

Looking Through the Lens of Cancer Patients- A Study to Investigate Difference between two groups of cancer patients belonging to two different age groups with respect to Life Satisfaction and Locus of Control.

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ABSTRACT

The present study probed into the differences with respect to two psychological variables namely Life Satisfaction and Locus of Control between two groups of Cancer patients with varying age. Group 1 included cancer patients aged 25 to 50 years and Group II consisted of patients between 55 years to 80 years of age. The sample consisted of 52 individuals in each group. Therefore, the total sample size was 104. The method of sampling was purposive. Data were collected from patients of cancer hospitals. The tools used for conducting the study included The Satisfaction With life Scale by Ed Diener (1983) and Levenson's Locus of Control Scale (1973). The latter included three dimensions namely Individual Locus of Control, Chance Locus of Control and Locus of Control of Powerful Others. Initially, General Information Schedule, General Health Questionnaire and Life Events Scale were administered for screening of the subjects. Four Hypotheses were formulated. Mean and SD of the variables of the two groups were calculated. t test was computed to test the mean differences, if any, across the variables in the two groups of cancer patients for testing the hypotheses. Findings reveal a significant mean difference with respect to the variables between the two groups. It was also found that the older patients were relatively more satisfied with life than the younger patients and also the older group of patients were oriented more towards individual control whereas the younger patients had high scores in Powerful Others and Chance Control.

Cancer is a potentially fatal disease caused mainly by environmental factors that mutate genes encoding critical cell-regulatory proteins. The resultant aberrant cell behavior leads to expansive masses of abnormal cells that destroy surrounding normal tissue and can spread to vital organs resulting in disseminated disease, commonly a harbinger of imminent patient death (Malcolm R. Alison 2007, Imperial College School of Medicine, London, UK). The cancer-causing agents (carcinogens) can be present in food and water, in the air, and in chemicals and sunlight that people are exposed to. In spite of good advancements for diagnosis and treatment, cancer is still a big threat to our society (Kotnis et al, 2005).

This is the second most common disease after cardiovascular disorders for maximum deaths in the world (Jemal et al, 2007). The world's population is expected to be 7.5 billion by 2020 and approximations predict that about 15.0 million new cancer cases will be diagnosed; with deaths of about 12.0 million cancer patients (Bray and et al, 2006). The prevalence of cancer in India is estimated to be around 2.5 million, with about 8,00,000 new cases and 5,50,000 deaths per annum (the developing and under developed countries, which may rise up to 70%; a serious issue for all of us. The magnitude of cancer problem in the Indian Sub-continent (sheer numbers) is increasing due to poor living standards (Wynder et al, 1974) and inadequate medical facilities. Most frequently observed cancers in Indian population are of lungs, breast, colon, rectum, stomach and liver (Nandakumar, 1990-96; Rao et al, 1998; Murthy et al, 2004).

Cancer survivorship researchers have begun attending to the multidimensional needs of survivors, including the need to promote optimal psychological adaptation and health. Theoretical models of well-being that account for the complexity of survivorship issues are needed.

Cancer causes emotional distress as well the normality of life style shifts to the unknown direction. The presence of death threat as well as social stigma, being a cancer patient, makes the patients vulnerable to mental disorders more than actual side effects of drugs and the disease itself. It is observed that palliative care and existential counselling aids in

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such cases bringing miraculous results. Social support and the very perspective of the disease bring multi dimensional results among cancer patients. Therefore, the personality and the psychological aspect play a major role in healing or resulting in degeneration of the patient.

Cancer is routinely portrayed as a psychological trauma .Dramatizing it as ‘traumatic’ is a standard way of introducing psychological studies of cancer. A diagnosis of Cancer is always life altering. We are only beginning to understand, in a scientific way, the connection between disease and the mind. There is a rapidly growing body of research studying the relationship among emotions, personality characteristics, and disease, especially cancer. The answers are beginning to emerge, and they demonstrate a definite connection between emotions and the chances of developing cancer, as well as the prognosis of the disease once it has appeared.

Several psychological characteristics appear to influence the course of cancer, depression and stress, lacking a sense of control, having a negative outlook, and lacking an adequate support system. All correlate with a poor prognosis. Having a sense of control, a positive outlook, and a good support system correlates with a better prognosis.

