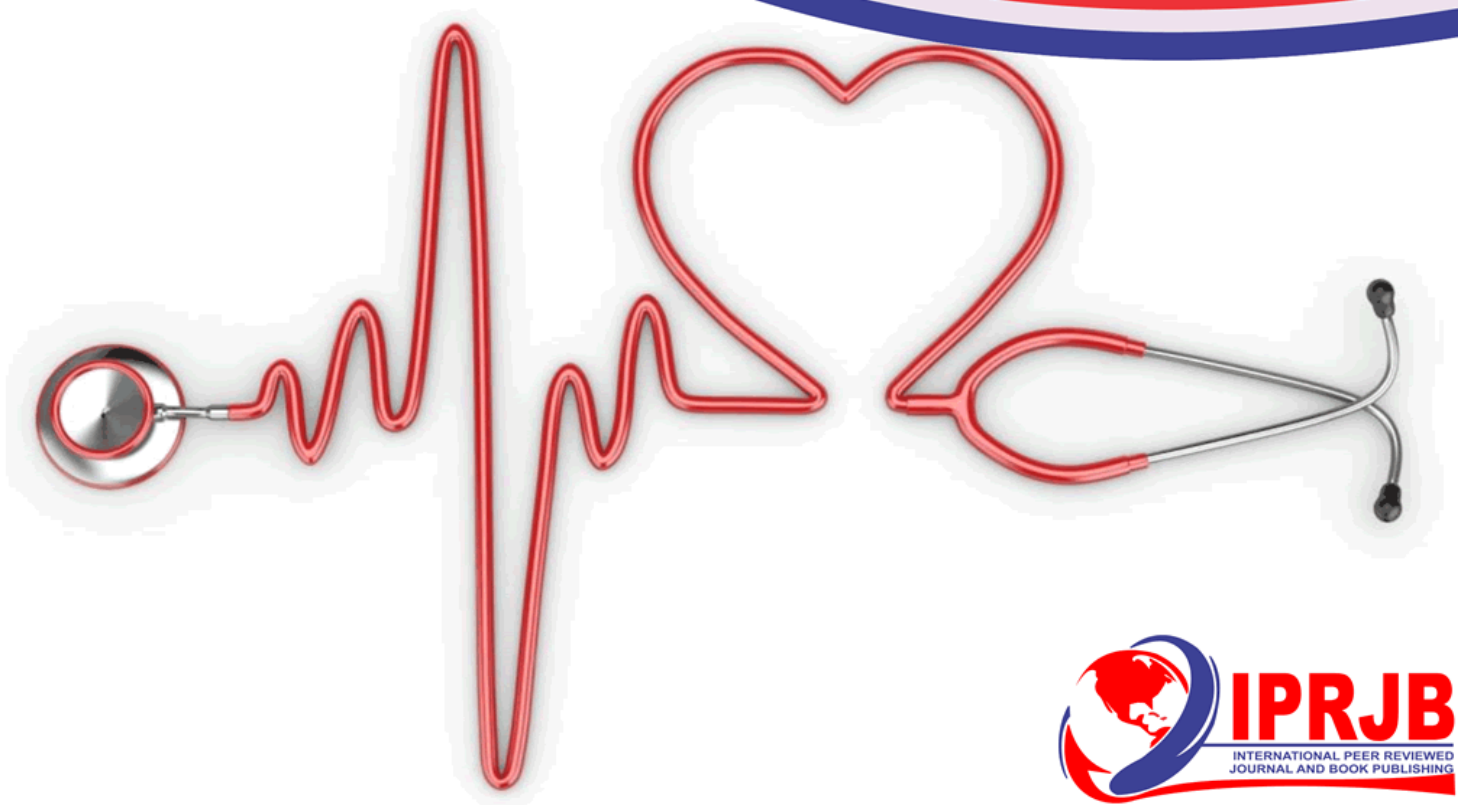


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**PALLIATIVE CARE RECOVERY OUTCOMES: NATURE OF  
RECOVERY OUTCOMES AMONG CANCER PATIENTS IN  
NAIROBI AND NYERI COUNTIES, KENYA**

