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# STAR RESEARCH REACH

Inter-Intra Disciplinary International Journal



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**PINCODE-683573, KERALA, INDIA**

**[mshsstarresearch@gmail.com](mailto:mshsstarresearch@gmail.com)**

# STAR RESEARCH REACH

Inter-Intra Disciplinary International Journal  
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## ***Editorial***

*“Star Research Reach,” an Inter-disciplinary, peer reviewed international journal publishes the latest research and review articles. The journal possesses an International registration number, ISSN 0975-5101. Journal offers opportunities for researchers, teachers and students who are interested in research.*

*The Editorial board of the journal had been reconstituted with pronounced faculty members and subject experts in the respective field. The journal has received overwhelming response since 2009.*

*The current issue comprises research papers from various disciplines, Literature Nutrition, Child Development etc. This issue focuses on relevant topics.*

*We express our sincere gratitude to our management and staff for the incessant support and motivation. We are happy to express a special word of thanks to our Principal, Dr. Sr. Alphonsa M K, who had taken keen interest and extended support in publishing this journal regularly. A great word of thanks to all authors for the timely submission of articles. The peer reviewers and the overseas editors had helped in maintaining the quality of each article. Above all let me thank God Almighty for the ample blessings and grace showered upon us.*

Dr. Lizmitha Godwin (Editor)

Asst. Professor & Head

Department of Home Science

Morning Star Home Science College

Angamaly South, Ernakulam Dist.

Pin-683573, Kerala, India

# **STAR RESEARCH REACH**

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## **YOLO-THE MANTRA OF 21<sup>ST</sup> CENTURY HOLLYWOOD MOVIES: RESURGENCE OF CARPE DIEM**

**George Vineeth\***

*\*Asst. Professor, Department of English, St.Alberts College, Ernakulam*

The 21<sup>st</sup> century witnesses an increased concern about ‘the future’ in the West especially in the US. The common theme of Hollywood movies for the past couple of years paves testimony to this. They caution about a ghastly future. It furnishes the attitudes - the future is uncertain, the present is insecure and life is short. You Only Live Once or the YOLO philosophy endows the same attitude. It implies that one should enjoy life, even if that entails taking risks, as if there would not be another chance for it. One can view this as the resurgence of, the centuries old perception, the Carpe diem philosophy. The paper intends to accentuate that the Hollywood releases post 2000, whether it is a superhero movie or a world coming to end movie or just another feel good movie, they all feed into the common theme of YOLO-carpe diem.

Carpe diem is a Latin aphorism meaning “seize the day”, taken from book I of the Roman poet Horace’s work *Odes*, 23 BCE (“Carmina/Liber I/Carmen XI”). Carpe diem is the part of the longer phrase *Carpe diem, quam minimum credulapostero*, which is translated as “seize the day, put very little trust in tomorrow [the future]”. Even though the ode intends to mean one should do all one can today to make one’s future better; the phrase is usually understood against Horace’s Epicurean background.

The YOLO concept was popularized by the 2011 song "The Motto" by Aubrey Drake Graham, a Canadian rapper, who records under the name Drake.

The phrase and acronym are both used in youth culture and music. Drake planned to release a 2011 joint mixtape titled YOLO along with Rick Ross. To promote this mixtape, the word YOLO was mentioned prominently on several of their tracks such as "The Motto", released on 29 Nov.2011, with the aim of promoting the tape. This use is said to have elevated the word into prominence and common colloquial use (Roberts). In late 2012, Drake expressed a desire to obtain royalties for use of "YOLO" due to the proliferation of merchandise bearing the phrase and lyrics from his song, which have been commonly seen at stores such as Walgreens and Macy's (both American), but he does not own a trademark on the word(Burns).However, the popularity of the word and the concept in the US is unswerving.

A survey of the Hollywood movies of the 21st century evidences the aforesaid claim. The movies *Bucket List* (2007), *The Hangover* (2009), *In Time* (2011), *Limitless* (2011),*21 &Over* (2013) and *Point Break* (2015) support the argument live the moment, you only live once. These movies demand one to enjoy the little time available. As in the movie *Bucket List* it says, "Forty-five years goes by pretty fast". "We live, we die, and the wheels on the bus go round and round". The movies like *Independence Day* (1996) , *The Day After Tomorrow* (2004) and *2012* (2009) of the same director, Roland Emmerich, *War of The Worlds* (2005), *World War Z* (2013) and *The Final Destination series* (2000-) are in line with the assertion, life is short and the future is uncertain. However, even though the movies claim future is uncertain, these movies enlightens the viewer with the probabilities. It's even more frightening when the happenings in the movie are linked with the current scientific findings and some of it really occurs. For example, the extreme climatic change suggested by Roland Emmerich in *The Day After Tomorrow* (2004), really happens just after a decade in US as 'The North American Cold Wave or Artic Blast'. ABC news reports it as "Another

Dangerous Blast of Cold Air on the Way With a Deep Freeze” (“Artic Blast”). “Icy mess! ‘Life Threatening’ Artic Blast chills USA” reports IWB [whose tag line is ‘Spreading the truth. Empowering people’] (“Icy mess”).

Hollywood’s obsession with time, alien invasion, zombies and cosmic natural disasters and its box-office success is uncanny. The obsession with the future has inevitably created a hunger to passionately and intensively live in the present. “The superabundance of any force inevitably produces its opposite”, says Carl G Jung in his principle Enantiodromia. When an extreme, one-sided tendency dominates conscious life in course of time an equally powerful counter position is built up, which first inhibits the conscious performance and subsequently breaks through the conscious control (“Jung on the Enantiodromia”). Thus, the anxiety about an uncertain future has produced the hunger to live in the present, to enjoy life, to make use of the little time available, to seize the day.

The proliferation of Superhero movies is no different. Considering US history, the American society, from its inception, has always cared to be under threat of the “Other”, to be xenophobic. Nevertheless, it also has taken special care to create its own soteriological images. Mandrake, Phantom, Superman, Thor, Captain America, Spiderman, Batman and others are assumingly permanent features of the media. In just a short time they have become inextricable part of the cultural landscape. By the end of 2015 alone, there were 83 superhero movie releases; that is more than the three decades prior altogether. It is not because Hollywood all of a sudden, ran out of new ideas. The proliferation of Superhero movies testifies to the collective emotional insecurity of the people.

In consequence, surveying the Hollywood releases of the 21st century carpe diem as it’s leitmotif is obvious. The distress about an uncertain future has

produced a crave to live in the present; thus the role of Hollywood in forming the collective psyche of the US citizens is also evident. The study is principally important because of the acceptance, influence and demand of the Hollywood movies around the globe. It furnishes the same attitude universally that the world is coming to and the life is short. The only concern is whether it would be received for the good or the bad or the ugly?

## **WORKS CITED**

- Burns, Ashley. "We Have Some Bad News For Drake Regarding The YOLO Wars". *Uproxx news*. <http://uproxx.com/music/we-have-some-bad-news-for-drake-in-the-yolo-wars/> Web. 6 Jan. 2013. Viewed on 14 Dec. 2016.
- "Carmina (Horatius)/Liber I/Carmen XI". *Vicifons*. [https://la.wikisource.org/wiki/Carmina\\_\(Horatius\)/Liber\\_I/Carmen\\_XI](https://la.wikisource.org/wiki/Carmina_(Horatius)/Liber_I/Carmen_XI). Web. 16 Dec. 2016.
- Good, Dan, "Arctic Blast Brings Historic Cold Across US". *ABC news*.
- <http://abcnews.go.com/US/arctic-blast-brings-historic-cold-us/story?id=29070715> . Web. 19 Feb. 2015. Viewed on 16 Dec. 2016.
- "Icy Mess! 'Life Threatening' Arctic Blast Chills USA". *IWB*. <https://investmentwatchblog.com/icy-mess-life-threatening-arctic-blast-chills-usa-boston-breaks-133-year-old-record/>. Web. 18 Dec. 2015.
- "Jung on the Enantiidromia" *Jungian Center for the Spiritual Sciences*. <http://jungiancenter.org/jung-on-the-enantiidromia-part-1-definitions-and-examples/>. Web. 18 Dec. 2016.
- Roberts, Soraya "Zac Efron Adopts Drake's 'YOLO' Motto, as Does Souljaboy". *Yahoo news*. <https://ca.news.yahoo.com/blogs/the-juice-celeb->



[news/zac-efron-adopts-drake-yolo-motto-does-souljaboy-180745977.html](http://news/zac-efron-adopts-drake-yolo-motto-does-souljaboy-180745977.html).

Web. 12 Dec. 2011. Viewed on 8 Nov. 2012.

- *The Bucket List*. Dir. Rob Reiner. Perf. Jack Nicholson, Morgan Freeman. Warner Bros., 2007. Film.

**PERCEPT AND PRACTICE: FEMINIST CONCERNS  
IN ISSUES OF IDENTITY IN THE MALAYALAM  
CINEMA - ENNUM EPOZHUM**

**Deepa. V. Nair\*and Dr. T. K. Pius\*\***

*\*Research Scholar Bharathiar University, Coimbatore-641046*

*\*\*Associate Professor, P.G.Department of English,St.Aloysius College,  
Elthuruth, Thrissur, Coimbatore-680611*

**ABSTRACT**

In the contemporary scenario, among the various discourses, cinema plays a pivotal role in the promotion of cultural identities. The popularity of the medium ensures a spectrum of cultural identities which are both positive and negative depending on the perception and ethical outlook of the society one lives in. Consequently, the viewers gravitate towards a subtext which manifests itself in various ways like, for instance, feminist, ecological, and dalit positions.

In a provincial society like ours where patriarchal concepts are deep-rooted, a divorcee who lives a life of her own with her baby, unhampered by the people around, is certainly a dream that a large number of women might look forward to realize. In fact, the tragedy of Malayalam film is that while it puts up a progressive face on the outside, it is fundamentally antifeminist in form and content. It continues to be patriarchal. When we analyse the Malayalam film *Ennum Eppozhum* on the framework of radical feminist concerns, it will prove to be patriarchal.

In the contemporary scenario, among the various discourses, cinema plays a pivotal role in the promotion of cultural identities. The objective of this paper is

to analyse the film *Ennum Eppozhum* directed by Sathyam Anthikad in the light of radical feminist concepts. The trend setters in the film industry are trying to showcase a new breed of bold women against the stereotyped women characters on the Malayalam screen. The new woman in the Malayalee concept, the woman who challenges patriarchal values and emerges as a model for the globalised world is pitted against stereotyped representation of woman where they are virtuous, obedient, and always affectionate. As a result, the popularity of the medium ensures a spectrum of cultural identities which are both positive and negative depending on the perception and ethical positions of the society one lives in. Consequently, the spectator gravitates towards a subtext which manifests itself in various ways like feminist, ecological, or dalit positions. However in a conventional society like ours, the patriarchal foundation looks out from the deep recesses in which they lie hidden, psychologically and culturally.

Feminism is one of the most influential and revolutionary movements of the 20<sup>th</sup> century. There are a number of feminisms based on various concepts and ideologies. It is a theory that supports equality of sexes. It has roots in social, political, and religious aspects. According to some feminists patriarchy is one of the root causes of sexual inequality. In the opinion of Kate Millett, an eminent exponent of radical feminism, patriarchy as a system of power, that organises society into a complex relationship, is based on the assertion that male supremacy oppresses women. In *Sexual Politics*, Millett announces:

Patriarchy as pervasive and which demands a systematic overview as a political institution. Patriarchy subordinates the female to the male or treats the female as inferior to male, and this power is exerted directly or indirectly, in civil or domestic life to certain women (qtd. in Selden 133).

Radical feminists locate the root cause of women's oppression in patriarchal gender discrimination.

While critiquing Sathyam Anthikad's film, *Ennum Eppozhum* one is suddenly face to face with the social and cultural dilemmas that a progressive artist confronts in the Malayalam film world. In this film there are two parallel plots, both supplying thought-provoking insights in spectators about the issues of the iconic modern women. The main plot consists of the story of two leading characters namely Vinneth N. Pillai, the senior reporter of the *Vanitharatnam* magazine and an advocate Deepa, a socially committed family lawyer. On one hand, there is Vineeth who remains a bachelor as he could not find any suitor with the personal traits of his mother. Though he is highly resourceful and a veteran, he lacks the ethics of professionalism. His new boss Kalyani (the role played by Rinnu Mathews), who has graduated from London is sick of his irresponsible ways and wants to dismiss him. On the other hand, there is Deepa ( the role played by Manju Warriar), a divorcee, single mother and lawyer who becomes a luminous public figure as she demands a written affidavit from the District Collector for providing good roads, after falling from her scooter because of a pothole. The *Vanitharatnam* magazine board decides to add an exclusive interview with Deepa, as an iconic figure, whose outlook and aspirations have changed the attitudes of the authorities in power, to bring about far-reaching changes, in public and social domains, for the welfare of the common man. Vineeth is assigned to interview Deepa for the same. He approaches her but she is reluctant. Vineeth follows her everywhere to get her consent and finally becomes close to Deepa, her daughter, and her friend Farraha (the role played by Lena).

The second plot deals with the intricate family ties, through the married life of two women characters, Deepa and Farraha. Both of them are projected as rejected women. In the case of Farraha, she belongs to the Muslim community and

according to their custom, a man can follow polygamy. The licence to practice polygamy, permitted by the dictates of his religion, has inculcated in Rafeeq, a feeling that an extramarital affair is no crime. Rafeeq's case cannot be generalised. So society would not find any fault if he had any extra-marital affair. But the tragedy is that Farraha comes to know about it. She gets overwhelmed by the pretensions of her husband. She tries to solace herself by saying that no relation is permanent on this earth and everything gets changed as the sights seen in a journey. They live in the same room, at two ends of a cot, without complaining. She negotiates with her new plight by being busy in business and tours.

