

ACCEPTANCE AND ADJUSTMENT TO STOMA AMONG PATIENTS AFTER PERMANENT COLOSTOMY

Kanmani J.^{1*}, Gopika Krishna N.² and Maya Mol M.²

¹Professor, Department of Medical Surgical Nursing, Amrita College of Nursing, Amrita Vishwa Vidyapeetham, Health Sciences Campus, AIMS- Ponekkara P.O., Kochi-41.

²B.Sc. Nursing Students, Amrita College of Nursing, Amrita Vishwa Vidyapeetham, Health Sciences Campus, AIMS- Ponekkara P.O., Kochi-41.

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*Corresponding Author: Kanmani J.

Professor, Department of Medical Surgical Nursing, Amrita College of Nursing, Amrita Vishwa Vidyapeetham, Health Sciences Campus, AIMS- Ponekkara P.O., Kochi-41.

ABSTRACT

Objectives: The objectives of the study were to identify acceptance, adjustment to stoma, find out the relationship between acceptance and adjustment to stoma. **Materials and method:** A quantitative descriptive correlational design was used. 50 subjects were taken. Sampling technique used was convenience sampling. A standardized Ostamates Adjustment inventory OA-23, Acceptance illness scale tool was used for the assessment along with a semi structured questionnaire for socio demographic and clinical variables. **Results:** The study result showed that 12(24%) subject with colostomy were having moderate degree of acceptance and 38 (76%) were having good acceptance. Also 21 (42%) of subjects were having moderate adjustment and 29(58%) were having good adjustment. There was a significant positive correlation exist between the acceptance and adjustment to stoma ($r=0.059$) and there is significant association between acceptance and adjustment with socio- demographic and clinical variables. **Conclusion:** A well- functioning colostomy may not negatively affect the patient's quality of life. It is important to assess the life style of the patients with colostomy in order to evaluate the result of different treatment modalities on life of patients. Making good decision to control disease complications, treatment and improving lifestyle is a very important goal in treating and caring patients with colostomy.^[1] The study revealed that there was a good acceptance as well as good adjustment in patient with permanent colostomy.

KEYWORDS: acceptance, adjustment, stoma, permanent colostomy.

INTRODUCTION

Cancer is a disease is characterized by the unchecked division and survival of abnormal cells. When this type of abnormal growth occurs in the colon or rectum it is called colorectal cancer (CRC). The colon and rectum (colorectal), which combined are referred to as the large intestine, are the final part of the gastrointestinal (GI) system, which processes food for energy and rids the body of solid waste (fecal matter or stool).^[2] This is the second most common visceral cancer. In 2017; there will be an estimated 95,520 new cases of colon cancers and 39,910 cases of rectal cancer diagnosed in US.^[3] While the number of colon cancers is fairly equal in men (47,700) and women (47,820), a large number of men (23,720) than women (16,190) will be diagnosed with rectal cancer. An estimated 27,150 men and 23,110 women will die from colorectal cancer in 2017.^[4]

Colostomy may be the best and safest form of treatment for a colorectal cancer and number of condition including acute diverticulitis, trauma and inflammatory bowel disease.^[5] A surgically created opening of colon results in a stoma. A colostomy is created when portion of the colon or rectum is removed and reaming colon is brought to the abdominal wall. This procedure involves creating an opening between the colon and abdominal wall, from which fecal content will pass. A colostomy can be located in the ascending, transverse, descending or sigmoid colon and can be permanent or temporary. Single barreled colostomies are usually permanent.^[6] Colostomy surgery saves many lives and return patients to better health and full productive life.^[7] As the acceptance and adjustment of people who lives with colostomy is affected by several factors, the patient may have negative feelings related to change in body image, gender, age, personality, marital status etc. This entire

problem may have harmful effect on living with stoma. All these may lead to frustrations and disappointment in life. One should overcome these negative and unwanted feelings so as to live a better life. A quality life can only be obtained if they are having good adjustment and acceptance with stoma.