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**PALLIATIVE CARE RECOVERY OUTCOMES: NATURE OF RECOVERY  
OUTCOMES AMONG CANCER PATIENTS IN NAIROBI AND NYERI COUNTIES,  
KENYA**

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**Abstract**

**Purpose:** This study sought to find out nature of recovery outcomes among cancer patients attending palliative care in Nairobi and Nyeri County

**Methodology:** The study adopted a correlation research design. The target population was the cancer patients, attending treatment at the three palliative care units in Nairobi and Nyeri Counties. Systematic random sampling technique was used in the study to obtain a sample of 96 participants. Semi structured questionnaires were used to collect data. Data was analyzed using both descriptive and inferential statistics, namely Pearson Moment Correlation Coefficient(r).

**Findings:** Result showed that, majority of the respondents (65.5%) had a low level of recovery outcomes, while 32.1% had a high level of recovery outcomes. results indicate that the lowest score on recovery outcomes was 31, while the highest score was 74. The mean score was 47.0+9.465, which indicates that the recovery outcomes fell in the low range. These findings were not unusual considering that most of the patients were newly diagnosed with cancer and for some respondent's metastasis had set in.

**Unique contribution to theory, practice and policy:** The study recommends that the counsellor in collaboration with the administrators and medical staff in the palliative care units should create awareness and encourage the attending patients to source for a health insurance cover e.g. National Health Insurance Fund (NHIF) to cater for the cancer disease both outpatient and incase of hospitalization. This will ease the financial burden of cancer on the patient, family and community which was identified as a challenge.

**Keywords:** Pain, Weight, Quality of life, Quality of sleep, Recovery outcomes, Adversity Quotient ,palliative care, Nyeri County Referral Hospital (CRH), Nairobi Hospice, Nyeri Hospice

## INTRODUCTION

Studies have shown that while majority of cancer survivors lead healthy, active lives, cancer can sometimes have long-term effects on the body, such as chronic pain, interrupted sleep patterns, weight loss and diminished quality of life. Pain dramatically affects the quality of life while disturbances in sleep patterns can lead to significant daytime tiredness (Berger, 2012). Disrupted sleep patterns are usually associated with aging, illness, situational stress and drug treatment (National Sleep Foundation, 2014). Research has shown that approximately one-third to one-half of people with cancer experience sleep disturbance (Savard & Morin, 2001). Other factors that may disrupt the sleep patterns of cancer patients include physical illness, hospitalization, pain, drugs, the psychological impact of a malignant disease and other treatments for cancer (Berger, 2012). Poor sleep negatively affects performance and daytime mood.

Estimates by the National Cancer Institute (2010) indicate that nearly 45% of cancer patients' experiences sleep disturbances. While there exists psychological and physiological sources of sleep pattern disruption, research has shown that cancer patients are at a greater risk for physiologic disturbances (Berger, 2012). The most commonly reported symptoms of sleep disruption by cancer patients include insomnia, excessive fatigue, excessive sleepiness and leg restlessness (Parish, 2009).

According to the NCI, alteration in system function, such as the gastrointestinal and genitourinary systems treatment side effects, tumor progression, thermoregulation disruption are among some of the sources of physiologic sources of sleep disruption (National Cancer Institute). Identification and treatment of sleep disorders is a key factor in cancer patients, because it is likely to influence other factors such as perception of tolerance of treatment measures, physical symptoms and quality of life (Stepanski, Walker, Schwartzberg, Blakely, Ong, & Houts, 2008). Consequently it is important to identify the potential cause of the sleep disturbance in order to determine the best means of treatment for cancer patients.