In the case of Deepa, her married life came to an end in two months. She is quite aware of her husband's cruelty, but her mother being an agent of patriarchal hegemony, blames her daughter for getting divorced. Besides, she walks away to live with her son, who is abroad. Though she is a mother, she leaves her daughter and granddaughter alone in the lurch in the hour of need. Naturally, Deepa's plight in this crisis is understandable. Deprived of any social and emotional support from her mother, Deepa never loses her confidence and tries her best to discharge her duties efficiently and sincerely as a dutiful mother and lawyer.

There are certain crucial occasions, where the feminist concerns of a single mother are reflected. Firstly, the personal life of Deepa is concerned, where she has to prove that her husband was a psychological case. Again, she has to substantiate that she was right in her option to get divorced from her husband and claiming the right of her child. Secondly, at the social level also her identity is challenged when she takes up cases against the District Collector and the real estate mafia. In the second case, she emerges victorious, in spite of the threats from her opponents who argue against her, not on the premise of justice but on the popular notions of hierarchy. Even her senior advocate tries to convince her of the

necessity of giving into the demands of the building mafia who are a law unto themselves. But the stiff fight and the subsequent triumph give a brief percept that she is the representative of a strong woman. But this strength melts when she faces issues relating to her marriage. The positive image created by the director collapses when the director brings in a hero to save her at crucial moments in her legal fight with her husband to prove the validity of her claim to the possession of her child. The patriarchal attitude of the film maker surfaces when he makes his hero Mohanlal, the traditional icon of masculinity for the Malayalam filmgoers, say “a woman will always be a woman”. Again when the child is knocked down by a hired goonda of her husband’s advocate, Deepa feels helpless because the legal system is heavily in favour of not justice but patriarchal values. To save her from the situation, again there is the intervention of the man, the hero who brings enough evidence to prove her husband’s cruelty.

To conclude we can say that every intelligent viewer would try to interrogate the subtext that emerges at the end of a film. Here, one does not need to go far to recognise the vision of the director which is culturally and ideologically rooted in patriarchal values. It could be argued that for a popular film maker who always keeps an eye upon the commercial success of a film, the emotional sympathies of the spectators cannot be ignored. Here, again the film maker is at fault from a feminist perspective because his concern is not truth or justice or equality that feminism demands but playing to the gallery to satisfy their outdated and primitive social identities.

## **REFERENCES**

1. [http:// en.wikipedia.org/wiki/ Eunum Eppozhum](http://en.wikipedia.org/wiki/Eunum_Eppozhum).
2. Selden, Raman., Peter Widdowson, and Peter Brooker. *A Reader’s Guide to Contemporary Literary Theory*. 5<sup>th</sup> ed. Pearson. 2005. Print.

## **THE TALE OF THE VICTOR to THE TALE OF THE VANQIUSHED**

**Aswathy S Nair\***

*Lecturer, Department of English, Morning Star Home Science College,  
Angamaly.*

### **ABSTRACT**

The collective consciousness of human beings bear different grand narratives which appear to be influential in their lives and deeds. The lacking of a sense of belonging and rootlessness in the present age forces man to appreciate the notions of meta narratives, heteroglossia and polyphony since it provides an opportunity to fill in the quid produced and sustained in the grand narratives. The epics and myths are now read with different perspectives thereby, leading to the emergence of alternative readings.

*Asura: tale of the Vanquished* by Anand Neelakantan is an example for one such alternative reading. *Asura* explores through the life of Ravana, the supreme anti-hero in *Ramayana*. It is the tale of the vanquished while; *Ramayana* is the tale of the victor- Rama. Anand Neelakantan justifies the actions of his protagonist and provides the reader an alternative perspective for the epic. This portrayal enables us to analyse the view points of the subverted characters in the myth/epic. Moreover the author consciously constructs a fictional world that lies within this physical world. No superhuman, no Godly powers are attributed to the characters. Every one becomes instrumental to the fate and acts accordingly to their role. *Asura* is the tale of Ravana and his people which questions the authenticity of the heroes and the God-like figures in the epic.

In an age of deconstruction, multiple identities, and innumerable possible voices, everything under the universe is questioned. Rationality and logical reasoning lead to the emergence of new realities, fictions and narratives in literature. Jean Francois Lyotard's notion of Meta narratives questioning the centrality of the Grand narratives provides us some insights about the human quest to identify the roots. The feel of rootlessness evades the single perspectives of the multiple events.

The silence embedded in the traditional literatures, especially the myths which focus on the glorification of the heroes as Godly or God-like has now been highlighted by the meta narratives. Mikhail Bakthin's coinage of the term 'polyphony' sets the theoretical foundation for modern literature to narrate stories in multiple voices and dimensions. The other terminology by him, 'heteroglossia' simply means the presence of "a mixture of tongues" (Waugh 230) in a single narration. Thus, the possible dimensions of a single narrative can be explored through these terms. Here, the silent characters are given voices and the plots are narrated through their perspectives. World literatures provide certain examples for that, like Jean Rhys's *Wide Sargasso Sea* which is a reworking of Charlotte Bronte's *Jane Eyre* (1847). Another angle of Daniel Defoe's *Robinson Crusoe's* from Friday's perspective can be viewed in J M Coetzee's *Foe*.

Indian Epics and myths like Ramayana, Mahabharatha etc are now available in various versions. The first *Ramayana* by Valmiki in Sanskrit to Ezhuthachan's *Adyathmaramayanam Kilippattu* and Kamban's Tamil version *Ramavataram* has reached its possible exploration through Amish Tripathi's *Scion of Ikshvaku*, Ashok Banker's *Prince Of Ayodhya*, and so on. All of these works picturize Rama as an incarnation of God, as the seventh Avatar of Lord Vishnu, as "Uthamapurushan" or as "Maryada purushothaman". These works not only



celebrate the victory of Rama over the Asura- Ravana, but also epitomizes a Ramarajya as the ideal world.

Apart from these positive, Godly portrayals of Rama and his dynasty, Anand Neelakantan, an Indian author from Kerala (Trippunithura) has provided another – a rare but appreciable dimension of Ramayana myth. Anand Neelakantan is known for his debut novel *Asura* which became the number one best seller of 2012 as per Crossword list and CNN IBN. The novel came into the top seller charts within a week of its launch and its author was chosen as one of the six most remarkable writers of 2012 by DNA. *Ajaya: Epic of the Caravan clan, Roll of the Dice, Rise of Kali: Duryodhana's Mhabharatha* are the other works by Neelakantan.

*Asura: Tale of The Vanquished, The Story of Ravana and His People*, as its title implies is a unique piece of narrative which describes the plot of Ramayana from the perspective of Ravana and Bhadra; one an Asura Emperor and the other a menial, downtrodden Asura who helped Ravana to ascend the throne of Lanka. The tale takes a fresh look at the story of Rama and Ravana from a different angle. Anand Neelakantan's new version of *Ramayana* is not a story of Gods, but of human beings who exist in the brutal caste consciousness where the Aryans with their fair skin and their own notions of superiority dominate the Dravidians. The Brahminical notions of the Vedas and their exploitation of lower caste become the domineering theme in the tale. Rama becomes instrumental to these ideas in order to attain Godhood. The Asura notions turn to be righteous at some or many points in the novel.

The novel *Asura* is a possible narrative of the real myth *Ramayana*, which offers reason for Ravana's deeds and provides justification from his and his people's points of view. But in between the novel, Ravana, by himself and Bhadra

is described as an ambitious and proud King who never cares for the will of his people. *Ramayana*, a story that has infinite multidimensional possibilities, has now narrowed down to a single perspective and is subverted here. Sita becomes Ravana's daughter here, who is the actual cause of his men's destruction. Siva, Vishnu and Brahma are no more Gods but mass leaders who achieved a kind of Godhood. The Devises and the Asuras cause various societal changes when they over run and attack the others' kingdom. *Asura* is the tale about the rise and the fall of the Asura Empire under the rule of Ravana.

The novel becomes unique through its narrative style and the manner of representing the mythical characters as it rephrases the version of Rama, Ravana, Sita, Mandodari, Bhadra, Soorpanaka and several other known and unnoticed characters. The novel seems realistic when the characters attain roles as normal, common ambitious human beings who thrive for their existence. The author of the novel provides reasons which are logical and justifiable with human comprehensive potential. Hence the narrative strategy is to be appreciated. Narratology which deals with the properties, style, weaving pattern, authorial stands, verbal evidences, perspectives, voices, standards, notions etc of narratives illuminates the discussion of the text in various topics and contexts. Narration is a process that started from time immemorial but its wide level of application exploring different possibilities makes each texts of literature unique.

The story is narrated through two narrators- Ravana and Bhadra. Ravana starts the narration and uses the flashback mode. In midst of that, Bhadra supports and follows the same event with his own viewpoint. Thus, the novel shares two first person narratives which are intertwined. After Ravana becomes the King of Lanka, both consecutively narrates different events in their chronological order and with the death of Ravana, Bhadra remains as the single narrator who provides the rest of the story.

The Washer man who has no voice, but is the leading factor for Rama's rejection of Sita in the *Ramayana* is given a strong voice, a name and an influential role in Neelakantan's *Asura*. This is a valid example for a possible narration with an unnoticed man in the grandnarrative emerging as a narrator. The multidimensional aspects of a single narrative are immense. Narratives providing different perspectives by different persons from their points of view may cause dramatic changes in their source, in the grand narrative. No one can claim their narration to be the right one and the only existing truth as 'truth' varies according to context. There comes the rational, logical, possible and plausible existence of a fiction. Here, in *Asura*, when Sita becomes Ravana's daughter the Asura Emperor can have ample reasons for his action to regain his daughter. The irony comes when the daughter is quiet ignorant about her origins and no one including her father dares to tell her the truth. The humane aspects leading to the thoughts, deeds etc can be overwhelmingly seen in the work. It never glorifies any characters, even the narrators.

The narrative in *Asura* covers the entire life of Ravana, Bhadra and Sita while Rama, Mandodari and other secondary characters are portrayed only in relation to the life of the primary characters only. The plot begins from Ravana's death scene, and develops as flashback to his life from childhood to deathbed. The other narrator Bhadra who at first acts as a supporter to Ravana's narration later acquires his own voice as the promoter of the story. In between these narrations, the reader can see different people associated with them. The marginalized characters too appear in the fiction. The voice of the other characters is unheard but there is a reflection of the mind of those characters according to the view of Ravana and Bhadra. Sita, Mandodari, Mala, Soorpanaka, Arasi, Ravana's Mother are some female characters who have no heard voices in the fiction directly. But if read seriously between the lines, readers can see that the silence in the classic gets

explored here and the submerged voices are given representation. Though the female characters have no direct representation in the novel, their mindset, behavior, character etc are projected through the voice of Ravana and Bhadra, to various extents. That is to say their unarticulated voice is heard through articulated voices of the narrators. These articulations may sometimes deconstruct the myths.

Women like Sita, Mandodari et.al give importance to purity, devotion and self respect while Mala acts as the liberated one. All of the women characters have almost the same fate. They are at the threshold to speak but, their condition becomes more and more pathetic as society pays no concern to their wish as in the case of Sita, the epitome of sacrifice and selfless devotion to her husband.

The ultimate narrator is the author himself. In the narration of *Asura*, there are instances where the author's unconsciousness regarding the 'real' mythical story works. This exemplifies the influence of the grand narrative which remains as a source for the metanarratives in the authors. There the worthiness of the narrative is questioned, but the entire narrative can be seen as a possible explanation of a myth from the perspective of Ravana, a vanquished.

“The Ramayana and the Mahabharata are the two epics that united India even when the country was geographically divided into a number of small kingdoms .The Ramayana has been more popular for ritual reading, but Mahabharata raises questions on the nature of morality that remain provocative even today ” (Jayakumar 11).

When Indian literature owes much to the great Epics Ramayana and Mahabharata, there is a random adherence to the exploration of these myths and grand narratives. The increased admiration to explain in detail the narrative structures and to follow the same pattern of the plot etc is now outwitted by the

possible narratives to the single grand narrative. Such possible exploration of the kind shows how a ritualistic text like Ramayana, or any Epic or a mythological framework is subverted. But since *Asura: Tale Of The Vanquished* never attempts to counter the real text completely; it won't be able to claim the text as a purely deconstructive one. The text offers us another perspective of the Ramayana myth. At times it tries to fill the gaps in the narratives, construct new frame works and implement new fictionalities in order to make the text sensible.

Anand Neelakantan writes the story of Ravana and his people. Ravana, an asura, a powerful ambitious man who succeeded in ascending the Throne of Lanka through many hardships is finally defeated by Rama, the Prince of Ayodhya. The narrative lies within this earth, "the real world" India and Lanka. The spatial temporal dimensions and the characters suit this world- the world of human beings. Ravana is now the vanquished. He recollects his life and thus the fiction becomes the tale of the vanquished. Ramayana is the story of Rama, the tale of the victor.

Literature never showed any reluctance in approving such narratives which offered an alternative to some other existing ones. For Georg Wilhelm Friedrich Hegel, a work of art "is a product of human activity...learnt and pursued by others" (547). According to Polkinghorne, any such human activity, for example a narrative is the "construction of complex relationships in narrative structures". Narratives often provide us the "fundamental epistemological structures that helps us to make sense of the confusing diversity and multiplicity of events and to produce explanatory patterns for them" (Fludernik 2). It is through the narratives the world and its history is recorded and developed. For the narratologists, "The significance of narrative in human culture can be seen from the fact that written cultures seek their origins in myths which they then record for posterity" (Fludernik 1).