MATERIALS AND METHODS

The institutional ethical committee, AIMS formal administrative permission was obtained from head of the department of GI Surgery unit, AIMS. The research design adopted for this study was quantitative correlational descriptive design and it was conducted in GI surgery OPD in AIMS Kochi.

Population: Target Population was all patients with colostomy and accessible population were all patients who came to OPD with colostomy during the period of data collection. There were total of 50 samples who were underwent permanent colostomy.

RESULTS

Distribution of sample characteristics

Table: sample characteristics based on demographic variables.

variable	Frequency	Percentage
Gender		
Male	34	68.0
Female	16	32.0
Marital status		
Single	2	4.0
Married	42	84.0
Widow	5	10.0
Separated	1	2.0
Education		
Illiterate	1	2.0
Primary	8	16.0
Middle	17	34.0
Secondary	10	20.0
Graduate & post graduate	9	18.0
Post Graduate and above	5	16.0
Place of Residence		
Rural	28	56.0
Urban	22	42.0
Occupation		
Unemployed	15	30.0
Employed	10	20.0
Retired	25	50.0
Monthly income		
Below 5000	17	34.0
5000-10000	17	34.0
10000-15000	3	6.0
Above 15000	13	26.0

n=50

Table: 1 depicts 2/3rd of the subjects i.e., most of the subjects 34 (68.0%) were males. About 42 (84%) subjects got married and more than half of the subjects

Tool

Tool-1: Semi structured questionnaire on socio-demographic and clinical data of patients with colostomy.

Tool -2: Acceptance Illness scale (AIS): Acceptance Illness Scale (AIS) (Felton, 1984) as the measure of acceptance was used. The scale has a high internal consistency (Cronbach's alpha =0.081). AIS consist of 8 items each measured on a 5- point Likert scale ranging from strongly agree to strongly disagree. All but one of the item measure a negative attribute of illness and are therefore scored in the negative direction (Strongly disagree=5; strongly agree =1). Thus, higher scores indicate high acceptance.^[8]

Tool 3: Ostomy Adjustment Inventory-23(OAI-23) It consist of 23 items, each measured on 5-point Likert scale (0-4) with higher scores indicating better adjustment. The principle component factor analysis was carried out to establish construct validity. 4 factors are acceptance (items 1,3,4,6,9,14,15,19,23), anxious preoccupation (items 12,13,17,20,21), social engagement (items 5,7,8,11), anger (2,10).^[9]

have educational status of middle class 17 (34%) and only 1(2.0) were illiterate. About 25(50%) subjects were retired and 10 (20%) were employed.

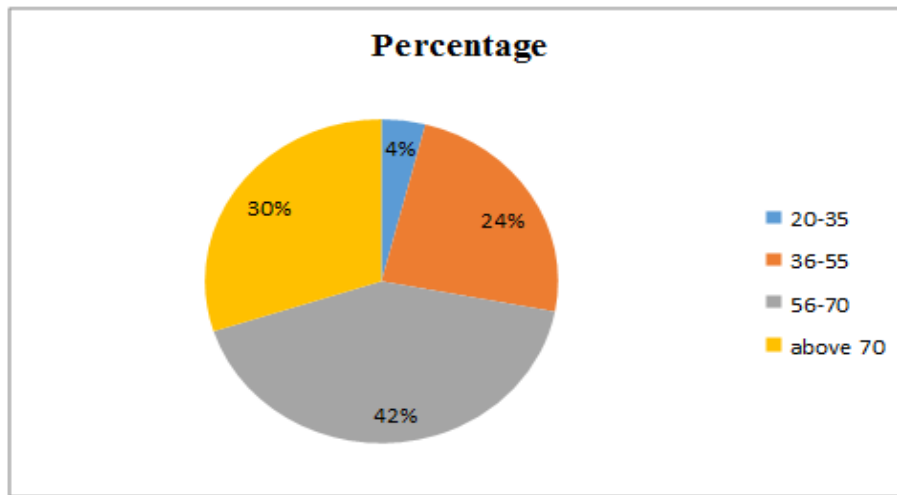


Figure 1: Pie diagram showing age distribution of acceptance and adjustment to stoma.