Cancer has been portrayed as a disease that has typically been approached as a supreme test for medical sciences – with the emotional and psychological needs of patients their care givers and post treatment psychological health often getting minimum consideration. In many ways, the race to find more effective biomedical treatments appears to have outpaced the search for ways to aid patients psychosocial well being. (Rowland, 2008)

Studies have been conducted to investigate the different psychological concomitants of cancer. However, much of the studies have explored variables like Anxiety, Depression, Quality of life, Stress, having a negative outlook, and lack of an adequate support system in relation to Cancer among the patients and the survivors. Cancer patients are occupied with many psychosocial problems, which are only partially, related to their health state and medical treatments. They are faced with a high social pressure, based on prejudices and stereotypes of this illness. Little research, if at all, has laid emphasis on age and its psychological implications.

Therefore the present study focuses on two major psychological concomitants of cancer - Satisfaction with Life and Locus of Control. It also aims to investigate the relationship of these criteria with respect to age and how that affects a person’s life and behaviors.

Satisfaction of Life: Webster’s Encyclopedic Dictionary of English Language (1977) defines it as an “act of satisfying or state of being satisfied, contentment in possession and enjoyment; and to satisfy is to gratify fully the wants, wishes or desires of any to supply to the full extent, with what is wished for”. In general, the word satisfaction is defined as fulfillment or gratification of desires, feelings or expressing pleasures, happiness, contentment and optimism. It is the knack of finding a positive for every negative affair. Satisfaction wholly depends upon the individuals’ environment, caliber, behavior and nature. It is more concerned with mind than the material world. Life Satisfaction is conceptualized as a key indicator of well being. It may be possible that a person is satisfied with almost all domains e.g. health, wealth, marriage, education etc but still may not be satisfied with a particular domain which he or she perceives to be most important. Health has been identified as one of the most important factor related to satisfaction (Dubey 2003)

Locus of Control: In psychology, Locus of Control refers to the extent to which individuals believe they can control events affecting them. Understanding of the concept was developed by Julian B. Rotter in 1954, and has since become an aspect of personality studies. A person’s “locus” (Latin for “place” or “location”) is conceptualized as either internal (the person believes he can control his life) or external (meaning he believes his decisions and life are controlled by environmental factors which he cannot influence, or by chance or fate). Individuals with a strong internal locus of control believe events in their life derive primarily from their own actions: they tend to praise or blame themselves and their abilities. People with a strong external locus of control tend to praise or blame external factors such as the teacher or the test. The Locus of Control actually aids in attaining the balance between the dynamic components -the adaptability and acceptance that ultimately enhances the attitude towards suffering as well as the process of coping.

Objectives

- To investigate whether there exists any difference in the psychological aspect namely **Satisfaction of Life** between the two age groups of cancer patients namely aged between 25 to 50 years and 55 to 80 years.
- To investigate whether there exists any difference in the psychological aspect namely **Locus of Control – Powerful Others, Chance Control and Individual Control** between two groups of cancer patients aged between 25 to 50 years and 55 to 80 years.

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Hypotheses

Ho1— There is no significant mean difference with respect to **Life satisfaction** between the two groups of Cancer patients, namely: GROUP-1 i.e. age ranging from 25 to 50 years and GROUP-2 i.e. age ranging from 55 to 80 years.

Ho2— There is no significant mean difference with respect to **Powerful Others** between the two groups of Cancer patients, namely: GROUP-1 i.e. age ranging from 25 to 50 years and GROUP-2 i.e. age ranging from 55 to 80 years.

Ho3— There is no significant mean difference with respect to **Chance Control** between the two groups of Cancer patients, namely: GROUP-1 i.e. age ranging from 25 to 50 years and GROUP-2 i.e. age ranging from 55 to 80 years.

Ho4— There is no significant mean difference with respect to **Individual Control** between the two groups of Cancer patients, namely: : GROUP-1 i.e. age ranging from 25 to 50 years and GROUP-2 i.e. age ranging from 55 to 80 years.

Sample

Sample Size: The sample comprised of 52 individuals in Group -1 (age from 25 years to 50 years) and Group 2-(age from 55 years to 80 years) who were suffering from different stages of Cancer disease. Therefore the total sample size was 104.