The Indian Epic, the Ramayana is sometimes considered as a myth which shows the cultural, social and private life of a society/people that is recorded for posterity. It dates back to 1500 BCE according to certain scholars. Recent studies have brought it down to about the fourth century BCE. But all dates in this regard can only be speculative, and the later one does not diminish in any manner the intrinsic value of the great epic. It was composed by Valmiki in the classical language of India- Sanskrit. He composed the whole work, running to twenty four thousand stanzas in a state of pure inspiration as we believe (since we are familiar with the divine intervention in changing the thief Ratnakara to the saint Valmiki). “The Ramayana pervades our cultural life in one form or another at all times, it may be as a scholarly discourse at a public hall, a traditional story tellers’ narrative in an open space, or a play or dance drama on stage” (Narayan 6).

The modern literary artists in India, such as Amish Tripathy, Ashok Banker, Anuja Chandramouli et.al took serious efforts to modify and picturize the tale in their own way and style. Apart from these works which favoured Rama’s deeds, Asura, by Anand Neelakantan stays aloof since it is a tale which restructured the entire perspectives of Ramayana and narrated it through the point of view of Ravana- the supreme anti hero in Ramayana and Bhadra- a menial character who caused the entire sufferings of Sita. Here too Bhadra is the initiator of Ravana’s fate.

Every narration is based on cause and effect relation. Asura is narrated by two narrators- Ravana and Bhadra who analyse the events with the same relations. Ravana begins the tale from his death bed in the warfield. He begins with the first person narration “I, Ravana ...” (10). Ravana recollects his past life and admits the fact that because of the intense pain and sense of loss and defeat, he lost all the senses of time. “I’ve lost all sense of time. I have lost the sense of many things” (10).

The narrator then leads us to his childhood and from there to his entire life. In between, there comes Bhadra who also expresses his world in association with Ravana. Thus we come across the possible world of narratives. The novel revolves round the perspectives of these two first person narrators, their justifications, reasons, logic, thoughts etc. Ravana, the emperor is the right choice to narrate the story. His version of Ramayana is different and made plausible by the author. But Bhadra's intervention was doubted by many. Infact, the sole reason is that Bhadra, the menial, downtrodden asura, the washer man in the great epic Ramayana who precipitated the misery of Sita and Rama appears in Asura with a higher role. He follows Ravana, witnesses his glory and defeat, accompanies him, suffers for him, but at times forgotten by the emperor but lives longer than Ravana and sees what happens to his people - the vanquished and to the victor- Rama.

Ravana's narrative takes us along with him to a new fictional world, which at instances resembles Ramayana. Lest it follows the anti hero's version. Neelakantan implemented his imaginative faculty in order to make justifications for his hero – Ravana. So Ravana's deeds and his struggle were to uplift his people and to regain his daughter Sita from the hands of that Devas who never show respect to women. That justifies his deed. At the same time by himself and through Bhadra's views, Ravana's real self which gave priority to himself, his pride, and his wishes, etc is revealed. "But I was a dreamer. And I did not want to just get along in this world. I wanted to own it" (15). Thus in every sense, *Asura: Tale Of The Vanquished* offers us a narrative which can be taken as a paratext with *Ramayana*. More than a paratext, *Asura* is another possible narration or an alternative reading of the Ramayana myth. It offers another interpretation and a choice to look at an event in a different way. Fludernik explains this as:

The story is then that which the narrative discourse reports, represents or signifies. These distinctions enable us, for example, to account for the fact that the same story can be presented in various guises... Thus different narratives focus on quite different aspects of the story; or more precisely the stories that we reconstruct from different narrative texts often complement each other. By means of parody or by reflecting current issues and concerns they fill the gaps that earlier versions of the 'same story' (fable /fabula) left in their presentation; or they simply rewrite the story... (2).

This is true with *Asura*, that the author intended to rewrite the story with a new perspective that was quite unknown or rather kept unspoken. The available translations of Valmiki's and Kamba's *Ramayana- Ramavataram*, generates this doubt that, whether some of the instances or topics discussed in *Asura* were the matter of discussion once. The main topic of discussion which pops up in the text is that the question of Sita's parentage or the reason behind Ravana's abduction of Sita. Sita is said to have discovered in a ploughed field and for that reason, is regarded as the daughter of Bhumi Devi. Sita is also seen as an incarnation of Vedavati, whom Ravana tried to molest. Here in *Asura*, Vedavati becomes his beloved, but she commits suicide because of Bhadra and other asuras. But at that time Sita was there with Bhadra and he keeps her safe and never kills her. For this very same reason Bhadra regress and repents when the prophecy about her comes true.

There is a part in Kamba's *Ramayana* where Soorpanaka tries to seduce Rama by the name of Karnavalli in Dhandaka forest. Meanwhile, she sees Sita and argues to Rama that she is a rakshasa woman. "karnavalli said to Rama very seriously, 'Great one! Don't let this creature come near you. Don't be misled by her appearance, its not her own, she has assumed it through black art. Actually she is a rakshasa woman; drive her off before she does you any harm...'"



(Narayan, 86). This might have provided a glimpse of idea for the author of *Asura* to portray Sita as the daughter of the demon emperor Ravana.

*Asura* never shifts much away from the actual incidents. Ravana's Brahminical lineage from his father Sage Visrava, his demonic inheritance from his mother Kaikasi and the blood relation with Kubera, the futile wars with Devas, friendship with Bali, acquiring Rama's rage etc are followed by the author. But how then it becomes another narratological presentation is the question. The answer is that the novel favours Ravana and it gives an opportunity for the readers to think from another point of view- other than glorifying Rama. The foremost thing to note is that the novel presents before us a world and a set of characters who are more human than Gods. Ravana himself wanted to be known as a man. "a complete man"- an "epitome of a complete human being". "He is as good or as bad as any human being... society is unable to curb his other nine faces... So Rama may be seen as God, but Ravana is the more complete man" (5).

The requirement of a narrative according to the narrative theorists is a "human or human-like (anthropomorphic) protagonist at the centre" (Fludernik 6). So here in *Asura*, the idea fits as it has portrayed the characters in their human form...It is agreed among narratologists that real narratives are those that have human protagonists or anthropomorphic characters.

Ravana describes about feelings and ambitions from a teenager's point of view initially and then, further describes the problems of handling an entire empire from a ruler's point view. While Bhadra describes everything from a common person's point of view or rather from a poor person's perspective. The author since the beginning tries to foreground the entire plot into the system of hierarchy based on caste. Ravana as a narrator explains the age old enmity between their race (*Asura*) and *Devas*. The history of South India, the civilizations

etc are mentioned. The novel seeks the geneology of the mythical characters like Mahabali, Indra and even the Gods who are described here as human forms which later labelled as Gods. Thus Neelakantan uses every logical argument to prove his fiction more serious, applicable and appreciable one.

Human beings are prone to be inspired by those characters whom do posses certain extra ordinary qualities while, the one who lived according to his wishes are not favoured by any. This very notion is subverted in *Asura* by Anand Neelakantan where he portrays Rama and Ravana as human beings possessing no superhuman powers but as mere participants in the caste dominated society. *Asura*, Anand Neelakantan's debut novel is a possible reworking of the great Indian epic *Ramayana*. The novel offers the reader to go through the mind set of different characters especially the silenced one in the *Ramayana*. The novel is the tale of Ravana and his people who are the vanquished. The author implements certain fictionalities and narrative imagination to mould the story line from the perspectives of Ravana and Bhadra. Through the narrators, Neelakantan recreates the myth with a different, may be an alternative reading for *Ramayana*.

## **WORKS CITED**

- Altman, Rick. *A Theory of Narrative*. Columbia University Press: USA,1945.Print.
- Bronte, Charlotte. *Jane Eyre*. Broadview Press: Peterborough,1999.Print.
- Coetzee, J M. *Foe*. Stoddart: Toronto,1986.Print.
- Defoe, Daniel. *Robinson Crusoe*. Dover Publications: NewYork,1998.Print.
- Fludernik, Monika. *An Introduction to Narratology*. Routledge: NewYork,2009.Print.

- Gilbert, Sandra M and Gubar, Susan. *The Madwoman in the Attic: The Woman*
- *Writer and the Nineteenth Century Literary Imagination*. Yale University Press: New Haven,1979.Print.
- Jayakumar, Prema. *Mahabharata*. DC Books:Kottayam,2009.Print.
- Leitch, Vincent B. *The Norton Anthology of Theory and Criticism*. Norton&co:USA,2010.Print.
- Lodge, David and Wood, Negel. *Modern Criticism and Theory: A Reader*. Pearson: Noida,2007.Print.
- Narayan, R K. *The Indian Epics Retold*. Penguin: Haryana,2000.Print.
- Neelakantan, Anand.*Asura: Tale of the vanquished*. Platinum Press: Mumbai,2012.Print.
- Phelan, James and Rabinowitz, Peter J. *A Companion to Narrative Theory*. Blackwell Publishing: USA,2005.Print.
- Rhys, Jean. *Wide Sargasso Sea*. Norton: NewYork,1999.Print.
- Tripathy, Amish. *Scion of Ikshvaku*. Westland Press: Chennai,2015.Print.
- Waugh, Patricia. *Literary Theory and Criticism: An Oxford Guide*. Oxford: UK,2006.print.

## **ASSESSMENT OF NUTRITIONAL STATUS IN PERI AND POST MENOPAUSAL WOMEN**

**Dr. Karuna M S\* , and M Khadeejath Rousana\*\***

*\*Associate Professor and Head, Department of Home Science, Vimala college (Autonomous), Thrissur , Kerala – 680009, Email: dr.karunams@gmail.com*

*\*\*M. Sc Scholar, Department of Home Science, Vimala college (Autonomous), Thrissur , Kerala*

### **ABSTRACT**

A study was carried out in hundred women subjects in the age group of 45-55 years, of which fifty were perimenopausal and fifty postmenopausal women from Kasaragod District. Anthropometric measurements, dietary assessment, clinical examination and biochemical estimation was performed to assess the nutritional status of the subjects. Majority of the subjects had higher than normal BMI and were either under the category of grade I obesity or overweight. The subjects followed poor dietary pattern with low intake of vitamins and minerals. Most of them were deficient in haemoglobin, calcium and vitamin D. In conclusion, overall nutritional status of both peri and post menopausal women was found to be low.

### **INTRODUCTION**

For social and biological reasons, women of the reproductive age are amongst the most vulnerable to malnutrition. Psychological and physiological changes have an impact on food intake and food choices of menopausal women. It is an established fact that a well balanced diet is important for good health and to combat some of the complications of menopause to certain extent. Therefore, there is a need to study the nutritional status of menopausal women.

Apart from a nutritious diet an active life style which includes exercise pattern is a cure for a trouble free menopause. Regular exercise benefits the heart and bones, helps to regulate weight and contributes to a sense of overall well being and improvement in mood.

## **MATERIALS AND METHODS**

The study was carried out at Kasaragod District. Hundred women subjects in the age group of 45-55 years were selected for the study. Of this, fifty women were perimenopausal and fifty women were postmenopausal stage.

Nutritional status of the subjects was assessed through anthropometric measurements, dietary assessment, clinical examination and biochemical estimation. Dietary assessment was done on the basis of food frequency method and 24 hour recall method. Biochemical parameters such as serum hemoglobin, blood sugar, calcium and 25-OH vitamin D were estimated in 20 per cent of the sample.

## **RESULT AND DISCUSSION**

### **Anthropometric measurements of the subjects**

Health status of the subjects was ascertained by assessing the anthropometric measurements with regard to height and weight. From the study it is clear that the average height and weight of the perimenopausal subjects was 155.56cm and 62.16kg respectively while the average height and weight of the postmenopausal subjects was 154.72cm and 62.04kg respectively. Body Mass Index (BMI) was calculated and presented in Figure 1.

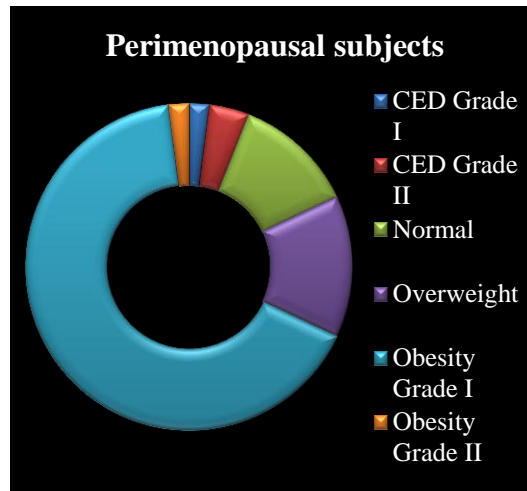
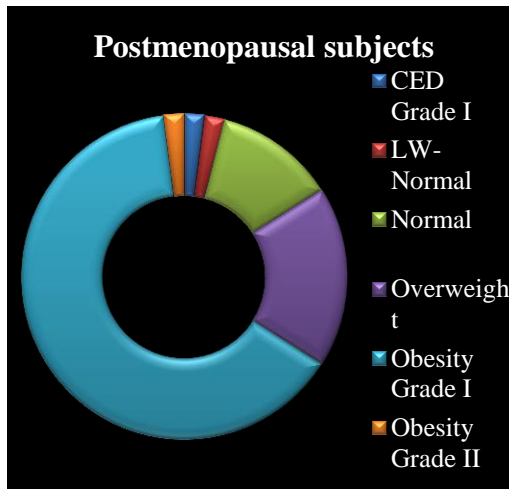
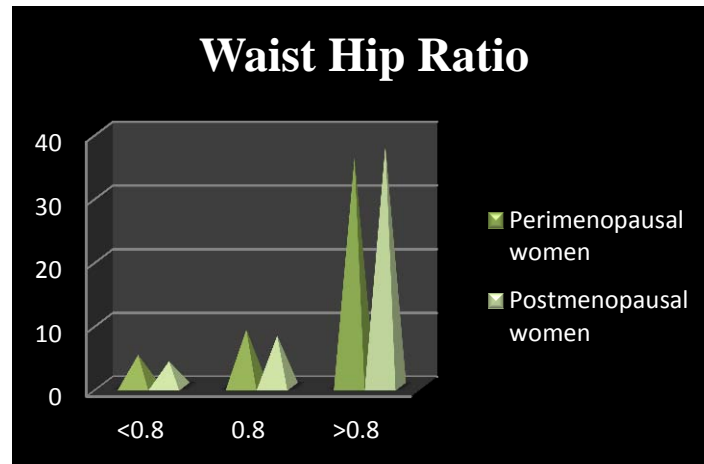


Figure 1: Classification of BMI of the peri and post menopausal women



Majority of the perimenopausal (68 per cent) and postmenopausal subjects (66 per cent) were obese followed by 14 and 18 per cent of the peri and postmenopausal subjects respectively were in the category of overweight. Equal number of peri and postmenopausal subjects (12 per cent) belonged to normal BMI category.