The Pie diagram shows that good acceptance with 56-70 years (42%) of age groups.

Table2: Sample Characteristics Based on Clinical Variables.

Clinical variable	Frequency	Percentage
Colostomy since		
6months - 1 year	4	8.0
1year – 3 years	19	38.0
3 years – 5 years	13	26.0
Above 5 years	14	28.0
Time taken		
1 month	24	48.0
2months	8	16.0
3months	6	12.0
More than 3 months	12	24.0
Smoking		
Yes	5	10.0
No	45	90.0
Alcoholism		
Yes	4	8.0
No	46	92.0
Food preference		
Vegetarian	8	16.0
Non vegetarian	42	84.0
Food habits		
Fast food	45	90.0
Homely food	5	10.0
Able to perform ADL		
Yes	8	16.0
No	42	84.0
Cleaning		
Self	34	68.0
Dependent	16	32.0
Handling of cloths		
Comfortable	40	80.0
Uncomfortable	10	20.0
Colostomy Irrigation		
Yes	18	36.0
No	32	64.0

n=50

Table: 2 The number of subjects who had colostomy for 1-3years were 19(38.0%). 45 (90%) of had non smoker and 46 (92%) had no alcoholism. 42 (84%) of them are preferred non vegetarian and 45 (90%) comes under fast food. It was also identified that more than half of

subjects 42(84%) were able to perform ADL and 34(68%) clean the colostomy by themselves. 40 (80%), handling of cloths comfortably and 18 (36%) were done colostomy irrigation.

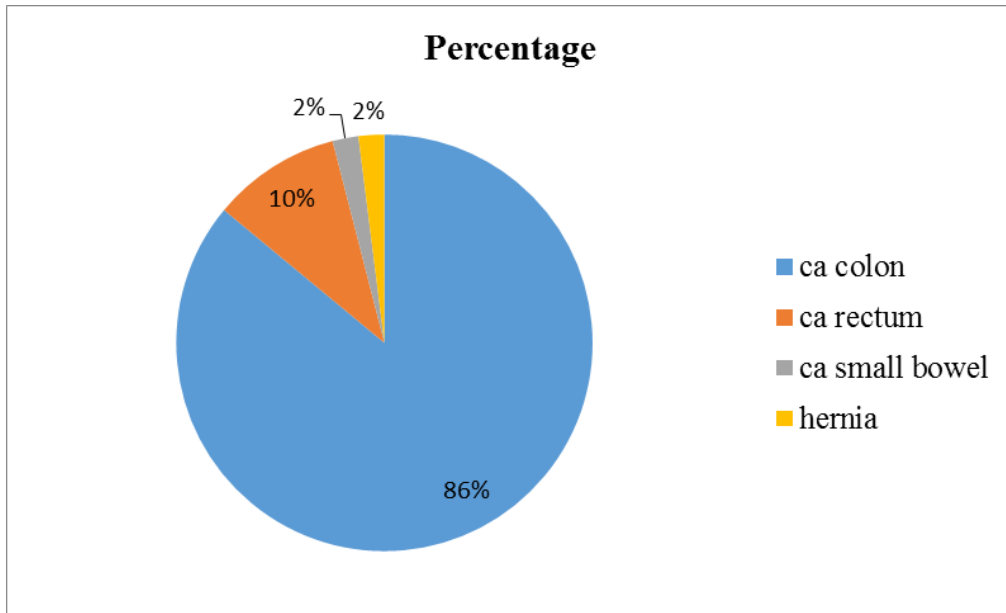
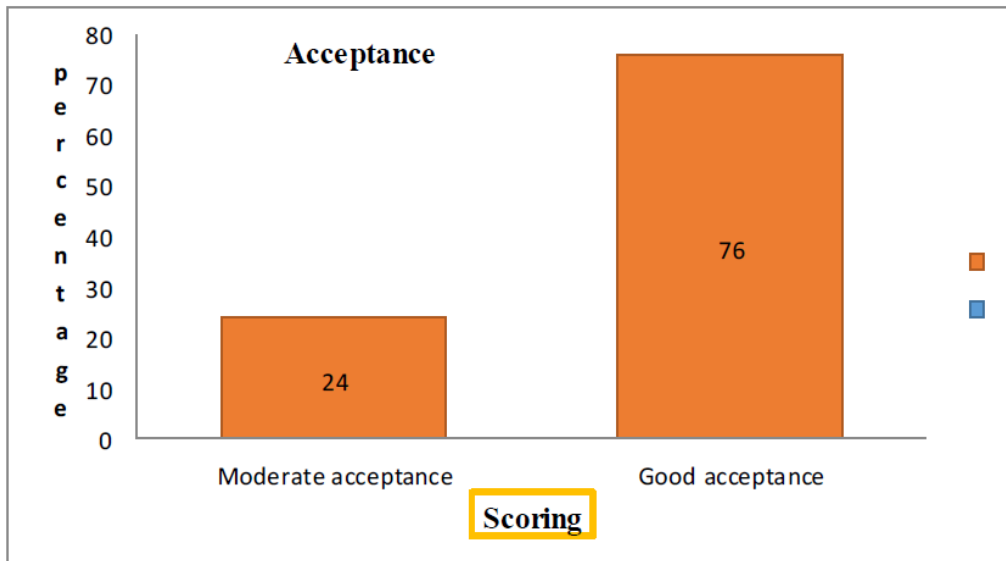


