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List of Publications for the C.Y 2018		
S. No	Name of the faculty	No. of publications
1	Mrs. A. Sravani	4
2	Dr.P.Naresh Kumar	2
3	D.Shiphra Jones	1
4	S.Swarupa Rani	1
5	Dr.D.Suneetha Devi	1
6	Dr. Safia Binte Omer	1
7	Dr.Kothapalli Thirupathi	1
8	Akhtar Sultana	1
	Total:	12


PRINCIPAL
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Managing the Distribution of Employee Workload of the Hospital Staff

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ABSTRACT

Attracting, recruiting, motivating and retaining the workforce is the main course of action for any organisations and also the success of any organization is highly dependent on how they maintain these practices. All this happens when the organisation will be providing fruitful Compensation Packages and the most important is the way the workload is distributed. Distribution of workload cannot be burdened or overburdened to any employee associated with the organisation. More over in today's world the organizations need to be more elastic so that they are set to build up their personnel to be fit for the present competition. Therefore, organizations are required to adopt a strategy to better manage the 'Workload of the Employees' to satisfy the both organizational objectives in developing and employee needs of satisfaction.

DEPOSITORY SYSTEM AND ITS PROCESS

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Abstract: The earlier settlement system in Indian stock exchanges was not so efficient, till we see the Technology introduction in the post-liberalization era. The Stock exchanges competition, increase in the players number and traditional system changes led to tremendous enhancement in the volume of the activity. Has it was unable to take care of the securities transfer in a quick way, the movement was also problematic has the securities were in the form of physical certificates. This led to the face the problems like delay in the settlement process, theft, forgery, mutilation and bad deliveries and also to added costs. So to avoid such problems, The Depositories Act 1996 was enacted.

Index terms: Depository, Demat, Demat Account, NSDL & CDSL.

I. Introduction:

A depository organisation holds the shareholders securities in an e

Depository in a simple way can be explained as securities are held in depository accounts has the bank holds the deposits in the accounts. And the ownership transfer of securities is also done in a very simple way of account transfers. This method avoids all the risks and hassles normally faced by the investors associated with paperwork. Similarly, the transacting cost in a depository system is considerably lower as compared to the Certificates transacting.

The paper-based settlement of trades caused substantial problems in Indian capital Market, like bad delivery and delayed transfer of title till recently. The enactment of Depositories Act in August 1996, helped to solve the problem for the Indian Government.

II. Meaning of a Depository:

An institution which holds your securities in a dematerialised form is called as Depository. Therefore, here a Depository is an institution which holds our Shares, Government Bonds, Mutual funds etc on our behalf, just like a Bank which holds our Fixed Deposits, Cash and Recurring Deposits etc.

The Depositories Act 1996 was enacted, led the following to happen: a) Free transferring of Public limited companies securities, by certain exceptions, b) Providing for maintenance of ownership records in a book entry form and c) Securities Dematerializing in the depository mode. For performing the above tasks, NSDL & CDSL (two depositories) have come up, which were formed with the purpose of ensuring free transferability of securities with speed, accuracy and security.

III. Definition of the Depository:

According to section 2(e) of the Depository Act, 1996, “Depository means a company formed and registered under the Companies Act, 1956 and which has been granted a certificate of registration under section 12(1A) of Securities and Exchanges Board of India Act, 1992”

The Germany Depository defines “A Depository has a file or a set of files in which data is stored for the purpose of safe keeping or identity authentication”.

According to the Bank for International Settlements (BIS), depository is “a facility for holding securities which enables securities transactions to be processed by book entry, physical securities may be immobilized by the depository or securities may be dematerialized (so that they exists only as electronic records)”.

Stress Management as a component of Work-life Balance with regards to a select field

A. Sravani

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ABSTRACT

Work-life balance is the term used to describe those practices that employees do to achieve a balance between the demands of the employee's family (life) and work lives. Wherein, the organisation plays a vital role in achieving the balance. Work-life balance is about people having a measure of control over when, where and how they work. It can only be achieved when an individual's right to fulfill the personal life needs and also working life needs, which are accepted and respected as the norm within the organisation. This mutually benefit all the three i.e., the individual, business and society. The concept of work-family life balance has emerged from the acknowledgement that an individual's work-life and personal/family life may exert conflicting demand on each other. Conflict is a normal part of life and is a natural result of conflicting demands arising from multiple roles such as mother, daughter, daughter-in-law, wife, friend and employee. In order to manage the negative spillover of conflict, it is important to balance the demands from both domains.

Key Words: *Work-life Balance, Involvement, Stress Management*

Introduction:

The model of work life balance, with time, involvement and satisfaction components, enables a broader and more inclusive picture to emerge. For example, someone who works two days a week and spends the rest of the week with his or her family may be unbalanced in terms of time i.e., equality measures between work and life. Or he may be equally committed to the work and non-work roles said as balanced involvement and may also be satisfied with his involvement in both work and family life, maybe called as balanced satisfaction. Work-life balance is a concept including proper prioritizing between "Work" (career and ambition) and "lifestyle" (health, pleasure, leisure, family, and spiritual development).

According to Mac Millen dictionary "Work-life balance is the relationship between the amount of time and effort that someone gives to work and the amount that they give to other aspects of life, such as their family."

Importance of Work-Life Balance

Work-life Balance is something we all know about, but sometimes, due to other commitments we ignore. Here, I have listed some of the reasons why implementing work life balance policies in your workplace are so important.