Sampling: The method of sampling used for the present research was purposive sampling. Two groups of patients suffering from cancer were considered in the present study. The first group-Group 1 consisted of patients belonging to the age group of 25 years to 50 years. The second group –Group 2 consisted of patients belonging to the age group of 55 years -80years. Both male and female patients were considered. Both the groups were matched in terms of age, marital status, number of children, number of dependents, organ affected, and stage of cancer, period of suffering and period of treatment.

Inclusion Criteria: The sample was selected by the method of purposive sampling from **Netaji Subhash Cancer Research Institute and Tata Memorial Cancer Hospital in Kolkata.**

The inclusion criteria of the sample is as follows-

Ø **Age:** Group -I = 25years to 50 years.

Group-II=55years to80 years.

Ø **Sex:** Both male and female patients were taken into account.

Ø **Educational Qualification:** Minimum class-X.

Ø **Marital Status:** Married.

Ø **Number Of Children:** At least one child. Patients with no children were not taken into account.

Ø **Socio-Economic Status:** Middle class.

Ø **Stage:** 2nd, 3rd.

Ø **Period of Suffering:** Not less than two years. Patients suffering for more than four years were not included as sample.

Ø **Period of Treatment:** At least one year.

Tools Used:

The following tools were used for the collection of data in the present study-

Ø General Information Schedule\

Ø The satisfaction with life scale by Ed Diener, (1983)

Ø Levenson's locus of control scale (1973) which includes: Powerful others, Chance Locus of Control and Individual Control.

Ø Life Events Scale, Holmes and Rahe (1986)

Ø General Health Questionnaire-28

Data Analysis Technique:

The data obtained from the different groups of the subjects were symmetrically arranged and properly tabulated with respect to each of the variables considered in the present study. The data were analyzed statistically and suitable statistical techniques were used in line with the hypotheses as stated earlier. At first, means and standard deviations for the two groups with respect to each of the variables were calculated. Then t statistics for independent samples of equal size was used to test the significance of the difference between the means.

Statistical Methods for Data Analysis: The result obtained from the analysis of data is presented in the following tables.

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Results

Table-1

Mean and SD of Two Groups of Cancer Patients; Group 1 (25years to 50 years of age) and Group II (55-80 years of age) with respect to the variables considered in the study

Variables	Groups	Mean	SD
Satisfaction Of Life	Group 1 (age from 25 years to 50 years)	21.59	6.45
	Group 2 (age from 55 years to 80 years)	25.03	6.57
LOC Powerful Others	Group 1 (age from 25 years to 50 years)	7.84	1.79
	Group 2 (age from 55 years to 80 years)	6.68	2.4
Chance Control	Group 1 (age from 25 years to 50 years)	9.34	0.86
	Group 2 (age from 55 years to 80 years)	8.56	1.56
Individual Control	Group 1 (age from 25 years to 50 years)	4.65	3.00
	Group 2 (age from 55 years to 80 years)	5.87	2.79

Table-2

(t Value) Group 1 (25years to 50 years of age) and Group II (55-80 years of age) with respect to the variables considered in the study

	Variables	t
Locus of Control	Satisfaction Of Life	2.11 *
	Powerful Others	2.23 *
	Chance Control	2.51*
	Individual Control	2.32*

* p<0.05,

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The above table reveals that there is a significant difference between two groups of cancer patients group1 (age from 25 years to 50 years) and Group 2-(age from 55 years to 80 years) with respect to satisfaction of life and the three dimensions of locus of control namely powerful others, chance control and individual control.

Thus on the basis of the results it can be put forward that-

In the selected sample, group 1[younger group] was found to display high mean values with respect to the variables and their sub factors namely;

- Powerful others and Chance Control in case of locus of control.

In the selected sample, group 2[old group] was found to display high mean values with respect to the variables and their sub factors namely;

- Satisfaction of Life and Individual Control.
- Significant mean differences have been found between two groups of cancer patients, varying in age with respect to satisfaction of life, Locus of control namely, Powerful others, Chance control and individual control.

Therefore, HA1, Ho2, Ho3 and Ho4 have been found to be rejected at 0.05 levels.

Discussion

SATISFACTION OF LIFE:

In the present study it is seen from the mean values with respect to Satisfaction of life that the older group, aged 55 to 80 years, suffering from Cancer displayed a higher satisfaction with life. These people appeared to be relatively more satisfied with their present life as they might have had a feeling that the end was near and so were not quite as hopeful for the future. In a study on gastrointestinal cancer patients, Karin Nordin (2001) ,of Uppsala University in Sweden, found that lowered expectations bring in the cancer patients greater life satisfaction, This long-held belief gels with the current finding that older cancer patients downgrade their expectations of life to match reality, and are consequently no more anxious or depressed regarding their suffering than their younger counterparts. Older people seem to apparently prepared for their deteriorating health related issues which are the tell-tale signs of aging.