**Figure 2: Waist Hip Ratio (WHR) of the subjects**

Waist Hip Ratio (WHR) of the subjects was calculated and presented in Figure 2. Most of the perimenopausal subjects (72 per cent) and postmenopausal subjects (76 per cent) were having Waist Hip Ratio greater than 0.8 which indicates abdominal obesity.

### **The nutrient intake of the subjects**

Nutrient intake of the subjects was calculated using Food Composition Table. It was found that a marginal variation in the intake of various food groups that also reflects in their nutrient intake. The nutrient intake of the subjects is presented in Table 1.

The intake of protein, fat, vitamin C and phosphorus was higher than RDA among both the subjects. High calorie intake was observed among the subjects with the increased consumption of fats. As the consumption of non veg food items was high among the subjects, the protein intake was found to be higher than RDA. The intake of minerals such as calcium and iron were much lower among the subjects and can be due to lower intake of green leafy vegetables and milk and its products. The intake of phosphorus was found to be higher than RDA. Kulieet *al.* (2009) stated that vitamin D is a fat soluble substance that plays

an important role in bone metabolism and controls calcium absorption. The most well recognized function of vitamin D involves regulation of calcium and phosphorus balance for bone mineralization and remodelling (Ritu and Ajay, 2014). The intake of vitamins such as retinol, beta carotene and folic acid among the subjects were found to be less compared to RDA which can be due to lower intake of fruits, other vegetables and green leafy vegetables.

**Table 1: Nutrient intake of the subjects**

Nutrients	RDA *	Perimenopausal		Postmenopausal		Comparison of nutrients with RDA	
		Mean nutrient intake	Percentage of RDA met from the diet	Mean nutrient intake	Percentage of RDA met from the diet	Peri menopausal	Post menopausal
Energy (KCal)	1900	2134	112	2084	109	10.89**	11.00**
Protein (g)	55	82	149	76	138	7.49**	12.79**
Fat (g)	20	44	220	41	205	13.91**	18.71**
Calcium (mg)	600	432	72	448	74	15.41**	14.03**
Iron (mg)	21	14	66	11	52	8.24**	11.01**
Phosphorus (mg)	600	937	156	914	152	12.35**	19.71**
Retinol (µg)	600	364	60	305	50	16.52**	18.71**
β-carotene (µg)	4800	1954	40	1762	36	16.00**	13.93**
Folic Acid (µg)	200	83	41	79	39	16.51**	18.40**
Vitamin C (mg)	40	78	195	64	160	19.01**	7.94**

\*Ref: ICMR (2011)

Statistical analysis of the data revealed a highly significant variation with the intake of Recommended Dietary Intake among peri and post menopausal women. Even though there is no significant variation in the intake of nutrients among peri and post menopausal women. High intake of calories, proteins, and



fats and low intake of calcium & iron during peri menopausal stage directly affect the nutritional status during their post menopausal period.

### **Clinical signs observed among the subjects**

Clinical examination was carried out among the subjects to assess the incidence of different clinical signs and symptoms. Majority of the symptoms such as muscle cramps (peri 38 per cent and post 42 per cent), pain in legs and joints (peri 64 per cent and post 68 per cent), difficulty in walking and climbing stairs (peri 30 per cent and post 52 per cent), fatigue (peri 32 per cent and post 54 per cent) and mood swing and depression (peri 4 per cent and post 10 per cent) was higher in postmenopausal women when compared to perimenopausal women. The most commonly reported symptoms in the study conducted by Jinping *et al.* (2001) were joint/muscle pain, which did not vary by menopausal status.

### **Biochemical parameters of the subjects**

Biochemical parameters such as haemoglobin, blood sugar, calcium and 25-OH Vitamin D were estimated and the results are presented in Table 2.

Haemoglobin level is a useful index of the overall state of nutrition irrespective of the significance of anaemia. Below the standard level of haemoglobin content was observed among post and peri menaopausal women indicating low consumption of iron rich food.

Majority of the subjects maintained their blood sugar level in normal even though 40 per cent each of peri and post menopausal women were found to be hyperglycaemic.

Very low level of calcium (70 per cent) was observed and it is an indication of vitamin D deficiency. In case of vitamin D all of them were either in deficient or in sufficient state. Agarwl *et al.*(2013) noticed a general vitamin D deficiency ( 83 percent) of Indian post menopausal women.

**Table 2: Biochemical parameters of the subjects**

Biochemical parameters (in blood)	No. of peri menopausal subjects (%)	No. of post menopausal subjects (%)
<b>Haemoglobin</b>		
Anemic <10 g/dl	3 (30)	1 (10)
Below normal 10-13 g/dl	7 (70)	9 (90)
Normal 13-15 g/dl	-	-
<b>Total</b>	<b>10 (100)</b>	<b>10 (100)</b>
<b>Random Blood Sugar</b>		
Below normal <80mg/dl	1 (10)	-
Normal 80-120 mg/dl	5 (50)	6 (60)
Above normal >120 mg/dl	4 (40)	4 (40)
<b>Total</b>	<b>10 (100)</b>	<b>10 (100)</b>
<b>Calcium</b>		
Below normal <9 mg/dl	5 (50)	9 (90)
Normal 9-11 mg/dl	5 (50)	1 (10)
<b>Total</b>	<b>10 (100)</b>	<b>10 (100)</b>
<b>Vitamin D</b>		
Deficiency <20 ng/ml	7 (70)	10 (100)
Insufficiency 20-30 ng/ml	3 (30)	-
Sufficiency 30-100 ng/ml	-	-
<b>Total</b>	<b>10 (100)</b>	<b>10 (100)</b>

Ref: Swaminathan, 1999 \*Numbers in parenthesis indicates percentage

## **CONCLUSION**

Good nutrition is indispensable component of healthy life and access to healthy diet and optimum nutrition are important to good health. Better nutrition means stronger immune systems, less illness and better health. Hence, information and health education programs for women are needed to help them to understand the components of a healthy diet and to ensure adequate access to health services.

## **REFERENCES**

- Agarwal, N., Mithal, A., Dhingra, V., Kaur, P., Godbole, M. M. and Shukla, M. (2013). "Effect of Two Different Doses of Oral Cholecalciferol Supplementation on Serum 25-hydroxy Vitamin D Levels in Healthy Indian Postmenopausal Women: A Randomized Controlled Trial". *Indian J Endocrinol Metab.* Vol. 17. Pp. 883-889.
- Hakimi, M., Ng, N., Van Minh, H., Juvekar, S., Razzaque, A., Ashraf, A., Masud, S., Kanungsukkasem, U., Soonthornthada, K and HuuBich, T. (2009). "Prevalence of Physical Inactivity in Nine Rural INDEPTH Health and Demographic Surveillance Systems in Five Asian Countries". *Global Health Action.* Vol. 2. Pp. 44-53.
- Indian Council of Medical Research. (2009). "Nutrient Requirements and Recommended Dietary Allowances for Indians". National Institute of Nutrition. Hyderabad. Pp. 304.
- Jinping, X., Anne, V. N., Rhonda, K. D., Justin, N. and Kendra, L. S. (2001). "Natural History of Menopause Symptoms in Primary Care Patients: A Metronet Study". *Journal of the American Board of Family Medicine.* Vol. 18(5). Pp. 374-382.

- Kaplia, R., Verma, H. N. and Bhatia, A. S. (2014). “Prevalence of Vitamin D Deficiency in Jammu Region”. *JK Science*. Vol. 16(1). Pp. 5-9.
- Kulie, T., Groff, A., Redmer, J., Hounshell, J. and Schrager, S. (2009). “Vitamin D: An Evidence Based Review”. *J Am Board Fam Med*. Vol. 22(6). Pp. 698-706.
- National Nutrition Monitoring Bureau. (2006). “Diet and Nutritional Status of Population and Prevalence of Hypertension among Adults in Rural Areas”. NNMB Technical Report No.24. National Institute of Nutrition. Indian Council of Medical Research. Hyderabad. Pp. 10-15.
- Ritu, G. and Ajay, G. (2014). “Vitamin D Deficiency in India: Prevalence, Causalities and Interventions”. *Nutrients*. Vol. 6(2). Pp. 729-775.
- Srilakshmi, B. (2014). “Dietetics”. 7th ed. New Age International Publishers. New Delhi. Pp. 236.
- Swaminathan, M. S. (1999). “Principles of Nutrition and Dietetics”. Bappco Publications. Pp. 53-55.

## **ASSESSING THE RISK OF DEVELOPING DEMENTIA AMONG DIABETIC ELDERLY**

**\*Dr. Nisha Vikraman and \*\*Linu Jose**

*\*Asst. Professor, Dept of Home Science, St Teresa's College  
Ernakulam*

*\*\* PG student Food Science and Nutrition, Dept of Home Science, St  
Teresa's College Ernakulam*

### **ABSTRACT**

The present study entitled “Assessing the Risk of Developing Dementia among Diabetic Elderly” has been carried out with the following objectives: To find out various nutritional, medical and psychological aspects in relation to diabetes and dementia, to find out the association of dementia status (based on MMSE Score) and various variables in socio – economic, nutritional, life style and medical history, to analyze the correlation between MMSE score, Glycosylated Haemoglobin, Post Prandial Blood Sugar and Fasting Blood Sugar.

The study was conducted in Ernakulum city and data was collected from Silverline Hospital, a specialty diabetic hospital in Kadavantra. A sample of 70 diabetic elderly people between the age group of 55-70 years were randomly selected and a specially formulated interview schedule was used among the diabetic patients to elicit the details like past history, clinical assessment, socio-economic background, diabetic history, nutritional assessment and biochemical assessment, anthropometry and Mini Mental Status Examination (MMSE), a standard tool that was used to monitor various signs and symptoms of dementia was also conducted among the patients. From the study of 70 subjects it was observed that 25% of them had dementia.

The study showed statistical significant difference between Mini Mental State Examination score and gender, those who spent time for doing exercise and who followed meal plan suggested by the dietitian. A positive correlation was also seen between Mini Mental State Examination score and PPBS value. But statistical analysis showed no statistical significant difference between Mini Mental State Examination score and age, education, marital status, dietary pattern they followed, type of activity, depression, hypertension, diabetic duration, diabetic control, hypoglycemia and hyperglycemia. A negative correlation was seen between Mini Mental State Examination score and FBS and HbA1C. From the study it was thus proved that controlled diabetes can lower the risk of developing dementia among the elderly.

## **INTRODUCTION**

A recent review concluded that type 2 diabetes is associated with increased risk of Alzheimer's disease & vascular dementia. Insulin inhibits degradation of amyloid through competitive inhibition of insulin degrading enzyme, increasing the formation of plaques. (Qui et.al., 2007)

Dementia is Global epidemic of 21<sup>st</sup> century. Dementia at present affects 7% of the world's adult population. 61.3 million people in India had diabetes in 2011. This figure is projected to rise to 101.2 million by 2030. India is ranked second in the world in diabetes prevalence, just behind China (Shaji et.al, 2010).

Kerala, the diabetes capital of India with a prevalence of as high as 20%. One study from central Kerala reported a prevalence of diabetes at 20% & prediabetes at 11%. The prevalence was 17% in urban, 10% in midland, 7% in highland & 4% in coastal regions. Other studies shown a prevalence of 11-19% in men & 15-22% in women. (Das et.al, 2010).

## **RELEVANCE OF THE STUDY**

This study will be an eye-opener to the probability of Kerala having high statistics of Dementia because of its present high statistic of Diabetes. This study is expected to prevent the onset of dementia in a population at risk for the diabetic disease. Occurrence of dementia among the population lowers their work productivity which in large scene will hinder national development. Therefore it is highly relevant in the present scenario.

## **AIM**

To find out the relation between diabetes & dementia among the elderly in the age group of 55-70years

## **OBJECTIVES**

- To find out various nutritional, medical and psychological aspects in relation to diabetes and dementia.
- To find out the association of dementia status (based on MMSE Score) and various variables in socio – economic, nutritional, life style and medical history.
- Relation between MMSE score, Glycosylated Haemoglobin, Post Prandial Blood Sugar and Fasting Blood Sugar.

## **HYPOTHESIS**

- Middle Age diabetic history has more chances of dementia.
- Uncontrolled diabetic elderly have more chances of developing dementia.
- Higher the inactivity of insulin produced, greater would be the chance of getting dementia.
- Sedentary lifestyle has more chances in developing dementia.

- Faulty Food habits lead to diabetes and hence later to dementia.