Figure 2: The Pie diagram shows that distribution of reason for permanent colostomy.

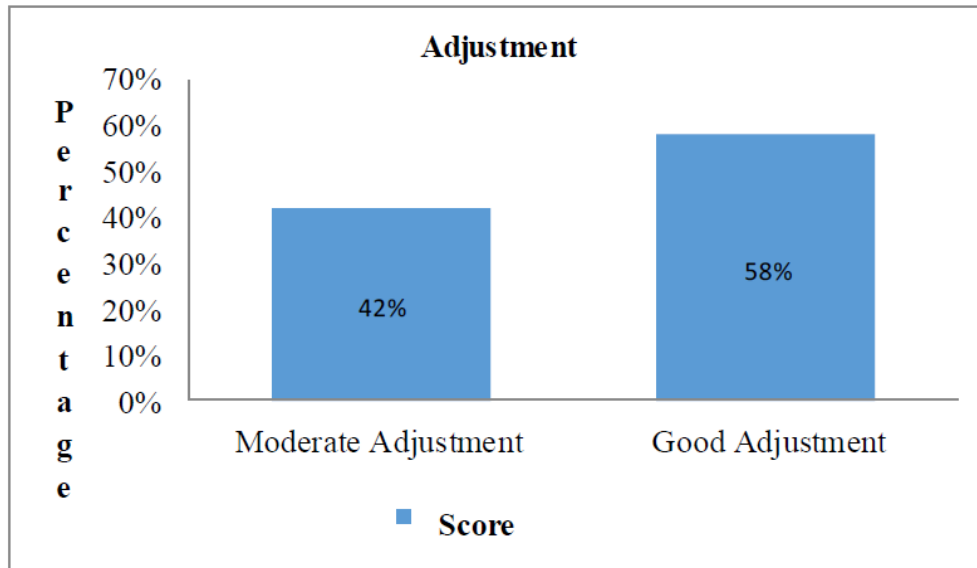
The Pie diagram shows that the major reason for colostomy is colon cancer (86%)



Graph 1: Acceptance of patient with colostomy.

n =50

The Graph 1 shows that 12 (24%) subject with colostomy are having moderate degree of acceptance and 38(76%) are having good acceptance.