Another reason for having higher life satisfaction could be **Intellectualization**-a defense mechanism where reasoning is used to block confrontation with an unconscious conflict and its associated emotional manifestation. As people become older, they appear to be contended with life because they become wiser and more knowledgeable, so they begin to realize that with age life unfolds its beauty more and more. They might even have the belief that they have had the opportunity to live their lives. They realize that they are heading towards the end of their lives. Cancer to them may be perceived as only a means to the end and therefore not an additional threat.

There are several factors that contribute towards happiness and life satisfaction. Positive and negative experiences, both; those that are acute events like death of a loved one or diagnosed with any chronic illness like Cancer, daily experiences like ongoing family discord, a satisfying career, doing something meaningful in a productive capacity contributes to one's feeling of life satisfaction. Personal religious identity, which is apparently higher in the older group, is also very positively associated with life satisfaction.

In his book "Happier", Tal Ben-Shahar (2009), argues that happiness should be people's ultimate goal, the primary factor in evaluating alternative choices. Furthermore, Ben- Shahar argues that pursuing genuine self-motivated goals, rather than just instant pleasure or selflessness in service of long delayed enjoyment, results in an optimal combination of short- and long-term happiness. Hence there is enough evidence that Satisfaction with life grows with age.

On the other hand, the other group of cancer patients, belonging to 25 to 50 years of age have scored relatively low with respect to satisfaction of life. It may be assumed that they are generally in Denial-a defense which leads in the delaying of the treatment. They become anxious about their future and life as a whole; truly so as they are still in a state of discovering life and are in pursuit of happiness. Cancer, to them acts as a sudden blow disrupting their flow of life and thereby inevitably lowering their sense of satisfaction in life. Therefore the role of age is evident amongst the two groups of patients suffering from cancer.

LOCUS OF CONTROL: A locus of control orientation is a belief about whether the outcomes of our actions are contingent on what we do (internal control orientation) or on events outside our personal control (external control orientation)" (Zimbardo, 1985).

The findings indicate a difference between the two groups suffering from Cancer under consideration in the present study, with respect to their mean value on three dimensions of Locus of Control i.e. Individual Control, Powerful Others

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and Chance Control. It is seen that Group -1 scores high in Powerful Others and Chance Control hence attributing the cause of their illness to Powerful Others and Chance Control while Group -2 score more on Individual Control.

Perceived control has been found to be a particularly important psycho-social factor (Helgeson, 1992; Taylor, Lichtman & Wood, 1984; Thompson & Spacapan, 1991). Perceived control, efficacy and competence are related to a variety of positive effects in chronic disease including better well-being, increased motivation to carry out different behaviours, the use of coping strategies and positive personal adjustment outcomes (Helgeson, 1992; Lledó, 2005; Martín-Aragón *et al.*, 2000; Pastor *et al.*, 1999; Taylor, Lichtman & Wood, 1984; Thompson and Spacapan, 1991).

Thus, control can be perceived either through an individual's own behaviour (personal control) or through other agents or means. Patients' control beliefs over the cause and evolution of their cancer are one of the psycho-social factors that facilitate patients' adaptation to their new situation. Patients need to create a sense of control regarding their illness,

The onset of any chronic disease like Cancer is an important source of stress that can lead to loss of control, helplessness and anxiety. Patients need to adapt to these types of experiences.

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Furthermore, this sense of perceived control, efficacy or competence is associated with a variety of positive effects such as better well-being, increased motivation to carry out behaviours, use of coping strategies and good adaptation results (López Roig, Neipp, Pastor, Terol & Massutí, 2004; Neipp, 2005; Osowiecki & Compas, 1999). Grassi and Rossi's study (1996) found that the external dimension was associated with worse adjustment and high distress, which is evident in the present findings as the younger group has scored high in the chance control and powerful others which are external dimensions. It is evident that younger respondents are on a road to discover themselves and busy in their struggle for personal and social adjustments which are the chief characteristic feature of early adulthood. Results also suggest that the group of patients belonging to a later phase of life attribute the cause of the illness to themselves as they blame themselves for the mistakes committed by them in the past (Berckman & Austin, 1993; Glinder & Compas (1999). According to a recent study published in the Journal BUON. 2014 Jul-Sep; on *Locus of control* and distressing symptoms in young cancer patients, Panagiotou I, Tsilika E, Parpa E, Patiraki E, when assessing depression suggested that younger cancer patients' poor quality of life, sense of control over the course of cancer', as well as anxiety, fatigue, anorexia, and sleep disturbances which are significantly correlated with the presence of depression and can eventually represent potential screening predictors.