## **METHODOLOGY**

The present study “Assessing the Risk of Developing Dementia among Diabetic Elderly” was conducted in Ernakulum city and data was collected from Silverline Hospital, a specialty diabetic hospital in Kadavantra. A sample of 70 diabetic elderly people between the age group of 55-70 years were randomly selected and a specially formulated interview schedule was used among the diabetic patients to elicit the details like past history, clinical assessment, socio-economic background, diabetic history, nutritional assessment and biochemical assessment, anthropometry and Mini Mental Status Examination (MMSE) was also conducted among the patients.

The mini-mental state examination score (MMSE) is a brief 30-point questionnaire test that is used to screen for cognitive impairment. It is commonly used in medicine to screen for dementia. It is also used to estimate the severity of cognitive impairment and to follow the course of cognitive changes in an individual over time, thus making it an effective way to document an individual's response to treatment (Pasquire,2010).

## **RESULTS**

### **General Information**

Background information of the subjects revealed that majority (54.3%) of the subjects were male, age wise distribution of the subjects showed that majority (38.6%) of the them belonged to 66-70 years, majority (54.3%) of the subjects acquired no higher qualification, occupation of the subjects showed that majority(25.7%) of them were involved in semi skilled occupation, 32.9% of the earned income in the range of 10,000-20,000 and most (82.9%) of the subjects were married.



### **Mini Mental State Examination Score**

Mini Mental State Examination Score revealed that 20% of the subjects were mildly dementic and 2.9% of the subjects had moderate and severe dementia

### **Dietary Habits**

When dietary habits of the subjects was concerned, it was observed that majority (81.4%) of them were non vegetarians, majority (88.6%) of the subjects had consulted a dietitian for diet counseling and about half of the subjects (55.7%) did not follow the meal plan suggested by the dietitian. The supplements taken by the sample revealed that 64.3% used vitamin on daily basis.

The meal pattern of the subjects revealed that majority (92.9%) subjects included cereals, pulses, vegetables and tea/coffee for their breakfast, most preferred combination of cereals, fish, vegetables and pulses for their lunch and about half of the subjects (48.6%) followed a combination of cereals, pulses, vegetables and fruits for dinner.

### **Physical activity**

Physical activity of the subjects revealed that about half of the subjects (57.1%) spent time to do exercise and remaining of them do not spent time to do any type of exercise, 50% of the subjects did exercise for five times a week and about half (52.9%) of the subjects took up moderate activity.

### **Diabetic history**

The diabetic history of the subjects revealed that 34.4% were diabetic for past 10 years and 30% of their diabetes were not under control. Regarding diabetes related disorders it was observed that 18.6% of the subjects suffered from heart diseases and 15.7% of them had neuropathy. Episodes of hyperglycemia and hypoglycemia revealed that Hypoglycemia was seen among 65.7% of the subjects and 8.6% of them suffered from hyperglycemia.

The Fasting Blood Sugar (FBS) values of majority (46%) were in the range less than 125mg/dl which is said to be normal and 12% of the subjects had their FBS value above 125mg/dl and they were said to be sever diabetic, Postprandial blood sugar (PPBS) value of the subjects revealed majority (64%) of the subjects had value above 200 mg/dl and 15% had PPBS value less than 140 mg/dl showing normal postprandial blood sugar values, Systolic pressure of the subjects revealed that, majority (54%) of them had pressure in the pre hypertension range, in case of diastolic pressure majority (85.7%) of the subjects had normal pressure, majority (87%) of the subjects had HbA1C value below 8 percent which is said to be normal and rest ( 12.9%) of the subjects had the value above 9 percent and HDL - cholesterol value of the subjects revealed majority (51%) were in the borderline range (35-49mg/dl) and few (14.3%) had desirable range (50-65mg/dl).

### **Psychological Parameters**

Regarding psychological parameters it was inferred that majority (77.1%) of the subjects were diagnosed with hypertension, 31.4% of the subjects were experiencing depression, 42.9% of them were found to have stress, majority( 64.3%) of the subjects were obese in the earlier stages of their life and 37.1% of the subjects faced crisis like death and separation. It was found that a statistical significant difference between male and female patients in respect to dementia since P value was 0.001. Statistical significant difference exist between dementia and Compliance of dietitian's guidelines since P value of the test was 0.016.

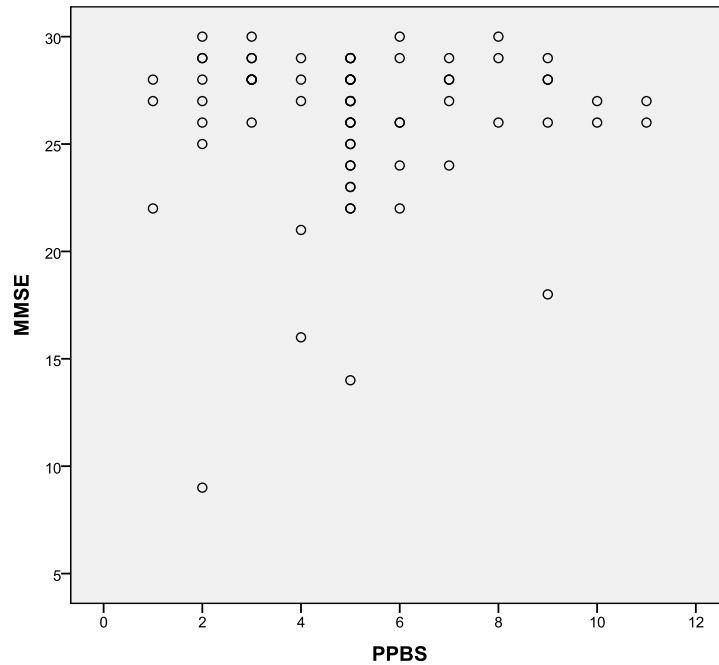
It was noted from the collected data that a statistical significant difference exist between dementia and people who spent time to do exercise and people who do not, since the P value was 0.039.

### Correlation between dementia status with Post Prandial Blood Sugar of the diabetic elderly

The table below depicted the correlation between dementia and Post Prandial Blood Sugar

**Table 1. Correlation between dementia and Post Prandial Blood Sugar**

PPBS	Dementia				P Value
	Normal	Mild	Moderate	Severe	
80-110	2(66.6%)	1(33.3%)	-	-	0.081
111-140	6(75%)	1(12.5%)	-	1(12.5%)	
141-170	9(100%)	-	-	-	
171-200	3(60%)	1(20%)	1(20%)	-	
201-230	13(59.1%)	8(36.3%)	-	1(4.5%)	
231-260	4(66.6%)	2(33.3%)	-	-	
261-290	4(80%)	1(20%)	-	-	
291-320	3(100%)	-	-	-	
321-350	4(80%)	-	1(20%)	-	
351-380	2(100%)	-	-	-	
381-410	2(100%)	-	-	-	



**Figure 1. Correlation between dementia and Post Prandial Blood Sugar**

Post Prandial Blood Sugar of the subjects revealed that among the subjects whose Post Prandial Blood Sugar value was between the range of 80-110, majority (66.6%) had no dementia and only 33.3% had mild dementia. The subjects whose Post Prandial Blood Sugar value was between the range of 111-140, majority (75%) of them found no dementia and a meager of 12.5% had mild and severe dementia. Among the subjects whose Post Prandial Blood Sugar value was between the range of 171-200, majority (60%) were found to fall under normal category of dementia while only 20% of them had mild and moderate dementia.

As the Post Prandial Blood Sugar value increased to the range of 201-230, majority (59.1%) had no dementia, some (36.3%) were found to have mild dementia and rest (4.5%) had severe dementia. This trend was seen to increase

when the Post Prandial Blood Sugar value was between the range of 231-260, majority (66.6%) had no dementia while some (33.3%) had mild dementia.

As the Post Prandial Blood Sugar value was fell between the range of 261-290, majority (80%) found no dementia and only 20% had found to have mild dementia .Among those subjects whose Post Prandial Blood Sugar value was between the range of 231-350, majority (80%) were found to have no dementia and only 20% had moderate dementia.

In the case of the subjects whose Prandial Blood Sugar values were between 141-170, 291-320, 351-380 and 381-410 100% of them were found to fall under normal category of dementia. The result is in congruence with the study conducted by Qui et.al, (2011) who concluded that Dementia risk rise when glucose gets out of control, particularly after meals, Higher two-hour post load glucose levels correlated with greater risk of developing dementia. Postprandial glucose regulation is critical to prevent future dementia.

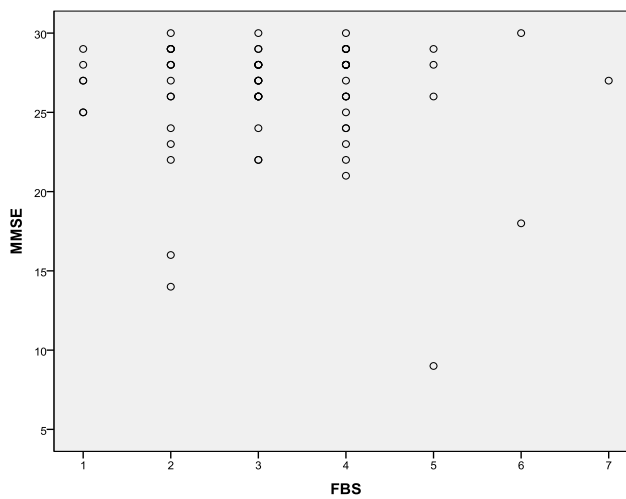
When statistical analysis was done it was observed that there is a correlation between dementia and Post Prandial Blood Sugar. The correlation is significant at 0.081.

**Correlation between dementia status with Fasting Blood Sugar of the diabetic elderly.**

The table below depicted the correlation between dementia and Fasting Blood Sugar

**Table 2. Correlation between dementia and Fasting Blood Sugar**

Fasting Blood Sugar	Dementia				P Value
	Normal	Mild	Moderate	Severe	
65-95	4(66.6%)	2(33.3%)	-	-	-.058
96-125	11(68.7%)	3(18.7%)	1(6.25%)	1(6.25%)	
126-155	17(85%)	3(15%)	-	-	
156-185	15(71.4%)	6(28.5%)	-	-	
186-215	3(75%)	-	-	1(25%)	
216-245	1(50%)	-	1(50%)	-	
246-275	1(100%)	-	-	-	



**Figure 2 Correlation between dementia and Fasting Blood Sugar**

From the Fasting Blood Sugar value of the subjects it was inferred that among the subjects who had their Fasting Blood Sugar value between the range of 69-95, majority (66.6%) had no dementia and only 33.3% had mild dementia. Here again as Fasting Blood Sugar value fell between the range of 96-125, majority (68.7%) had found to have no dementia, some of them (18.7%) had mild dementia and a minimum (6.25%) of them had moderate and severe dementia.

When the Fasting Blood Sugar value was between the range of 126-155 , majority (85%) had found to fall under normal category of dementia while rest (15%) had mild dementias same was the case among the subjects whose Fasting Blood Sugar value was between the range of 156-185, majority (71.4%) had no dementia and few (28.5%) had mild dementia.

Among the subjects who had their Fasting Blood Sugar value between the range of 186-215, majority (75%) had no dementia where as a meager of 25% had severe dementia.

The trend changed slightly when the subjects whose Fasting Blood Sugar value was between the range of 216-245 about half had no dementia (50%) whereas the other half of them had moderate dementia.

Only those subjects whose Fasting Blood Sugar value was between the range of 246-275, 100% had dementia asserting the study results of the study done by Mortimer (2010) who observed that Higher Fasting blood sugar was associated with dementia, independent of vascular risk factors and MRI indicators of vascular disease, and remained a significant risk factor when compared with subjects with normal Fasting blood sugar. A high normal level of Fasting blood sugar is a risk factor for dementia. But when statistical analysis was done it was observed that there is no correlation between dementia and Fasting blood sugar, since the P value obtained was  $-.058$

## **CONCLUSION**

Dementia assessment were observed among the control groups, it is obvious that a higher percentage of subjects with dementia will be found if samples from general community and uncontrolled groups were studied .A negative correlation was seen between Mini Mental State Examination score and Fasting blood sugar and Glycosylated haemoglobin. The reason to this may be that the subjects were collected from hospital where they had already undergone routine checkups and had their biochemical parameters kept under control resulting in fewer chances of these subjects to develop dementia in future. From the study it can be concluded that controlled diabetes can lower the risk of developing dementia among the elderly.

## **REFERENCES**

- Shaji K S, Jotheeswaran AT , Girish N. (2010) “The dementia India report: prevalence, impact, costs and services for dementia: executive summary.” *Alzheimer’s & Related Disorders Society of India*. Pp1–38.
- Das A, RamachandranA, Joshi S. (2010), *JAPI*, Vol 58, Pp 7-9
- Qiu C, Winblad B, Xu W. (2007), The Effect of Borderline Diabetes on the risk of Dementia and Alzheimer’s Disease, *Diabetes*, Vol 56, Pp 211-216.
- Pasquier F. (2010), Diabetes and Cognitive Impairment: How to Evaluate the Cognitive Status, *Diabetes and Metabolism*, Vol 36, Pp 100-105.



## **COMMON PHYSICAL AND PSYCHOLOGICAL HAZARDS OF OLD AGE**

**Sajitha Suseelan S\***

*Asst. Professor, Department of Home Science, Morning Star Home Science  
College, Angamaly.*

### **ABSTRACT**

Old age is a closing period in one's life span. Old age has been viewed as a problematic period of one's life. Like every other period in the life span, old age is characterized by certain physical and psychological changes. The elderly shows marked deterioration in the physical health, stamina and strength as well as in psychological wellness. The disintegrating system of joint family, busy life schedule due to rapid industrialization and urbanization and changing social values lead to the lack of adequate care and negligence by the family members and care givers to the elderly. Hence they become more vulnerable to physical and mental ailments. Nowadays, more and more old people are seriously affected by depression and loneliness. The article throws light on the period of old age and the characteristics and problems of old age. It also focuses on the physical and psychological hazards of old age.