In a study conducted at the University of California San Diego, which evaluated the presence of sleep disturbances in cancer patients undergoing chemotherapy before onset of treatment and thereafter (Liu, Fiorentino, Natarajan, Parker, Mills, Sadler, et al, 2009) the study established that patients who had sleep disturbance before starting treatment had clinically worse symptoms during treatment, which negatively impacted the quality of life (Liu, et al, 2009). In conclusion, the study concluded that early identification and treatment of the sleep disturbance would lead to a decrease in the severity of symptoms and help improve patients' overall quality of life (Liu, et al, 2009).

Studies have shown that a good survival rate for a cancer patient can be significantly affected by a weight loss greater than 6% of normal weight at the time of cancer diagnosis (Wolff, 2007). According to Carver (2006) weight loss is a common phenomenon among people with cancer and is usually the first noticeable sign of the disease. National Cancer Institute (2010) reports that up to 40% of people diagnosed with cancer report unexplained weight loss at the time of diagnosis, and up to 80% of people with advanced cancer experience weight loss and cachexia (muscle loss).

Most people with cancer experience weight changes, muscle loss and fatigue at some point during their illness. In an effort to fight the cancer, the body produces substances called cytokines which can lead to weight loss, muscle loss and decrease in appetite. Chemotherapy and radiation, often causes reduced appetite this is due to the treatment side effects such as

nausea, vomiting, leading to inability to feed well and further contributing to muscle loss and loss of weight. Patients experiencing cachexia often cannot manage treatments well and may experience more intense symptoms (Gurret, 2011). Throughout the cancer continuum, individuals should strive to maintain a healthy weight as defined by a body mass index. Weight loss can impair a patient's quality of life, interfere with the completion of treatment, delay healing, and increase the risk of complications (Bethseda, 2011). Quality of life is a broad multidimensional concept that considers a person's physical, emotional, social, and spiritual well-being (Ferrell & Dow, 1997). According to a survey in USA approximately one in four cancer survivors has a diminished quality of life due to physical problems and one in ten due to emotional problems (Forsythe, 2012).

Physical well-being is the degree to which symptoms and side effects, such as pain, fatigue, and poor sleep quality, affect the ability to perform normal daily activities. Emotional, or psychological, well-being refers to the ability to maintain control over anxiety, depression, fear of cancer recurrence, and problems with memory and concentration. Social well-being primarily addresses relationships with family members and friends, including intimacy and sexuality. Other factors that affect social wellbeing include employment, insurance, and financial concerns. Finally, spiritual well-being draws its meaning from the cancer experience, either in the context of religion, keeping hope alive and resilience in the face of uncertainty about one's future health (Toles & Demark-Wahnefried, 2008).

Korstjens (2006) conducted a longitudinal study (n = 658) to address problems in a 12-week rehabilitation group program for cancer patients in the Netherlands. The study combined physical exercise and psycho-education. At baseline, participants reported a low quality of life, measured by sleep disturbances and high experience of pain. At the end of the 12 week rehabilitation, participants reported significant improvements on both variables: in experience of pain and sleep patterns. The findings of this study clearly indicate that the recovery outcomes among cancer patients is multifaceted, a situation the proposed research intends to investigate bearing in mind the different population characteristics. The study presented a methodological gap as it adopted a longitudinal research design while our current study will adopt a correlational research design. Pain in cancer can be caused by the disease itself or by the treatments and is common in patients with cancer. Approximately 30% to 50% of people with cancer experience pain while undergoing treatment, and 70% to 90% of people with advanced cancer experience pain. (Lesarge and Portenoy, 1999)

A study by Adriaan (2013) at the University of Stellenbosh, South Africa to compare the experience of pain on cancer survivors' quality of life in a rehabilitation Programme employing behavioral, cognitive and self-management therapies, established that participants showed significant, clinically relevant reduction of pain. In physical functioning, he found vitality and health change. The researcher concluded that behavioral interventions did have beneficial effects on cancer survivors' quality of life. The study presented geographical gap as it was done in South Africa while our current study will be done in Kenya.