Conclusion:

In this investigation, the aim was to assess the psychological well being of two groups of cancer patients namely group 1 aged 25 to 50 years and Group II ranging from 55 to 80 years with respect to their life satisfaction, and Locus of control,

Thus from results and findings it can be concluded that:

- Both the groups differed significantly in terms of locus of control. Older patients were found to be relatively more satisfied with life than the younger patients as revealed by mean values.
- Both the groups differed significantly in terms of locus of control. The older group of patients scored higher in individual control whereas the younger group had high scores in powerful others and chance control with respect to their mean values.

Thus it can be concluded on the basis of present findings that the disease cancer does not discriminate anybody rather the difference lies in the psychological wellbeing of an individual as it is a disease of body mind and soul. The study also unravels the fact that with age comes an insight and a unique perception towards life which enable people to take the hardest of situations as a challenge rather than a threat. A positive attitude towards life that has already been led for a long time make individuals so strong that they are almost equipped to face anything in life calmly -even death. Whereas younger people ascribe their disease more to fate, destiny and luck. This learned helplessness makes them view life negatively thereby leading to a dissatisfied, unfulfilled life with lowered life satisfaction.

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It implies psychological aspects of cancer patients can be channelized into positive direction if taken into account properly. This definitely transforms the fate of the disease as well as the diseased at the same time changing the interactions within. Thus the criterion of social perception along with the concept of self brings the resilience to overcome such situation. It indicates clearly that cancer is associated with psychosocial aspects varying across age groups and that the treatment should encompass variety of distinct components instead of any singular one to facilitate the survival as a whole and not in parts.

We all need to do our bit. We all know that cancer “kills”; but there is a better prospective to it also which is: *What Cancer Cannot Do*”

Cancer is so limited...
 It cannot cripple love
 It cannot shatter hope
 It cannot corrode faith
 It cannot destroy peace
 It cannot kill friendship
 It cannot suppress memories
 It cannot silence courage
 It cannot invade the soul
 It cannot steal eternal life
 It cannot conquer the spirit.”
 - Author Unknown

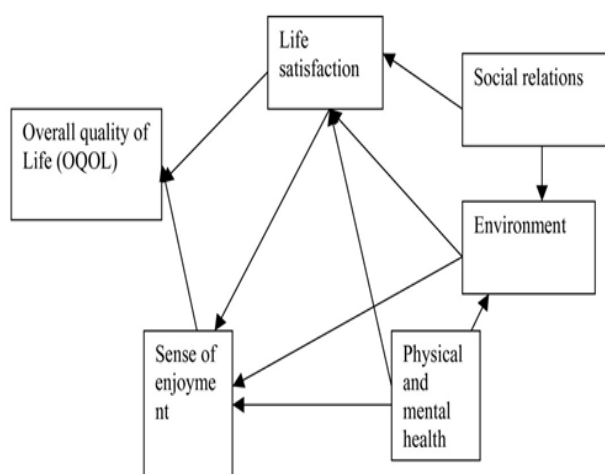
Summary: Overall the present study has attempted to understand the psychological well-being of Cancer patients. The study hopes to encourage future research towards gaining deeper insight into the nuances of psycho-oncology. The limitations can be covered in the future research work which aims to unravel different aspects of this interesting phenomenon.

Limitations of The Study : 1. Sample size could have been increased 2. Different age groups could have been included in the study 3. A comparison could have been drawn between cancer patients and non cancer patients pertaining to the two groups.

Fig 1



Fig 2



Graphical Representation of the mean and SD of the two groups of Cancer Patients : Group I (25-50) years and Group II (55-80) years.