### **INTRODUCTION**

Every human being passes through various stages in life time. Old age is a closing period in one's life span. Like every other period in the life span, old age is characterized by certain physical and psychological changes. But elderly people face more adjustment problems in many areas due to the wear and tear in almost all areas of their development such as physical, mental, emotional and social.

According to American Psychological Association, Old age is often portrayed as a time of rest, reflection and opportunities to do things that were put

off while raising families and pursuing careers. Unfortunately, the aging process is not always so idyllic. Late-life events such as chronic and debilitating medical disorders, loss of friends and loved ones and the inability to take part in once-cherished activities can take a heavy toll on an aging person's emotional well-being. An older adult may also sense a loss of control over his or her life due to failing eyesight, hearing loss and other physical changes, as well as external pressures such as limited financial resources. These and other issues often give rise to negative emotions such as sadness, anxiety, loneliness and lowered self-esteem, which in turn lead to social withdrawal and apathy. Such physical and psychological changes during old age are far more likely to lead elderly to poor adjustments and unhappiness than to good adjustments.

### **The Period of old age**

The last stage in the life span is sub-divided into **early old age**, which extends from age sixty to age seventy, and **advanced old age**, which begins at seventy and extends to the end of life. People during the sixties are usually referred to as “elderly” – meaning somewhat old or advanced beyond middle age and “old” after they reach the age of seventy – meaning advanced far in years of life and having lost the vigor of youth (Hurlock, 1981).

### **Characteristics and problems of old age**

Ageing is an inevitable developmental phenomenon bringing along a number of changes in the physical, psychological, hormonal and the social conditions. Nowadays, old age has been viewed as a problematic period of one's life. The disintegrating system of joint family, rapid industrialization and urbanization and changing social values have together caused serious problem for the aged. They are treated like an unavoidable burden if they ceased to remain

productive members. Occupational problems of aging are generally accepted fact that the lack of employment security of older workers constitutes a significant social problem. The aged become increasingly dependent on others. As man grows, his reduced activities, income and consequent decline in the position of the family and society makes his life more vulnerable. An old person begins to feel that even his children do not look upon him with that degree of respect, which he used to get some years earlier. The old persons feel neglected and humiliated.

The common characteristics of old age are:

- Loss of general attractiveness and status because of loss of productivity in the matter of work and money. Feeling 'useless' may be the source of frustration.
- Deterioration of sense faculties.
- Loneliness
- Ill health
- Financial worries
- Decline in mental functioning which leads to think and learn slowly, to forget quickly, to be confused, to have repetitive speech, to wander in attention and get fatigued quickly.
- Decline in companionship, withdrawal from social contacts and loss of interest in personal life and family responsibility.
- Feeling of insecurity, selfishness, demanding attention and unwillingness to do his share of work.
- Cautious, conservative and religious.
- Feelings of inadequacy, rejection, self-pity, apathy, negativism, rigidity and regressive tendencies (Devadas & Jaya, 1984).

### **Physical hazards of old age**

In old age there is a marked deterioration in the physical health, stamina and strength. The functioning of the organic structures and body systems decline to a great extent. The resistance of the body to diseases is decreased and become victims of a number of diseases so often. Heart ailments, diabetes, hypertension, rheumatism, arthritis, visual and hearing impairments are quite common with the aged. The muscles and bones become weak and fragile. Hence they suffer from pains in joints and muscles and bone fractures. Most elderly people lose some or all of their teeth. Those who must wear dentures often have difficulty in chewing foods. This encourages the swallowing of food which may lead to digestive disorders. Ill-fitting dentures or the absence of teeth often causes lisping and slurring. Older people are generally more accident-prone than younger ones. Falls, which may be due to environmental obstacles or to dizziness, giddiness, weakness or defective vision are the most common accidents that may leave the person disabled for life. Motor vehicle accidents and fire accidents are also common in old age.

### **Psychological hazards of old age**

The most common psychological hazard characteristics of old age are:

- *Acceptance of Cultural Stereotypes of the elderly*

Acceptance of the traditional beliefs and cultural stereotypes of aged is hazardous because it encourages the elderly to feel inferior. It tends to stifle their motivation to do what they are capable of doing.

- *Effects of physical changes of aging*

Another psychological hazard of old age stems from feelings of inferiority and inadequacy that come with physical changes. The loss of an

attractive appearance may lead to feel rejection by the social group. Loss of hearing and difficulty in speaking proves to be a barrier in communication and to social relationships.

- *Change in life patterns*

The necessity for establishing a different, more appropriate pattern of life is another important psychological hazard many elderly people face. For e.g. If elderly people move to places that are better suited to their needs, the physical hazards may be reduced but the psychological hazards may increase.

- *A tendency to slip mentally*

Deterioration in general health and poor functioning of nervous system may lead to poor cognitive functioning of the aged. It can result in slowing down or impairment of their intellectual performance. The memory losses are common. They may think that they are ‘slipping’ mentally and are not able to learn new things. So they withdraw from all activities that might involve competition with younger people.

- *Feeling of guilt about idleness*

Many older people feel guilty after retirement or after their home responsibilities have diminished. They want to do something useful, but may shy away from community activities planned for older citizens because they regard them as forms of recreation rather than real work.

- *Reduced income*

Finance is the most important problem in old age. Reduced income during retirement life is a hazard to their personal and social adjustments. Most of them have to depend on their children for financial matters which may develop negative feelings among them.

- *Feeling of depression and loneliness*

Depression and loneliness is the most important and serious psychological hazard that old age people face now a days. Depressive symptoms not only have an important place as indicators of psychological well-being but are also recognized as significant predictors of functional health and longevity. Longitudinal studies demonstrate that increased depressive symptoms are significantly associated with increased difficulties with activities of daily living (Penninx *et al.*, 1998). Community-based data indicate that older persons with major depressive disorders are at increased risk of mortality (Bruce, 1994). There are also studies that suggest that depressive disorders may be associated with a reduction in cognitive functions (Speck *et al.*, 1995).

One of the most common causes of loneliness in old age is loss of a spouse. Most of them will be living alone as their children will be settled abroad and meet them occasionally. Loneliness may lead to serious health-related consequences. It is one of the 3 main factors leading to depression (Green *et al.*, 1992), and an important cause of suicide and suicide attempts. A study carried out by Hansson *et al.* (1987) revealed that loneliness was related to poor psychological adjustment, dissatisfaction with family and social relationships.

## **CONCLUSION**

Aging is a series of processes that begin with life and continue throughout the life cycle. Old age is usually discussed in connection with the different types of problems encountered by the aged and the welfare measures associated with providing them a better quality of life. It has been observed that physical diseases, psychological illness and adjustment problems are quite common during this phase of life. Due to declined health condition, lack of adequate care and negligence by the family members and care givers, busy life schedule due to

urbanization etc. they become more vulnerable to physical and mental ailments. Hence elderly people must make adjustments to the changes that accompany old age and must develop new coping skills to adapt to the changes that are common to this time in their lives.

## **REFERENCES**

1. Hurlock B. E. (1981), Developmental psychology, McGraw Hill Education(India) Pvt. Ltd., New Delhi.
2. Devadas P. R and Jaya. N. (1984), The Textbook on Child Development, Macmillan India Ltd., Madras.
3. Mangal S. K. (2013), Essentials of Psychology for Nurses, Avichal Publishing Company, Delhi.
4. Singh. A, Misra. N., Industrial Psychiatry Journal, 2009. Jan-Jun; 18(1): 51-55
5. [www.homeorizon.com/dr-smita-ded-krori](http://www.homeorizon.com/dr-smita-ded-krori)

## **A STUDY ON FOOD ALLERGIES IN PEOPLE**

**Dr. Sr. Shemi George\* and Bini Baby\*\***

*Asst. Professor, M.S.H.S. College, Angamaly. Email srshemigeorge@gmail.com*

### **ABSTRACT**

Food allergy is an abnormal response to a food triggered by the body's immune system. The objectives of the study was to find out the prevalence of allergy, to find out the symptoms related to food allergy, to find out the general treatment taken for food allergy. The sample consisted of 100 peoples between the age group of 10 -40 years from urban and rural area. The prevalence of the study was 30% of the subjects suffered from food allergy. Of that 22% female subject suffered from food allergy and only 8% male subject were suffering from food allergy. Majorities 70% of the subject were not suffering from allergy and 30% subjects were suffering from food allergy. About 15% of the subjects were suffering from meat allergy. 4% of the subjects were suffering from milk allergy. 35% of the subjects were suffering from shell fish allergy. 2% of the subjects were suffering from egg allergy. And only 1% of the subjects were suffering from soya allergy. The study can conclude that the prevalence of food allergy in Kerala as well as India is high.

**Key words:** Allergy, immunoglobulin

### **INTRODUCTION**

Food allergy is an abnormal response to a food triggered by the body's immune system. The body produces a specific type of antibody called immunoglobulin E (IgE). The binding of IgE to specific molecules present in a



food triggered the immune response. The response may be mild or in rare case it can be associated with severe and life threatening reaction called Anaphylaxis. A reaction to type of reaction called food intolerance<sup>1</sup>.

Food allergies and other food sensitivities are individualistic adverse reactions to foods. These foods related illness are individualistic because they affect only a few people in the population; most consumers can eat the same food with no ill effect. Many different types of reactions are involved in these individualistic adverse reactions to foods<sup>2</sup>.

Individuals with food allergies and other type of food sensitivities react adversely to the ingestion of foods and food ingredients that most consumers can ingest with no problems. For most consumers eating is an enjoyable experience given the variety and abundance of food available in the market place. For some individuals, however, consuming certain food can be a debilitating, possibly even life threatening, experience<sup>3</sup>.

Food preparation requires careful attention to details such as “cooking from scratch”, seeking alternative recipes for many dishes, and avoidance of shared utensils, containers and cooking surfaces between allergic and non-allergic foods. In situations where one family member has a very serious allergic sensitivity, entire family often has to avoid the offending food as a precautionary measure<sup>4</sup>.

The majority of food allergies are triggered by certain proteins in; Shellfish, such as shrimp, lobster and crab, peanuts, tree nuts, such as walnuts and pecans, fish, and eggs. In children, food allergies are commonly triggered by proteins in; eggs, milk, peanuts, tree nuts and wheat.

## **OBJECTIVES**

- To find out the prevalence of allergy
- To find out the symptoms related to food allergy
- To find out the general treatment taken for food allergy

## **METHDOLOGY**

The area selected for the study was Angamaly and Ayyambuzha village at Ernakulam district. The study was conducted among the people between the age group of 10 -40 years. The sample consisted of 100 peoples between the age group of 10 -40 years from urban and rural area. This survey was used as it was easy for them to give responses.

## **RESULTS AND DISCUSSION**

### **Background Information**

The basic information of the studied subject consists of details about age, sex, and place of residence. These are given in the table below.

**Table I**  
**Background Information**

Details	Number =100	Percentage
<b>Age</b>		
10 -17	25	25%
18 -25	45	45%
25 -35	20	20%
35 -50	10	10%
<b>Sex</b>		
Male	45	45%
Female	55	55%
<b>Place of residence</b>		
Urban	20	20%
Rural	80	80%

The table 1 shows that 25% of the subjects were 10 -17 years of age, 45% of them between 17 -25 years, 20% of subject were 25 -35 years of age and 10% of them were between 35 -50 years. About 20% of the subjects were from urban area. Majority 80% of the subject was from rural area.

### **Prevalence of Allergy**

**Table 2**  
**Prevalence Of Allergy**

Criteria	Number =100	Percentage	Total
Affected food allergy			
Male	8	8%	30%
Female	22	22%	
Not affected food allergy			
Male	37	37%	70%
Female	33	33%	

The table 2 shows that 30% of the subject was suffering from food allergy. Of that 22% female subject suffered from food allergy and only 8% male subject were suffering from food allergy. The majority 70% subject were not suffering from food allergy. Of that 37% male not suffered from food allergy and 33% of female subject were not suffering from food allergy.

**Allergic Food Items**

**Table 3**

**Allergic Food Items**

<b>Criteria</b>	<b>Number =30</b>	<b>Percentage</b>
<b>Allergic food items</b>		
Milk	4	4%
Egg	2	2%
Peanut	0	0%
Tree nut	0	0%
Wheat soya	0	0%
Fish	0	0%
Shell fish	3	3%
Soya	1	1%
Meat	15	15%
Watermelon	0	0%
Any other	5	5%

The table 3 explains about the food they are allergic to. Majorities 70% of the subject were not suffering from allergy and 30% subjects were suffering from food allergy. About 15% of the subjects were suffering from meat allergy. 4% of the subjects were suffering from milk allergy. 35% of the subjects were suffering from shell fish allergy. 2% of the subjects were suffering from egg allergy. And only 1% of the subjects were suffering from soya allergy. In this survey none of the subject is suffering from food allergy caused by the food items such as peanut, tree nut, wheat soya, fish and water melon.

**Symptoms Related To Food Allergy**

**Table 4**

**Symptoms of Food Allergy**

<b>Symptoms</b>	<b>Number N=100</b>	<b>Percentage</b>
Difficulty in breathing	3	3%
Anaphylaxis	0	0%
A drop in blood pressure	0	0%
Swelling of tongue, Lips, Face or throat	27	27%

The table 4 shows that symptoms related to food allergy. Most of the subject 70% were not suffering from food allergy and 30% of the subject were suffering from food allergy. Most of the subjects 27% were suffering from swelling of the tongue, lips, face or throat. Only 3% of the subjects were having difficulty in breathing.