Hollingshaus and Rebecca (2015) observe that although diagnosis with a major chronic illness tends to weigh heavily on the patient's well-being. Little attention is paid to gender variations in mental health following diagnosis. To test how diagnosis with cancer affected the AQ over time, a sample of 12,271 older adults was utilized in the European Union. The study explored AQ variation and whether sex differences were accounted for. Results showed that while male patients reported higher AQ scores than female patients. Females generally reported more

depressive symptoms than males, but the increase following diagnosis was smaller for females. The study presented geographical gap as it was done in European while our current study will be done in Kenya

Andrade, Muniz, Lange, Schwart, Echevarria and Guanilo (2010) conducted a descriptive cross-sectional study, with 264 Brazilian cancer survivors under medical assessment, data was collected through interviews. It was ascertained that the characterization of this population is relevant, because it will contribute to identifying factors which promote high resilience. The results indicated a higher level of resilience among the males (49.1%), while majority of women showed moderate resilience (45.9%). This finding with a study conducted in America in the Oncosinos/Hospital Regina in Novo Hamburgo-RS in 2007. In the study the researchers examined the degree of resilience of 418 oncology patients who were undertaking chemotherapy treatment. The study showed that female patients had lower resilience scores compared to their male counter parts. (De Silva, 2007).The study presented a conceptual gap as it examined the degree of resilience of 418 oncology patients who were undertaking chemotherapy treatment.while our current study sought to find out nature of recovery outcomes among cancer patients attending palliative care in Nairobi and Nyeri County

Cohen etal (2014) conducted an exploratory cross sectional study of 92 individuals aged between 27-87 years, diagnosed with colorectal cancer stage ii-iii, 1-5 years prior to enrollment in the study. Results found that older age men had less cancer related problems and this was associated with higher resilience and lower emotional distress. Findings were that there is better adjustment of older patients with cancer and increased professional support should be provided for patients with low resilience. The study presented a methodological gap as it adopted a exploratory cross sectional research design while our current study will adopt a correlational research design.

Mulemi (2010) study on cancer ethnography in Kenya highlights inadequate attention to cancer in Kenya. Cancer is and has been relatively neglected, a consequence of the complexity of the health problems cancer causes. This is a policy concern for Kenya, as limited literature exists that can inform policy formulation process. Social scientists and medical practitioners need to be aware of the comprehensive issues that shape patients' experiences of disease and treatment outcomes. Unfortunately, many of the problems that medical practitioners may perceive as non-technical attract the least attention. Comprehensive cancer management requires holistic assessment of sufferers' needs inside and outside the hospital. The study presented a conceptual gap as it examined the degree of resilience of 418 oncology patients who were undertaking chemotherapy treatment while our current study sought to find out nature of recovery outcomes among cancer patients attending palliative care in Nairobi and Nyeri County.

## **METHODS AND PROCEDURES**

This study adopted a correlational research design to examine the relationship between Adversity Quotient and recovery outcomes among cancer patients. Research was carried out at the three palliative care units in Nyeri and Nairobi Counties which are: Nyeri County Referral Hospital (CRH), Nairobi Hospice and Nyeri Hospice. The total target population for one month as per the data below was an estimated 637 patient's The areas were chosen as a research site because the government of Kenya plans to decentralize essential cancer management activities from Kenyatta National Hospital in Nairobi to Nyeri, Mombasa and

Kisumu County referral hospitals so as to ease the cost of the disease for low income families. These regions were identified by the Ministry of Health as the regions with the highest prevalence of cancer (Mulemi, 2010). The study adopted a systematic random sampling technique. Systematic random sampling is a method that involves selecting subjects from a sampling frame in a systematic way rather than a random manner. Based on this every third person was selected from a list until the study attained a total of 96 participants. The study utilized a self-scoring questionnaire administered to the participants to collect data on AQ, recovery outcomes and strategies that can be used to enhance Adversity Quotient among the participants. The completed questionnaires were coded and the participants' responses scored and keyed into a computer data file. Descriptive statistics, namely; means, percentages and frequencies were used in the analysis. In addition inferential statistics, namely Pearson Moment Correlation Coefficient was applied to calculate the nature, power, and direction of the association between two continuous variables, namely the recovery outcomes and AQ.