Graph 2: Adjustment of patient with colostomy.

n =50

The Graph 2 shows that 21 (42%) subject with colostomy are having moderate degree of adjustment and 29 (58%) are having Good adjustment.

Table 3: Correlation between Acceptance and Adjustment.

Acceptance and Adjustment with Colostomy	Correlation Coefficient	p value
	0.591	<0.01

n =50

The Table shows that there is significant correlation between acceptance and adjustment.

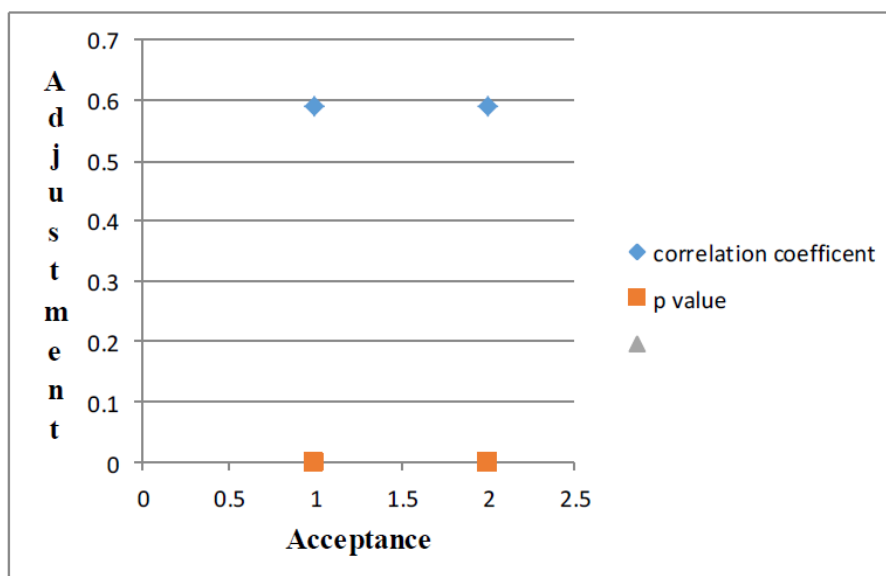


Table 3: Association between Acceptance with Socio Demographic and Clinical Variables.

SL No	variables	ACCEPTANCE				p value
		Moderate		Good		
		Frequency(f)	Percentage (%)	Frequency(f)	Percentage (%)	
1	Colostomy since					0.004
	6 month -1 year	5	41.7	1	2.6	
	1year- 3year	3	25.0	14	3.8	
	3 years- 5 years	2	16.7	11	28.9	
	Above 5 years	2	16.7	12	31.6	
2	Irrigation					0.021
	Yes	1	8.3	17	44	
	No	11	91.7	21	53.3	

n =50.

The Table 3 shows that, there is a significant association between acceptance illness scales with clinical variables including duration, irrigation of colostomy.

Table 4: Association between adjustment with socio demographic and clinical variables.

SI No	Variables	Adjustment				p value
		Moderate		Good		
		Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)	
1	Food Habits					.045
	Homely Foods	21	100	24	82.8	
	Fast Food	0	0	5	17.2	
2	Cleaning					.044
	Dependent	11	52.4	23	79.3	
	Self	10	47.6	6	20.7	
3	Handling of cloths					.001
	Comfortable	12	57.1	28	96.6	
	Uncomfortable	9	42.9	1	3.4	

n=50

The table 4 shows that, there is a significant association between adjustment inventory with clinical variables

including food habits, cleaning, and handling of cloths in colostomy.

Table 6: Adjustment Inventory Factors.

