
Evaluate the effectiveness of ‘Holistic Humanized Nursing Care strategy’ on physiological parameter (HRQOL) of adolescents living with HIV

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Abstract

According to UNICEF there are 220,000 adolescents infected by HIV/AIDS in India. In which around 70,000 adolescents are below the age of 15 and 21,000 adolescents are being infected through mother-child transmission every year. “A quasi experimental study to evaluate the effectiveness of ‘Holistic Humanized Nursing Care strategy’ on physiological parameter of adolescents living with HIV in selected settings”. Quantitative research approach was adopted, quasi experimental research which includes control group and manipulation with no randomization. The settings of the study were Integrated Child Welfare Organization (ICWO), Thiruvallur. The sample consist of 40 adolescents in experimental and control group who were diagnosed to have HIV and met inclusion criteria and chosen by non probability convenient sampling technique. The tool used was a demographic variables and 34 Item Health Survey Questionnaire for assessing physiological parameter (Health Related Quality of life).The calculated paired t value of t is =31.06 was found to be statistically significant at $p < 0.001$ level. It clearly indicates that after the administration of Holistic Humanized Nursing Care strategies there was significant increase in the physiological parameter (Health Related Quality of Life) in the experimental group. The calculated paired t value of $t = 0.51$ was not found to be statistically significant and this clearly indicates that there was no significant increase in the level of physiological parameter (Health Related Quality of Life) in the control group. The calculated Z value is=3.92 between experimental and control group was found to be statistically significant at $p , < 0.001$ level. This clearly indicates that the Holistic Humanized Nursing care strategies to the adolescents with HIV was found to be effective to increase the physiological parameter (Health Related Quality of life) among adolescents with HIV in the experimental group than the adolescents in the control group.

Keywords: Research article, adolescent, HIV, holistic humanized care, health related quality of life (HRQOL)

INTRODUCTION

HIV is the abbreviation used for the Human Immunodeficiency Virus. HIV attacks the body's immune system. An estimated 2.5 million adolescents around the world are living with HIV/AIDS, according to the Joint United Nations Program on HIV/AIDS (UNAIDS), 2010. Report on the Global AIDS Epidemic approximately 282,000 adults, adolescents, and children are currently living with human immunodeficiency virus (HIV) infection or acquired immunodeficiency syndrome (AIDS) in the United States. The current HIV/AIDS programmes are reaching only 15% of young people and 17% of high-risk groups. Adolescents affected by HIV need medical treatment, counselling, support from extended families, and other non-institutional care, and help with medical care for parents. Providing HIV patients with an emotionally stable, happy and supportive environment goes a long way in keeping them healthy.

HHNCS is the combination of nursing interventions which fulfil the physical and psychological needs of adolescents living with HIV for the duration of 6 months with reinforcement of the same intervention by the investigator to the group once in 15 days for 6 months, which consist of multifaceted teaching package on positive living of adolescents, structured group counselling for self esteem, aerobic exercises and follow up and reinforcement of counselling and exercise. This HHNCS helps to improve quality of life and fatigue, decreased body mass index, subcutaneous fat, and abdominal girth and improve the psychological status of adolescents with HIV.

Nixon O Brian (2001) conducted a systematic review on aerobic exercise interventions for people with HIV/AIDS from various data base and abstracts. For inclusion, studies were randomized control trials involving HIV+ adults 18 years of age or older and had to include at least one group randomized to receive aerobic exercise performed at least three times/week for at least four weeks. Six studies satisfied the eligibility criteria. The main results indicated that performing constant or interval aerobic exercise for at least 20 minutes, at least three times per week for four weeks may lead to increased CD4 count, improved cardiopulmonary fitness, and improved psychological status. These findings are limited to those who continued to exercise and for whom there was adequate follow-up data. Aerobic exercise appears to be safe and may be beneficial for adults living with HIV/AIDS.

Thus the researcher decided to find the effectiveness of HHNCS on HRQOL among adolescents with HIV

OBJECTIVES

1. To assess the pre test level of physiological parameter (HRQOL) among adolescents living with HIV in experimental and control group
2. To evaluate the effectiveness of Holistic Humanized Nursing Care strategies on selected physiological parameter (HRQOL) among adolescents living with HIV.

ASSUMPTION

The Holistic Humanized Nursing Care strategies may have effect on physiological parameter (HRQOL) among adolescents with HIV

METHODOLOGY

Quantitative research approach was adopted in this study. The research design selected for the study was quasi experimental research design which includes control group and manipulation with no randomization. The setting of the study was ICWO, Thiruvallur. The sample consisted of 40 adolescents who were diagnosed to have HIV stage I by the screening and physician and met the inclusion criteria were chosen for the study by Non probability convenient sampling technique.

Tools of the study- It consists of two sections

Section A Semi structured questionnaire to assess the background variable which consisted of items related to age, gender, educational level of adolescents. number of siblings, parents education ,parents occupation ,health status of siblings and parents,CD4 level, duration of diagnosis and treatment. The investigator has collected the response by interview method and Bio physiological assessment.

Section B 34 Item questionnaire for assessing Health Related Quality of life among Adolescents with HIV used to assess the level of HRQOL. This instrument consisted of 34 item questionnaire and had 8 domains like physical functioning(10),role limitations due to physical functioning(4),role limitations due to emotional problems(3)energy(2),emotional well being (5),social functioning(2),pain(2),general health(6)items. All these 34 items were re coded and each item were scored. The r value for the tool was 0.86.