## Management of Food Allergy

**Table 5**  
**Management Of Food Allergy**

Criteria	Number =100	Percentage
<b>Take Medicine</b>	20	20%
<b>Food Avoided</b>	30	30%
<b>Which Food Avoided</b>		
Milk	4	4%
Egg	2	2%
Soya	1	1%
Meat	15	15%
Peanut	0	0%
Tree nut	0	0%
Wheat soya	0	0%
Fish	0	0%
Shell fish	3	3%
Any other	15	15%

Majority 80% of the subjects do not take medicine because they have not suffering from food allergy. 20% of them take medicines, 100% of the subject do not take injection during allergy. 70% of the subjects do not avoid food and 30% of the subjects avoid food items. Because they have suffering from food allergy. About 15% of the subject avoided meat. 15% of the subject avoided other food items. 3% of them avoided shell fish. 2% of them avoided egg and 1% of the subject avoided soya.

## **CONCLUSION**

The study can conclude that the prevalence of food allergy in Kerala as well as India is high. Non vegetarian foods are the main sources of allergy in Kerala. Proper treatment and management can prevent the allergy.

## **REFERENCES**

- National Institute of Allergy and Infectious Diseases (July 2012). "Food Allergy An Overview".
- Sampson, HA; Ho DG (October 1997). "Relationship between food-specific IgE concentrations and the risk of positive food challenges in children and adolescents". *J Allergy Clin Immunol.* 100 (4): 444–51. doi:10.1016/S0091-6749(97)70133-7
- Ampson, HA (May 2001). "Utility of food-specific IgE concentrations in predicting symptomatic food allergy". *J Allergy Clin Immunol.* 107 (5): 891–6.
- Wüthrich B (2005). "Unproven techniques in allergy diagnosis". *J Investig Allergol Clin Immunol.* 15 (2): 86–90

## **PREVALENCE OF LIFESTYLE DISEASES AMONG WORKING WOMAN UNDER OCCUPATIONAL STRESS**

**Sherin Abraham\***

*\*Asst.Professor, Department of Home Science, Morning Star Home Science College, Angamaly.*

### **ABSTRACT**

Occupational life is one of the major parts of our daily lives that might cause a great amount of stress .If workers are unable to cope with stress factors, it might lead to multiple complications. One of the important issues of prolonged stress is burnout. The significant causes are sustained sitting posture during working in offices accompanied with poor ergonomic status of workplaces.The working environment and the nature of work itself are both important influences on health (Marmot & Wilkinson, 2006).The Psychological information gives that the conditions like job pressure, stress, family problems are often affects their work and vice versa, and it also causes lifestyle disease for them.

The objective of the study is to analyse the experience-wise occupational stress among working women.

The survey was done to collect data, with the help of a well-structured questionnaire

Can be conclude that lifestyle diseases like diabetics, osteoporosis, cholesterol, heart diseases, hypertension etc, are commonly seen in women who are working and also those women are severely stressedleads to lifestyle diseases.



## **INTRODUCTION**

“Throughout the world, most adults—and many children—spend much of their waking hours at work. Work provides a number of economic and other benefits. At the same time, people at work .a variety of hazards owing to chemicals, biological agents, physical factors, adverse ergonomic conditions, allergens, a complex network of safety risks, and many and varied psychosocial factors” (Concha-Barrientos et al., 2004: p.1653). The working environment and the nature of work itself are both important influences on health (Marmot & Wilkinson, 2006). Stress is an inevitable part of today’s fast life. The concept of stress was borrowed from the natural science. Stress was popularly used in seventeenth century to mean hardship, strain adversity (or) affliction. The Psychological information gives that the conditions like job pressure, stress, family problems are often affects their work and vice versa, and it also causes lifestyle disease for them. Rheumatoid arthritis, Multiple Sclerosis, Depression and Osteoporosis are the common diseases predominantly found in females; some have a link to female gene pattern, others to hormonal changes and some to female body structure while some are linked to the female psyche and lifestyle.

Lifestyle diseases characterize those diseases whose occurrence is primarily based on the daily habits of people and are a result of an inappropriate relationship of people with their environment. The main factors contributing to lifestyle diseases include bad food habits, physical inactivity, wrong body posture, and disturbed biological clock. According to a survey conducted by the Associated Chamber of Commerce and Industry (ASSOC-HAM), 68% of working women in the age bracket of 21-52 years were found to be afflicted with lifestyle ailments such as obesity, depression, chronic backache, diabetes and hypertension. Women play multiple roles- specially working women who have to balance between work and home resulting in negligence of their own health. Tight

deadlines, work pressures, social networking, travel, etc. are just some of the common reasons of an increase in lifestyle ailments like obesity, depression, diabetes, blood pressure, etc. Today women tend to give more importance to their careers rather than their own health. Work pressures lead them to eat more of junk food which leads to obesity and other health related issues. Lack of time forces them to get less amount and poor quality of sleep. A busy lifestyle results in lack of exercise and poor nutrition resulting in iron and calcium deficiency. Irritation and mental depression become a part of their lives which in turn badly affects the hormones that play a vital role in a woman's body. Hormonal disturbances are increased with stress and then result in ovulation and polycystic ovarian diseases. Now there is a great need to focus our attention on **preventive health care**.

. This study is revealed occupational stress is leads to lifestyle diseases.

## **OBJECTIVES**

- To examine general effect of occupational stress and health complaint among working women
- To elucidate information on the lifestyle diseases among working women
- To study women's knowledge on health awareness programs
- Women are having moderate stress and 2% of them are having severely stressed. This study is revealed occupational stress is leads to lifestyle diseases.

## **METHODOLOGY**

The objective of the study is to analyse the experience-wise occupational stress among working women. To achieve this objective the data was collected from 50 working women..The sample was selected randomly keeping in mind the

variations in experience. The survey was done with the help of a well-structured questionnaire

## RESULTS AND DISCUSSION

**Table 1.Occupational status**

<b>Employed</b>	<b>No=50</b>	<b>%</b>
Part time	6	12%
Full time	44	88%

The above table observed that 88% of sample had full time work and 12% of sample are part time workers.

**Table 2.Details of the Occupational aspects**

<b>Aspect</b>	<b>No=50</b>	<b>%</b>
Interest in job		
Yes	50	100%
No	Nil	Nil
Job situation (freedom)		
Yes	48	96%
No	2	4%
Enough salary position		
Yes	37	74%
No	13	28%
Satisfaction in job		
Yes	47	94%
No	3	6%

Night duty		
Yes	5	10%
No	45	90%
Leaves on appropriate time		
Yes	43	86%
No	7	14%
Medical facilities		
Yes	13	26%
No	37	74%
Security at work place		
Yes	36	72%
No	14	28%
Work place		
Near	23	46%
Far	27	54%
Work performance		
Above average	34	68%
Average	16	32%
Below average	Nil	Nil

From the above table we can see that 100% samples are interested in job. In this 96% samples are getting freedom in their work place. From above table it seems that 74% of samples are getting enough salary in their position, 94% samples are satisfied in their job. As it seems 86% of samples are getting leaves on appropriate time. From the above table it evidently shows that there is a lack of medical facilities. The 74% of sample are not getting medical facilities. By the table it clearly gives that only 72 % samples are secure at work place. For 54% of

sample's work place is near to the house. The working efficiency of the 68% is above average.

**Table 3.Sources of information about Health awareness**

Aspect	No =50	%
Information about awareness programme	5	10%
Colleagues	45	90%
Newspaper		
Participation in health awareness programme		
Yes	3	6%
No	47	94%
Distribution of medicine		
Yes	5	10%
No	45	90%
Government policies		
Health insurances	4	8%
ESI	10	20%
Other	2	4%
No	34	68%

The table shows that 95% of samples are getting information about health awareness programs from the newspapers and only 5% of samples are getting health awareness from their colleagues. Most of the samples are not participating

in the health awareness programs. From the data on the table 90% of samples not getting medicines from organizations the table shows that 20% of samples provided with ESI medical facilities and 4% of samples are not. 8% of samples are getting health insurance policies.

**Table 4. Lifestyle Diseases**

Lifestyle Diseases	Yes	No
Obesity	1	2%
Heart diseases	2	4%
Diabetics	8	16%
Asthma	10	20%
Cholesterol	7	14%
Osteoporosis	11	22%
Hyper tension	3	6%
Alzheimer's	Nil	Nil
No	6	16%

This table detailed about lifestyle diseases like obesity, heart diseases, diabetics etc. from the survived table samples 22% of them had osteoporosis, 20% of them had asthma, 16% of samples were facing diabetics, among of the samples, and 14% of them had cholesterol. 6% of them had hypertension, 4% of samples

were facing heart diseases.2% of them had obesity. Among of the samples shows only 16% of samples are not affected any lifestyle diseases.

**Table 5.Psychological Information**

Statements	Never	Rarely	Sometime s	Often	Very Often
Condition at work are unpleasant or sometimes even unsafe :	39 (78%)	9 (18%)	2 (4%)	Nil	Nil
I feel that my job is negatively affecting my physical or emotional well being :	38(76%)	6(12%)	4(8%)	Nil	2(4%)
I have too much work to do and /or too many unreasonable:	43(86%)	5(10%)	6(12%)	Nil	Nil
I find it difficult to experts my opinions or feelings about my job conditions to my superiors:	42(84%)	3(6%)	3(6%)	7(14%)	Nil
I feel that job pressure interfere with my family life:	26(52%)	21(42%)	5(10%)	2(4%)	Nil
I have adequate control or input over my work duties:	6(12%)	2(4%)	3(6%)	25(50%)	14(28%)

I receive appropriate recognition or rewards for good performances: Number Percentage	7(14%)	4(8%)	21(42%)	8(16%)	10(20%)
I am able to utilize my skills and talents to the fullest extent at work:	Nil	6(12%)	1(2%)	22(44%)	21(42%)

The table shows that 78% of samples are never affected any unpleasant or unsafe feeling in their work place, 18% of samples are rarely affected unpleasant or unsafe feeling. For 76%, 84%, 86%, of samples are not affected job pressure, work load, family problems.

**CONCLUSIONS**

The foregoing analysis reveals that women working in public and private sectors face the occupational stress. Working women having less experience face the stress relatively more as compared to working women having higher level of experience. Adequate feedback, training and proper promotion facilities should be provided to working women. There is a need to reduce the workload among working women. Proper working conditions should be provided to working women at the workplace. Working woman should be involved in decisions making process so that they may not feel isolated at the work place.

**Suggestions as tips**

1. Make a time table for daily activities with sufficient time for exercise and entertainment.



2. Do brisk walking daily for 15 minutes or 10,000 steps or 2-3 kilometres.
3. Practice meditation or Yoga for at least 30 minutes. A
4. Avoid fried food stuffs and junk food. Avoid foods with preservatives and colouring agents
5. Increase intake of fruits, salad, healthy and nutritious diet.
6. Never skip a meal for efficiency and productivity.
7. Have a good night sleep; also try to rest whenever your body demands it.
8. Use proper seat and sit in a right posture at home and at workplace to avoid postural disorders like cervical sprain and backache.
9. Periodic medical check-up.
10. Follow medical advice if you have some health problem in addition to life style disorder.

## **SELECTION OF COLOR IN HOME**

**Dr.Lizmitha Godwin\***

*\*Asst.Professor, Department of Home Science, Morning Star Home Science College, Angamaly.*

### **ABSTRACT**

Colour is an important aspect of the design of interior spaces. We know that a well planned space can be enhanced by using ‘appropriate’ colors. An appropriate colour for a space is relative and cannot be prescribed. The use of colors in interior spaces as the translation of abstract colour schemes, theories and meanings into real materials, surfaces, experience and use in a space is a complex matter requiring creativity, judgment and often comes with experience. Color affects every aspect of our lives every day. Our lives depend on color and it surrounds us. It penetrates our bodies as light waves. Color removes the drabness from life and enhances the beauty of object. The beauty that we find and cherish in nature is very largely the beauty of color. Everyone enjoy colors and the beauty created by it. The study shows more preference for light and monochromatic colours.

### **INTRODUCTION**

Colors used for residential interiors can be highly personalized depending on the taste and choice of the owners. Hospital interiors are generally white and blue to indicate cleanliness and being calm.

Color plays an important role in interior and exterior environment. It can dramatically change the way objects look both individually and relation to each other. One’s life can be made bright and cheerful by the use of color in interior. A magical effect can be created by color since they can transform darkness to

brightness, gloominess in to cheerful and drabness in to beauty. Color can give you grace and charm, an air of restfulness and contentment. The home can be made in to a colorful place with its different colored furniture's and accessories. Color plays a vital physiological role in life. It gives primary importance to the emotional life of the occupants. Further, the selections and use of different colors and colored materials in the home express the character and individuality of the members of the home.

### **OBJECTIVES**

- To study the colour choice for different areas
- To find out the role of homemaker in colour choices
- To study the factors affecting colour selection

### **METHODOLOGY**

The area selected for the study was Thrissur district. This area was selected due to convenience and easy access. Forty houses that was constructed within the time period of past five years were selected for the study. Selection of Sample is necessary to conduct any research study. According to (Kothari, 2009) sampling may be defined as the selection of some part of an aggregate or totally on the basis of which a judgement or inference about the aggregate or totally is made. Purposive sampling method is used. Purposive sampling is when a researcher chooses specific people within the population to use for a particular study or research project. Unlike random studies, which deliberately include a diverse cross section of ages, backgrounds and cultures, the idea behind purposive sampling is to concentrate on people with particular characteristics who will better be able to assist with the relevant research. The tool used to collect information was an interview schedule. An interview schedule is a constructed set of questions which are usually asked orally and recorded in writing by

interviewer. Interview is used to gather Information regarding an individual's experience and knowledge, his / her opinion, beliefs and feelings and demographic data. Observation provides knowledge about the way and style of using Different color in the house. The data collected by survey was gathered and consolidated as the first step, later the data was calculated and the results were analyzed and are presented in tables and figures.