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Chart-1 Satisfaction of Life (Series 1-Grp1, Series 2-GrpII)

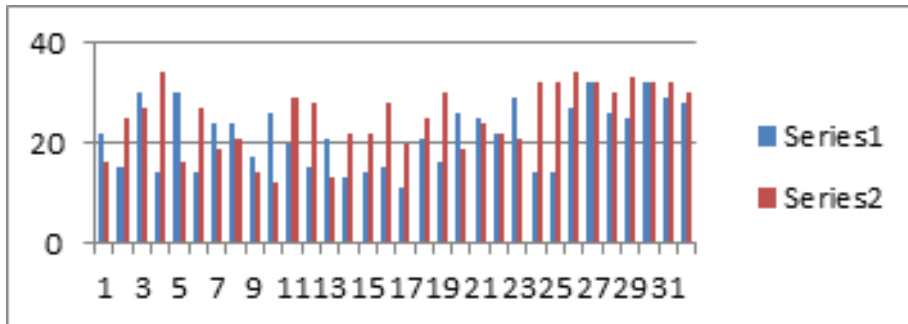


Chart-2 Locus of Control Powerful Others (Series 1-Grp1, Series 2-GrpII)

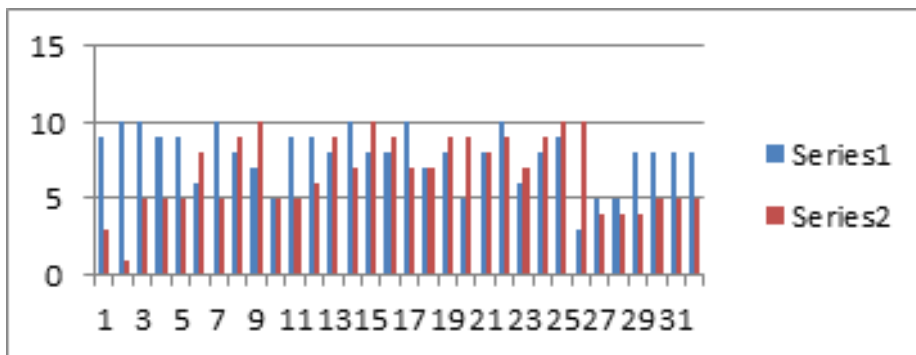


Chart-3 Chance Control (Series 1-Grp1, Series 2-GrpII)

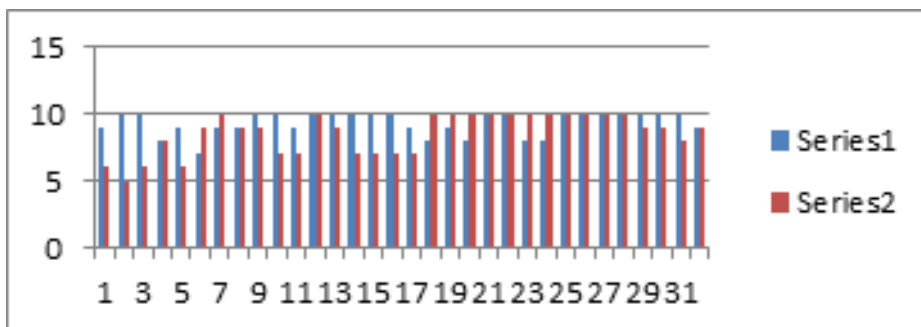
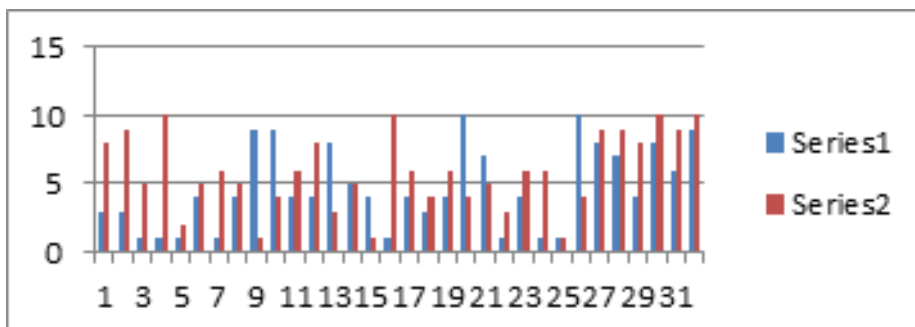


Chart-4 Individual Control (Series 1-Grp1, Series 2-GrpII)



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