Item numbers	Recoding numbers	Score
1,2,22,34,36	1,2,3,4,5	100,75,50,25,0
3,4,5,6,7,8,9,10,11,12	1,2,3	0,50,100
13,14,15,16,17,18,19	1,2	0,100
21,23,26,27,30	1,2,3,4,5,6	100,80,60,40,20,0
24,25,26	1,2,3,4,5,6	0,20,40,60,80,100
32,38,35	1,2,3,4,5	0,25,50,75,100

RESULTS AND FINDINGS

Table 1.1 Assessment of protest and post test level of physiological parameter (HRQOL) among adolescents with HIV within and between experimental and control group N=40

Parameters	Group				Mean Difference	Mann-Whitney U-test
	Experimental(n=20)		Control(n=20)			
	Mean	SD	Mean	SD		
HRQOL						
Pre test	364.09	28.51	353.60	87.27	10.48	t=0.51 p=0.62 (NS)
Post test	447.94	48.65	367.95	73.38	79.99	t=31.06 p=0.001***(S)

***p<0.001, S – Significant, N.S – Not Significant

The table 1.1 shows that the pre test mean score of physiological parameter (HRQOL) in the experimental group was 364.09 ± 28.51 and the post test mean score of HRQOL was 447.94 ± 48.65 . The table also depicts that the pre test mean score of HRQOL in the control group was 353.60 ± 87.27 and the post interventional mean score of physiological parameter (HRQOL) was 367.95 ± 73.38 . The calculated paired t value of $t = 31.06$ was found to be statistically significant at $p < 0.001$ level. This clearly indicates that after the administration of HHNCS there was significant increase in the level of physiological parameter (HRQOL) among adolescents living with HIV in the experimental group. The calculated paired t value of $t = 0.51$ was not found to be statistically significant and this clearly indicates that there was no significant increase in the level of physiological parameter (HRQOL) among adolescents with HIV in the control group who had undergone normal hospital routine.

TABLE-1.2 Comparison of pre and post interventional level of physiological parameters (HRQOL) among adolescents living with HIV N=40

HRQOL DOMAIN	GROUP				Mean Difference	Mann-Whitney U-test
	Experimental(n=20)		Control(n=20)			
	Mean	SD	Mean	SD		
pre test						
physical functioning	54.25	12.06	53.5	14.24	0.75	Z=0.11P=0.91(NS)
role physical	34.75	17.55	33.88	23.23	0.87	Z=.29P=0.77(NS)
role emotional	38.42	36.3	36.83	37.29	1.59	Z=0.23P=0.82(NS)
Energy/Fatigue	36.5	16.31	35.5	15.38	1	Z=0.13P=0.88(NS)
emotional wellbeing	53.55	9.52	52.9	19.77	0.65	Z=0.62P=0.53(NS)

social functioning	61.25	26.25	59.5	25.8	1.75	Z=0.27P=0.78(NS)
bodily pain	46.13	14.38	43.75	23.6 5	2.38	Z=1.01P=0.31(NS)
general health	39.25	15.92	37.75	21.6 7	1.5	Z=0.62P=0.53(NS)
post test						
physical functioning	63.65	11.02	54.75	15	8.9	Z=2.07P=0.5*(S)
role physical	41.03	13.9	34.88	22.5 7	6.15	Z=1.98P=0.05*(S)
role emotional	50.62	32.45	38.48	36.3	12.14	Z=2.46P=0.02*(S)
Energy/Fatigue	47.65	15.89	37.5	15.8 5	10.15	Z=2.14P=0.05*(S)
emotional wellbeing	60.8	17.39	52.5	20.2	8.3	Z=1.99P=0.05*(S)
social functioning	71.45	20.67	61.25	27.3 3	10.2	Z=2.20P=0.05*(S)
bodily pain	59.5	16.66	46.75	22.9 4	12.75	Z=2.59P=0.01*(S)
general health	53.25	15.92	41.85	20.2 2	11.4	Z=2.38P=0.02*(S)

The table 1.2 shows that in pre test, in all domains such as physical functioning, role limitations due to physical health, role limitations due to emotional problems-,energy, emotional well being, social functioning, pain and general health mean difference between experimental and control group is small and it is not statistically significant difference.

In post test, in all domains such as physical functioning, role limitations due to physical health, role limitations due to emotional problems- energy, emotional well being, social functioning, pain and general health ,mean difference between experiment and control group is large and it is statistically significant difference.

Table 3 -Effectiveness of HHNCS on physiological parameter (HRQOL) among adolescent living with HIV. N=40

Parameters	Groups	Pre test		Post test		Mean Difference	Wilcox on signed rank test
		Mean	SD	Mean	SD		
HRQOL	Experimental	364.09	28.51	447.94	48.65	83.85	Z=3.92 p=0.001*** (S)
	Control	353.60	87.27	367.95	73.38	14.35	Z=1.93 p=0.06(NS)

The table shows that in experimental group the mean difference between the pre and post test was 83.85. The calculated Z value of $Z = 3.92$ was statistically significant at $p < 0.001$ level. This clearly indicates that after the administration of HHNCS there was significant increase in the level of physiological parameter (HRQOL) among adolescents with HIV. The calculated Z value of $Z = 1.93$ was not statistically significant at $p < 0.001$ level. This clearly indicates that there was no significant increase in the level of physiological parameter (HRQOL) among adolescents with HIV in the control group who had undergone normal NGOs routine measures. This clearly indicates that the HHNCS administered to the adolescents with HIV was found to be increase the physiological parameter (HRQOL) among adolescents with HIV in the experimental group than in the adolescents in the control group.

CONCLUSION

The study concluded that HHNCS showed significant changes in the physiological parameter. There is notable increase in the physiological parameter (HRQOL) and the control group results shows there is no changes in physiological parameter. HHNCS which is non invasive harmless will be utilized to increase the Physiological parameter among adolescents with HIV.

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