This section presents the findings on objective two which sought to establish the nature of recovery outcomes among patients in palliative care. Recovery outcomes were assessed using a scale with four dimensions namely level of pain experienced, weight change, quality of sleep and quality of life. Each of these dimensions was tested using items that assessed changes in the sub variables. The respondents rated their changes on a four point likert items (1-not at all, 2-to a lesser extent, 3- to a moderate extent, and 4- to a great extent). Since the total number of items on the entire scale was 20, the minimum possible score for an individual in the scale was 20 (1x20) and the maximum possible score was 80 (4x20). The scores were then categorized into two levels where scores ranging from 20 to 50 (level 1 and 2 of the likert scale) represented low recovery outcomes and scores ranging from 51 to 80 (level 3 and 4 of the likert scale) represented high recovery outcomes. The findings are presented in the subsections that follow beginning with the nature of recovery outcome in general followed by the various dimensions of recovery outcomes.

## RESULTS

### Recovery Outcomes in general

In this section data is presented on recovery outcomes in general using frequencies and percentages as well as means or descriptive statistics.

**Table 1: Nature of Recovery Outcomes**

Levels of Recovery Outcomes	Frequency	Percent
Low recovery outcomes	55	65.5
High recovery outcomes	27	32.1
No response	2	2.4
<b>Total</b>	<b>84</b>	<b>100.0</b>

From the results in table 1, majority of the respondents (65.5%) had a low level of recovery outcomes, while 32.1% had a high level of recovery outcomes. Data on recovery outcomes was further analyzed descriptively in terms of means and standard deviation. The findings are presented in table 2.

**Table 2: Descriptive Statistics for Levels of Recovery Outcomes**

	N	Minimum	Maximum	Mean	Std. Deviation
Recovery outcomes	82	31	74	47.00	9.465
Valid N	82				

As shown in table 2, results indicate that the lowest score on recovery outcomes was 31, while the highest score was 74. The mean score was  $47.0 \pm 9.465$ , which indicates that the recovery outcomes fell in the low range. Data was further analyzed to compare recovery outcomes by county. The findings are in table 3.

**Table 3: Comparison between Levels of Recovery Outcomes by County**

County		N	Minimum	Maximum	Mean	Std. Deviation
Nairobi	Recovery outcomes	20	31	70	46.80	10.165
	Valid N	20				
Nyeri	Recovery outcomes	62	31	74	47.06	9.314
	Valid N	62				

From the results in table 3, the lowest recovery outcomes score in Nairobi was 31 while that for Nyeri was also 31. The highest score was 70 for Nairobi and 74 for Nyeri. The recovery outcomes mean score for Nairobi was  $46.80 \pm 10.165$ , whereas for Nyeri was  $47.06 \pm 9.314$ . Both means fell within the low level range of recovery outcomes.

### Levels of Recovery Outcomes by Dimensions

The researcher further sought to find out the nature of the recovery outcome as per the four dimensions or indicators of recovery outcome, namely level of pain experienced, weight change, quality of sleep and quality of life.

#### Dimension of Pain as an Indicator of Recovery outcome

The dimension of level of pain experienced had four items and hence the lowest possible score was 4 (4x1) and the highest possible score 16 (4x4). Scores ranging from 4 to 11 represented high levels of pain and hence low recovery outcome and 12 to 16 represented low levels of pain and hence high recovery outcome. The frequencies for levels of recovery outcomes for dimension of pain are shown in table 4.

