIV discarded couples in India.

5. Implications of present study

First, supportive psychotherapy is expected to extend a platform for ventilation, facilitate emotional support and social support. Further, such as effort may also help to connect the couple with professional and community social support systems. Therefore, such approaches are expected to help reduce chronic distress experienced by the discordant couples. Second, specially designed family education programmes may be yet another way of systematically promoting empathetic understanding about the ill relatives to the family members. This may in turn promote family support to both discordant couples and their children. The challenges towards this may be, in the absence of well established theoretical and empirical knowledge from the socio-cultural contexts of India, to develop standardized and theoretically guided family education guidelines. Towards this, development of further systematic research evidences may be required. Thirdly, social skills including assertive skill training for availing due rights and supports, including welfare benefits, may be a critical clinical social work practice response with an empowering edge. Further, social skills training may help discordant couples to promote healthy coping strategies because improving skills in communication, problem solving, assertive skills and so on are found to significantly improve the healthy coping among marginalized communities.

6. Conclusion

The current study is based on consecutively selected small sample size which extremely limits the generalizability to a larger population. However, consistent with the dominant discourse, the present findings

have confirmative properties. It is evident that HIV discordant couple experienced increased level stress, anxiety and depression coupled with exclusion and social isolation within family and in neighbourhood (Reshmi & Sekar, 2012, Solomen & Solomen, 2009).

This prolonged stress experience evidently has significant implication on the mental health and wellbeing, ultimately their quality of life. Though restricted, the present study findings highlights the gender dimensions of coping strategies as well as the severe level of distress experience.

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