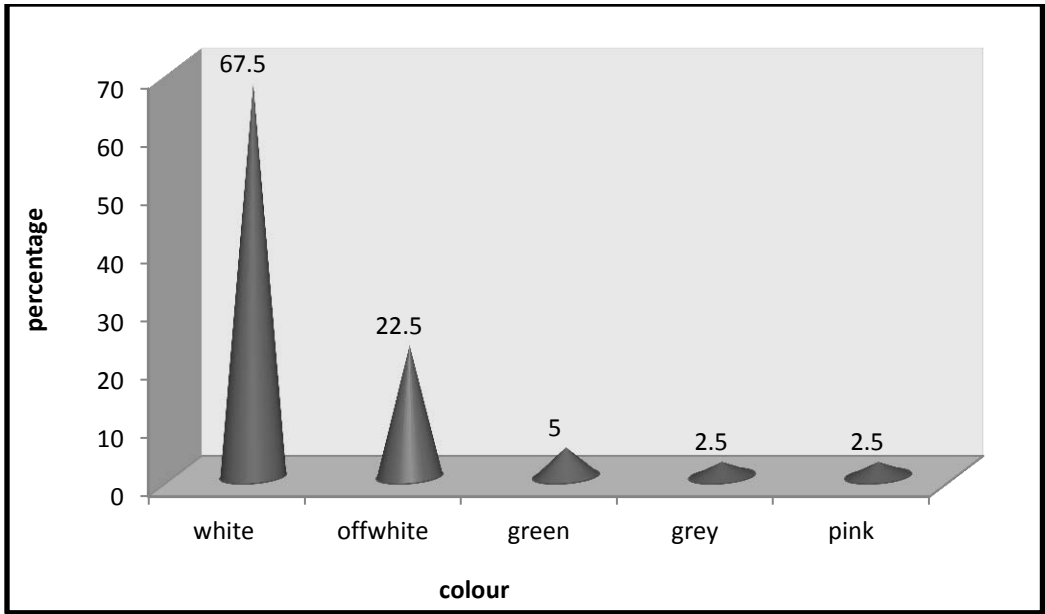
## **RESULTS AND DISCUSSION**

### **Colour choices for different areas**

**Table 1**  
**Number of living rooms and bedrooms**

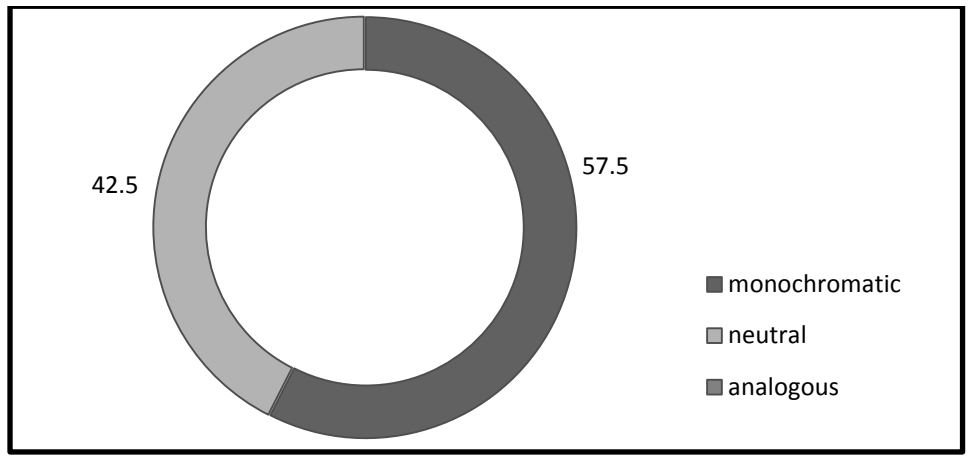
<b>Number of rooms</b>	<b>Frequency</b>	<b>Percentage(n=40)</b>
Living rooms		
1	14	35
2	26	65
Bed rooms		
2	5	12.5
3	23	57.5
4	12	30

The above table gives an idea about number of living rooms and bed rooms in the houses selected for the study. Out of this thirty five percent of house consists of one living room and sixty five percent of house consists of two living rooms. From the table it is clear that 12.5 percent of house consists of two bed rooms, 57.5 percent of house had three bed rooms and 30 percent of house consists of four bed rooms.



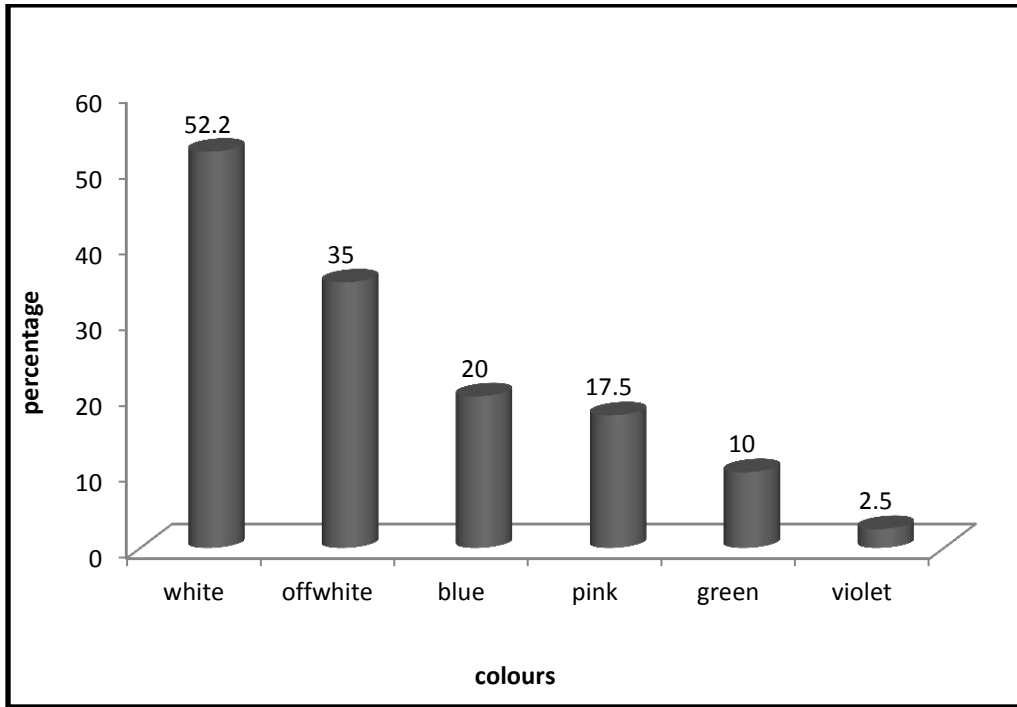
**Figure 1**  
**Color used for exterior**

Figure shows the color selected for exterior. Here 67.5 percent selected white color, 22.5 percent selected off-white, five percent green, 2.5 percent gray and pink.



**Figure 2**  
**Color preference for room**

Figure shows that 57.5 percent of people prefer monochromatic color scheme for their house and remaining 42.5 percent of people selected neutral color.



**Figure 3**

**Color schemes used in bedrooms**

The color preference in bed rooms shows that 52.5 percent of people prefer white color for their room, 35 percent people prefer off-white color, 20 percent people select blue color, and 17.5 percent select pink color, 10 percent select green and the remaining 2.5 percent select violet color for their rooms.

**Table 2**  
**Color shades used in interior**

<b>Color shades</b>	<b>Frequency</b>	<b>Percentage</b> <b>(n=40)</b>
Single shades	5	12.5
Different	30	75
Plane	5	12.5

The above table shows the result of color shades used by different people for their rooms. Here 12.5 percent of them use single and plane shades respectively the remaining 75 percent use different shades of single color for their rooms.

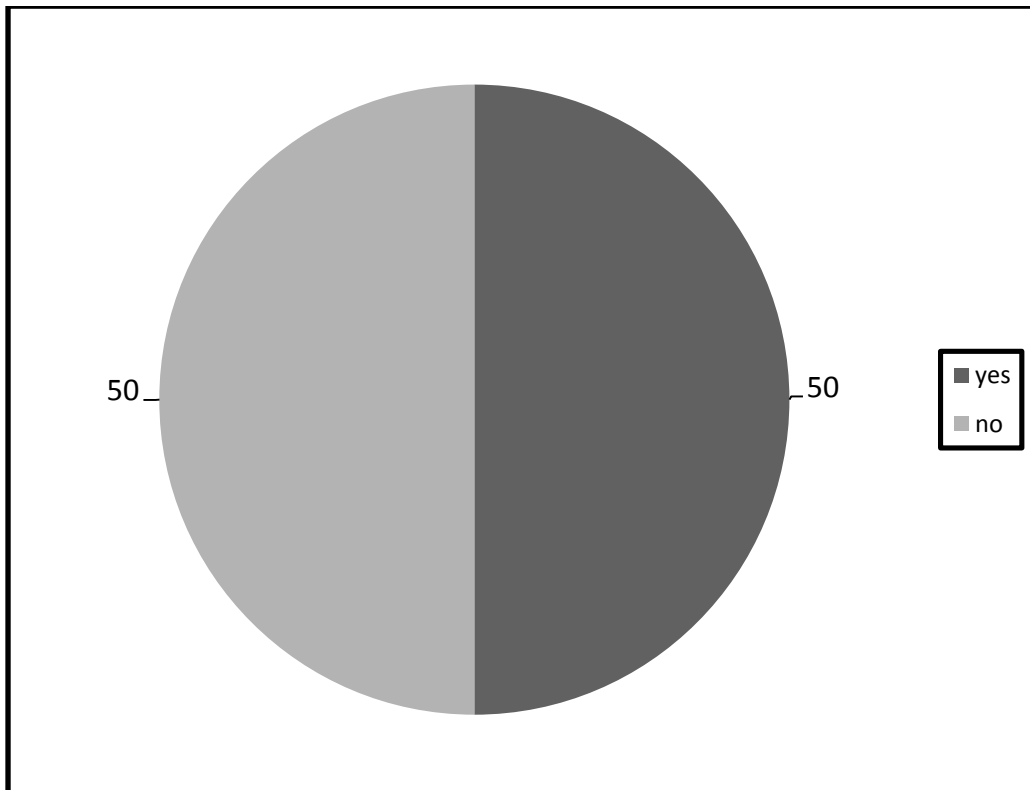
**Role of homemaker in colour choices**

**Table 3**  
**Selection of color**

<b>Color selection by</b>	<b>Frequency</b>	<b>Percentage</b> <b>(n=40)</b>
Home maker	36	90
Interior designer	3	7.5
Other members	1	2.5

The above table shows that 90 percent of homes, homemakers selected the colors , while among 7.5 percent selection was made by interior designers and the remaining 2.5 by other members of the family.

**Factors affecting colour selection**



**Figure 4**

**Influence of age in color selection**

Figure shows the influence of color in different age groups, here 50 percent of people express that age is very important factor that influence color selection and the remaining 50 percent explained that they were not influenced by their age on their color selection.



**Table 4**

**Favorite colors selection**

<b>Color</b>	<b>Frequency</b>	<b>Percentage (n=40)</b>
White	15	37.5
Blue	8	20
Black and white	5	12.5
Red	4	10
Pink	1	2.5
Off white	2	5
Violet	1	2.5
Not responded	4	10

The above table gives an idea about the selection of the favorite color by the people which makes them flexible in selection of color for their interiors. Here 37.5 percent of people select white, 20 percent select blue, 12.5 percent select black and white combination, for 10 percent its red, pink by 2.5 percent, 5 percent select off white, and 2.5 percent select of people select violet color as their favorite color. The remaining 10 percent had no opinion about their favorite color.

**Table 5****Causes for the present color selection**

<b>Color selection</b>	<b>frequency</b>	<b>Percentage (n=40)</b>
Personal preference	22	47.5
Maintenance	2	5
Cost	2	5
Fashion	2	5
Tradition	1	2.5
Child preference	11	15

The above table explains about the reasons for the selection of color for interior. Of this for 47.5 percent it was personal preference, 5 percent people select based on maintenance, cost, fashion respectively, and 2.5 percent explains about tradition and remaining select the color due to their child preference.

**CONCLUSION**

The study can be concluded as though the satisfaction level was fifty-fifty, their preference lasts for white and monochromatic colors. Spaciousness was given more importance combined with casual look. Personal preference was also important in selection of colors.

Through this study it was found that color is one of the most fascinating tool to work with in decoration. It can do wonders if used with imagination. Probably color is important in establishing the mood and the personality of a home. Color brings an cheerful atmosphere to home through conscious choice of few fashionable favorite colors.

## **BIBLIOGRAPHY**

- Agarwala.A(2010), interior Decoration, GaganKapur for DhanpatRai Publications.P:38-42.
- Agarwala, C.S.(1999),interior Decoration, J.C Kapur for DhanpatRai&Co.Ltd.,New Delhi, Pp:26-30.
- Kothari, C.R.(2004). Research Methodology Methods and Techniques-2<sup>nd</sup> revised edition. New age international (P) Limited, Publishers, P:97,100.
- Kothari, C.R.(2009). Research Methodology-method and techniques- 2<sup>nd</sup> edition, P 8.
- Kumar R.(2011), Research Methodology a-step-by-step guide for beginners-3<sup>rd</sup> edition, P 144
- Premavathy and Parveen,(2005) Interior Design and Decoration, CBS Publishers, P:109-113.
- Soundararaj,S(1974).A Text book of House hold arts, Orient Longman Ltd.,Mumbai, P:36-53

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