**Table 4: Frequency level for Pain as an Indicator of Recovery Outcomes**

Level of recovery outcomes	Frequency	Percent
Low recovery outcomes (High pain)	27	32.9
High recovery outcomes (Low pain)	55	67.1
<b>Total</b>	<b>82</b>	<b>100.0</b>

As shown in table 4, 67.1% of the respondents had high recovery outcomes, while 32.9 had low recovery outcomes for dimension of pain. Table 5 presents the descriptive statistics for the dimension of pain.

**Table 5: Descriptive Statistics for Pain levels as an Indicator of Recovery Outcome**

	N	Minimum	Maximum	Mean	Std. Deviation
Pain	82	5	16	10.90	2.909
Valid N (listwise)	82				

From the results in table 4.14, the minimum recovery outcomes score was 5, while the maximum score was 16. The mean score was 10.90 (SD=2.909) indicating that on average there was high level of pain and hence low recovery outcomes.

#### **Weight as an Indicator of Recovery Outcomes**

The dimension of weight change had three items and thus the lowest possible score was 3 (3x1) and the highest possible score 12 (3x4). Higher scores indicated weight gain thus high recovery outcomes, while lower scores indicated decreased weight thus low recovery outcomes. Scores ranging from 3 to 7 represented weight loss and hence low recovery outcomes and 8 to 12 represented weight gain and hence high recovery outcomes in terms of weight. The frequency level for weight as an indicator of recovery outcomes are shown in table 6.

**Table 6: Frequency for Weight as an Indicator of Recovery Outcomes**

Level of Recovery Outcomes	Frequency	Percent
Low recovery outcomes (Weight loss)	66	80.5
High recovery outcomes (weight gain)	16	19.5
<b>Total</b>	<b>82</b>	<b>100.0</b>

As shown in table 4.16, 80.5% of the respondents had low recovery outcomes, while 19.5% had high recovery outcomes for dimension of weight change. Table 7 presents the descriptive statistics for dimension of weight.

**Table 7 :Descriptive Statistics for Weight as an Indicator of Recovery Outcomes**

	N	Minimum	Maximum	Mean	Std. Deviation
Weight	82	3	12	4.80	2.848
Valid N (listwise)	82				

From the results in table 7, the minimum recovery outcomes score was 3, while the maximum score was 12. The mean score was 4.8 (SD=2.848) indicating that on average recovering patients experienced loss in weight and therefor had low recovery outcomes.

#### **Sleep as an Indicator of Recovery Outcomes**

The dimension of quality of sleep had three items and thus the lowest possible score was 3 (3x1) and the highest possible score 12 (3x4). Higher scores represented good sleep thus a high recovery outcome, and lower scores represented poor sleep thus low recovery outcome. Scores ranging from 3 to 7 represented poor sleep and hence indicated low recovery outcomes and 8 to 12 represented good sleep and hence indicated high recovery outcomes. The frequencies for dimension of sleep as an indicator of recovery outcomes are shown in table 8.



**Table 8: Frequency for Sleep as an Indicator of Recovery Outcomes**

Level of Recovery Outcomes	Frequency	Percent
Low recovery outcomes (Poor sleep)	47	57.3
High recovery outcomes (Good sleep)	35	42.7
<b>Total</b>	<b>82</b>	<b>100.0</b>

From table 8, 57.3% of the respondents had low recovery outcomes, while 42.7% had high recovery outcomes for dimension of sleep change.

Table 9 presents the descriptive statistics for dimension of sleep as an indicator of recovery outcomes.

**Table 9: Descriptive Statistics for Sleep as an Indicator of Recovery Outcomes**

	N	Minimum	Maximum	Mean	Std. Deviation
Sleep	82	3	11	6.90	1.584
Valid N (listwise)	82				

From the results in table 9, the minimum recovery outcomes score was 3, while the maximum score was 11. The mean score was 6.9 (SD=1.584) indicating that on average the recovering patients had poor sleep and hence indicating low recovery outcome.