Variables	Category	Adjustment inventory			
		Strongly agree		Strongly disagree	
		N	%	N	%
Factor 1	OA1 (recovered from stoma operation)	43	86	7	14
	OA3 (able to live meaningful life with stoma)	49	98	1	2
	OA4(enjoy food as earlier)	18	36	32	64
	OA6 (sleep well with stoma)	17	34	33	66
	OA9 (accepted stoma)	4	8	46	92
	OA14 (accepted bodily changes due to stoma)	5	10	45	90
	OA15 (got a new life with stoma)	8	16	42	84
	OA19 (I have rewarding life even with stoma)	5	10	45	90
	OA23 (can engaging all activities)	8	16	42	84
Factor2	OA12 (I will be patient due to stoma)	11	22	39	78
	OA13(conscious about my stoma)	23	46	27	54
	OA17 (less sexually attractive due to stoma)	7	14	43	86
	OA20 (able to manage stoma in future)	8	16	42	84
	OA21(anxious about my stoma)	11	22	39	78

Factor3	OA5 (stoma inhibits in bathing)	17	34	33	66
	OA7 (cannot control life due to stoma)	11	22	39	78
	OA8 (cannot mix socially due to stoma)	8	16	42	84
	OA11 (limited activity due to stoma)	9	18	41	82
Factor 4	OA2 (Don't like stoma)	10	20	40	80
	OA10 (cannot get over shock of having stoma)	13	26	37	74

n=50

Table: 5 The data depicted in the table shows that in factor 1 (acceptance) OA3 is more strongly agreeing 49 (98%) and in factor 2 (anxious preoccupation) OA13 is strongly agreeing 23 (46%), In factor 3 (social engagement) OA 5 is strongly agreeing 17(34%), factor 4 (anger) OA10 is strongly agreeing 13(26%).

DISCUSSION

The study deals with discusses of finding that are obtained through the study in light of available literature. The study was descriptive correlation in nature which was designed to assess the acceptance and adjustment to stoma among patient after permanent colostomy. The objective that formed in this study were 1) identify the acceptance to stoma among patient after permanent colostomy, 2) identify the adjustment to stoma among patient after permanent colostomy 3) find relationship between acceptance and adjustment to stoma among patient after permanent colostomy .

First objective of the study was to identify the acceptance to stoma among patient after permanent colostomy

In the present study the researcher assessed acceptance to colostomy using the acceptance illness scale. The results showed that no subjects are included in the poor acceptance category, 12 (24%) are having moderate acceptance and 38 (76%) are having good acceptance. Further analysis on acceptance revealed that majority of the subjects have good acceptance to colostomy.

The finding of the acceptance to colostomy supported by the study done by zhang TL, et al. regarding patients after colostomy: relationship between quality of life and acceptance of disability and social support. A Descriptive, correlational study was conducted using four scales. A Convenience sample of 111 colostomy patients from four hospital in Guangzhou who underwent colostomy operation at least one month prior to the study and who visited the stoma clinic or association from august 2011 to February 2012 were evaluated for inclusion in the study. The result shows that the patient's general health status was better than the reference and treatment of cancer, and the overall ADS score was average. The general health status and dimensions of QOL were significantly correlated with ADS and all of it dimensions ($p < 0.05$). The general health status and dimensions of QOL were also significant correlated with SRQS and its entire dimension ($p = 0.05$). They conclude that QOL, Acceptance of disability, social relational quality of colostomy patients were closely related. Their

result emphasize that patient should work to form rational values and close bond with families and friends to achieve a better quality of life.^[10]

Second objective of the study was to identify the adjustment to stoma among patient permanent colostomy

In the present study the researcher assess adjustment to colostomy using OSTAMATES Adjustment inventory OA – 23 items, the adjustment shows that no subject include in the no adjustment, 21 (42%) are having moderate adjustment and 29(58%) are having good adjustment.

The finding on the adjustment to colostomy are supported by the study done by Kingsley L. Simmons et al.... regarding the adjustment to colostomy: stoma acceptance, stoma care self- efficacy and inter personal relationships. The aim of the study was examining adjustment and its relationship with stoma acceptance and social interaction and the link between stoma care, self- efficacy and adjustment in the presence of acceptance and social interaction. The study was conducted between 2000- 2002 and 70 patients were approached. The result showed that stoma care –efficacy ($t = 3.36$, $p = 0.002$), stoma acceptance ($t = 4.16$, $p < 0.001$), interpersonal relationship ($t = -2.25$, $p = 0.03$) and location of the stoma were strongly associated with adjustment. In conclusion of the study was addressing psychosocial concerns should become part of the care routinely given to stoma patients .we recommend more emphasis on dispelling negative thoughts and encouraging social interaction.^[8]

Third objective of the study was to find the relationship between the acceptance and adjustment to stoma among patient after permanent colostomy.