### Quality of Life as an Indicator of Recovery Outcomes

The dimension of quality of life had ten items and thus the lowest possible score was 10 (10x1) and the highest possible score 40 (10x4). Scores ranging from 10 to 24 represented poor quality of life and hence indicating low recovery outcomes and 25 to 40 represented good quality of life and hence indicating high recovery outcomes. In quality of life as an indicator of recovery outcomes, higher scores represented good quality of life thus a high recovery outcome, and lower scores represented poor quality of life thus low recovery outcome. The frequency for quality of life as an indicator of recovery outcomes are shown in table 10.

**Table 10: Frequency for Quality of Life as an Indicator of Recovery Outcomes**

Level of Recovery Outcomes	Frequency	Percent
Low recovery outcomes (Poor quality of life)	46	56.1
High recovery outcomes (Good quality of life)	36	43.9
<b>Total</b>	<b>82</b>	<b>100.0</b>

As shown in table 10, 56.1% of the respondents had low recovery outcomes, while 43.9% had high recovery outcomes.

Table 11 presents the descriptive statistics for quality of life as an indicator of dimension of recovery outcomes.

**Table 11: Descriptive Statistics Quality of Life as an Indicator of Recovery Outcomes**

	N	Minimum	Maximum	Mean	Std. Deviation
Quality of life	82	18	35	24.39	4.388
Valid N (listwise)	82				

From the results in table 11, the minimum recovery outcomes score was 18, while the maximum score was 35. The mean score was 24.39 (SD=4.388) indicating that on average, recovering patients had poor quality of life and hence indicating low recovery outcomes.

## DISCUSSIONS

Findings on the nature of recovery outcomes among patients in palliative care established that the majority of the respondents had low levels of recovery outcomes. Nature of Recovery Outcomes among Patients in Palliative Care established that majority of the respondents had low levels of recovery outcomes. These findings were not unusual considering that most of the patients were newly diagnosed with cancer and for some respondent's metastasis had set in. This is when the cancer cells spread from the target organ to other parts of the body. According to the findings majority of the respondents (65.5%) had a low level of recovery outcomes, while 32.1% had a high level of recovery outcomes.

The findings also supported by previous findings by Berger (2009) which have shown that while majority of cancer survivors lead healthy and active lives, cancer can have a significant and long-term effect on their body through experience of chronic pain, sleep interruption, weight loss and diminished quality of life. Findings that the study respondents had low recovery outcomes could also be explained by the fact that most of the respondents had been receiving palliative care for a period of between 0 to 5 years and majority had been diagnosed with cancer between 1 to 2 years earlier. During the initial period after cancer diagnosis and embarking on palliative care, patients are more likely to be disturbed by pain, changes in sleep patterns and loss of weight (Becker and Newton 2004).

Further descriptive analysis of recovery outcomes established that on average, the dimension of pain was in the low level of recovery outcome. In the initial stages after a cancer diagnosis, patients may complain of experiencing high levels of pain especially those whose cancer has spread to adjacent organs. Some of the respondents may have been experiencing high level of pains due to metastasis of their cancer and they were at the initial stages of drug and psychotherapy interventions. This finding is supported by those of Lesarge and Portenoy (1999), who found out that pain, was common among people with cancer, with 30% to 50% of people with cancer experiencing, pain and 90% of those with advanced cancer experiencing pain.

The outcome could also be due to majority of the cancer patients being newly diagnosed with cancer may have reduced coping threshold which may make them have symptoms such as loss of appetite or refusal to eat due to their belief that they may die soon. (Becker and Newton, 2004). These findings are consistent with studies by Vigano, Watanabe & Bruera (1994) where weight loss has been used as an indicator of poor prognosis in cancer patients.

The researcher found out that majority of the respondents came from a financially challenged background where most of the cancer patients especially in Nairobi County were struggling to get a proper nutritional diet in line with their cancer disease which requires nutritious and adequate diet. This may have contributed to their weight dimension falling in the low range of recovery outcome. The findings are also consistent with study findings by Carver (2006) where weight loss is a common phenomenon among people with cancer and is usually the first noticeable sign of the disease.

This study finding was in tandem with a study by National Cancer Institute (2010) that reported that up to 40% of people diagnosed with cancer report unexplained weight loss at the time of diagnosis, and up to 80% of people with advanced cancer experience weight loss and cachexia (muscle loss). Many patients experience unintentional weight loss leading to a diagnosis of cancer. Studies have reported weight loss attributed to poor feeding in 30% to 85% of patients with cancer (Martin, Birdsell, Macdonald, 2013).

The findings are also consistent with the findings by Bethesda (2011) who established that chemotherapy and radiation used in cancer treatments often caused reduced appetite due to their side effects such as nausea, vomiting, leading to inability to feed well contributing to muscle loss and loss of weight. From the current findings, it is apparent that progression in cancer illness, side effects from medication and deficiency in food nutrition value have a significant impact on weight. In a study by Macasa (2016) the findings deduced were: cancer associated weight loss has a considerable social, psychological and physical impact on the patient experience and can affect the quality of life.

The dimension of sleep had an average recovery outcome in the low level. This finding was in line with study findings by the National Cancer Institute (2010) which indicates that nearly 45% of cancer patients' experiences sleep disturbances. Previous studies as indicated above have shown that during the initial periods after a cancer diagnosis, major negative psychological impact may develop among the affected patients and may cause sleep disturbance.

The findings of this study also concur with study findings by Savard & Morin, (2001) that cancer being a long-term illness that impacts on the psychological aspect of the patient may cause sleep disturbances. Researchers have shown that approximately one-third to one-half of people with cancer experience sleep disturbance. Up to half of cancer patients don't sleep well at some point. Insomnia is most common, with up to 80 percent of cancer patients having difficulty falling and/or staying asleep. Cancer patients are twice as likely to experience insomnia as people without cancer. (National Cancer Institute, 2010). The current study findings are in tandem with the findings above; since the researcher found out that the respondents were facing challenges such as lack of social and financial support which may have negatively influenced sleeping duration and quality.

The findings further established that the quality of life dimension was in the low level. These findings were expected since some of the cancer patients were in the advanced stages of cancer and were experiencing increased dependence on others for physical and emotional support which may have negatively influenced their quality of life. Otherwise the study finding concurs with a survey conducted in USA by Forsythe, (2012) which established that approximately one in four cancer survivors had a diminished quality of life due to physical problems.

Descriptive analysis of data on levels of recovery outcomes by County established that the mean recovery outcomes in both Counties were in the low range. Thus, the mean for Nyeri County was slightly higher than that of Nairobi County. The slight difference between the two Counties can be possibly explained by the level of psychosocial support available to patients in each County. Patients in Nyeri were more likely to experience social and emotional support compared to their counterparts in Nairobi due to the availability of extended families and more communal tendencies.

The researcher recommends that counselors in palliative care units should use counselling strategies such as spiritual and financial support to address the cancer patients' fears since initially, a cancer diagnosis is daunting and it may cause a decrease in Adversity Quotient and thus low recovery outcomes. This may improve the low levels of recovery outcomes that were identified in this study.

## CONCLUSION

On the Nature of Recovery Outcomes among Patients in Palliative Care, majority had low recovery outcomes possibly because most had been receiving palliative care for a period of between 0 to 5 years. Moreover the study concluded that the two most significant challenges encountered in palliative care were, patient experiencing isolation and lacking finances. Provision of financial support and increasing the number of counselling sessions were suggested as possible strategies for enhancing patient recovery outcomes

## RECOMMENDATION

The researcher recommends that the counsellor in collaboration with the administrators and medical staff in the palliative care units should create awareness and encourage the attending patients to source for a health insurance cover e.g. National Health Insurance Fund (NHIF) to cater for the cancer disease both outpatient and in case of hospitalization. This will ease the financial burden of cancer on the patient, family and community which was identified as a challenge. Moreover the study recommended further study to be done to examine the nature of recovery outcomes among patients who do not have access to palliative.

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