In the present study, a highly significant correlation ($r = 0.591$, $p < 0.01$) was found between acceptance and adjustment to stoma among patient after permanent colostomy.

The finding on the relationship between acceptance and adjustment to colostomy are supported by the study done by the Tianjin University of Traditional Chinese Medicine, Tianjing, and china regarding correlation between acceptance of disability and social relation quality in patients with colostomy. The sample in that the study consisted of 111 patients with permanent colostomies who were recruited by convenience sampling .The results showed that over all the patients' acceptance of disability was moderate. The total score

and factor scores of acceptance of disability were significantly correlated with the total score of social relational quality and the factor score of family commitment and friendship ($p < 0.05$). In the conclusion of the study was there is a positive correlation between acceptance of disability and social relational quality in patients with colostomy. These result will improve patient's social relational quality of life and provide psychosocial intervention to promote their acceptance of disability.^[11]

Association of acceptance and adjustment to colostomy with socio- demographic and clinical variables.

There is a significant association between acceptance illness scale with clinical variables including duration, acceptance, adjustment, irrigation of colostomy. As well as there is a significant association between adjustment inventories with clinical variables including food habits, cleaning, and handling of cloths of the colostomy.

Conflicts of interest: Nil.

Source of income: Self.

CONCLUSION

The study findings showed that there is good acceptance and adjustment among patients with colostomy and there exist a significant correlation between acceptance and adjustment. But there is still a group of people who are having moderate acceptance and adjustment. So some kind interventions are needed in order to improve acceptance and adjustment among the remaining group of people.

REFERENCES

1. Adel, M., Ashoori, E., Moladoost, A. and Aghayi, S.(2008): psychological experience of patient with surgical stoma (colostomy): A phenomenological study. *Res Behav Sci*, 2: 119-127.
2. Lee GH, Malietzis G, Askari A, Bernardo D, Al-Hassi HO, Clark SK. is right-sided colon cancer different to left-sided colorectal cancer?- a systematic review. *Eur J Surg Oncol*, 2015; 41: 300-308.
3. Brady. M, Nettina. M S., the Lippincott manual of nursing practice; Lippincott William and wilikm, 7 ed, India, 2001; 590.
4. Siegel RL, Miller KD, Jemal A. Cancer Statistics 2016. *CA Cancer J Clin*, 2016; 66: 7-30.
5. Yin D, Morris CR, Bates JH, Germen RR. Effect of misclassified underlying cause of death on survival estimates of colon and rectal cancer. *J Natl cancer inst*, 2011; 1130-1133.
6. Kieghley, M.(2009): *Surgery of the anus ,rectum and colon* (2nd ed.).Philadelphia: W. B. Saunders.
7. Felton ea. (1984) Acceptance of illness scale. In *Measures in health Psychology*, Berkshire.
8. Simmons, K., J., Bobb, K. and Liles, L. (2007): Adjustment to colostomy: stoma acceptance, stomas care self-efficacy and interpersonal relationships. *J Adv. Nurs*, Decemper, 60(6): 627-35.
9. Hussein, M. and Aboelfadel, S. (2008): Quality of life in Egyptian stoma patients. University of Alexandria, Egypt. *Eg Journal of Surgery*, (20), No. (3).
10. Zhang TL,et al. *Chin Med J (Engl)*.2013. Patients after colostomy: relationship between quality of life and acceptance of disability and social support.
11. Tie-ling Z et .al. correlation between acceptance disability and social relational quality in patients with colostomy .*International Journal Of Nursing Science*, 2014.