- The work life balance helps the employees in improving relationships with family and friends.

Information Systems: its Security and Control

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Abstract

Data transformed to the Information and now the talk is of its Security. In the present world, the flow of information and its storage has begun an important task for every individual, organisation and also to the government. The security means protecting the information from an unauthorised access and use. The Information security is also concerned with the identification of an organization's electronic information assets and the development. It is also concerned with that of the execution of tools and techniques, policies and procedures, standards and guidelines and so on, to ensure the confidentiality, integrity and availability of these assets.

Keywords: Information, Security, Malicious Software and Information System control.

Introduction:

Inclusion of global internet and the information system and their infusion into the operations and management of businesses, government organizations, and also into the infrastructure, information security issues have moved to ahead of concerns about global well-being.

What Is Security?

In general, security is something that is not likely to fail or be lost". In other words, protection against those who would do harm, intentionally or otherwise is aim. National security, a multilayered system, actually talks about the protection of sovereignty of a state, its assets and resources, and its people. In the same, security for an organization also requires a multifaceted system.

The National Institution of Standards and technology (NIST) defines Information Security based on the 44 United States Code System 3542 (b) (2), which states that an Information Security is protection of information and information systems from illegitimate opening and using, leaking the information and creating the trouble, modifying and ruining of the data to

Goods and Services Tax (GST): Networking and its working process

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Abstract

A reform in every step will be an added advantage to every individual, society and also for State. A special case may be the Tax Environment of every country. A reform in the Government Tax System will be a definite help for the country to grow. To move ahead, Goods and Services Tax (GST) is an instrument in the indirect tax system of the country. Has it supports the execution of transparency and eliminates the tax burden between the Inter-states.

This paper helps us to know about the Goods and Services Tax (GST) approach the networking and also an idea about its working process. It clears on the view that what are the unresolved problems in achievement of GST approach in our India and also discussing benefits of GST for common man and for the business sectors. GST mechanism is a game changing approach in our Indian Economy.

Key words: Tax System, Goods and services tax, Goods and services tax Networking, Tax malfunctioning.

DECLARATION

I hereby declare that the Article entitled “*A Study on Business Intelligence and its Impacts in organizations: an overview*” has been prepared by me. I further declare that it is my Original work, unpublished or not submitted to any other Institution/ University/Organization for Publishing.

Date:

[P. Naresh kumar]

Place: Hyderabad, Telanagana state

“A Study on Business Intelligence and its Impacts in organizations: an overview”

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Abstract

Business Intelligence disseminates the combinations of Tools, Techniques and approaches towards to perform analytical process which includes collection and integration and analysis of huge un-structured business data to produce value chain for decision making. Business intelligence is a Data-driven systematic process which supports for quality decision making in Modern business environment. Modern business environment each organization Activities always depending on their own ERP Software but These ERP software's are supporting up to 45-50% for the organization for their operational efficiency in decision making process. Organizations ERP software's are failed to dig huge volume of data and perform optimal Data Analysis using visualized approaches. This paper mainly concentrating to describe the importance, challenges of Business Intelligence, also describes how to increase performance using business intelligence approach in organizational ERP which supports to reach top place in the competitive business environment .

Key Words: *Business Intelligence, Data-driven, Value Chain. Key Components.*

[Article](#)

Occurrence of arbuscular mycorrhizal fungi in certain members of polygonaceae from Telangana State, India

January 2019 · [The Journal of Indian Botanical Society](#) 98(3and4):216

DOI:[10.5958/2455-7218.2019.00026.3](https://doi.org/10.5958/2455-7218.2019.00026.3)

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Arbuscular mycorrhizal fungi (AMF) are important contributors to plant health and yield in low input systems. We investigated the relative size of the AM fungus community in paired organic and conventional fields from 12 farms in England on a range of soil types. It was found that AMF spore numbers and root colonization potential were significantly higher under organic relative to conventional ...

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USAGE OF M-BANKING SERVICES - A COMPARATIVE STUDY OF SELECT PUBLIC, PRIVATE AND FOREIGN SECTOR BANKS

Safia Binte Omer¹

Abstract:

The aim of this paper is to study the use of M-banking services provided by select public, private and foreign sector banks in Hyderabad. A total of 1088 bank customers are taken for the study. Different statistical tests like Proportion, Frequency distribution, Tables, Chi square used to study the perception towards M-banking and also to test significant difference in usage of M-banking by different sector banks. The result of the study shows the usage of M-banking differs significantly according to public, private and foreign sector banks. This paper concludes that a usage of M-banking services by the customers will help banks to understand their customer in a better way.

Key words – M-banking, chi square test, old and new private sector banks.

1. Introduction

Worldwide financial systems have undergone structural changes. The global factors driving these changes have been advancements in technology and computing, external financial liberalization and organizational changes in corporate world. Banking and finance in emerging economies has been no exception (vasant desai, 2010). IT revolution has had a great impact on the Indian banking system. In India traditional branch-based banking remains the most widely adopted method of conducting banking transaction, at same time commercial banks are undergoing a rapid change majorly driven by the information & telecommunication (ITC) technology. ICICI bank pioneered in mobile banking services in India. Today many commercial banks have launched mobile banking using ITC technology and now they can reach out to customers and provide them with not only general information about its services but also the opportunity of performing interactive retail banking transactions anytime, anywhere.

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Role of the National Commission for Scheduled Castes in Protection of Scheduled Castes- An Analysis

Dr. K. Thirupathi*

The caste structural values of purity and pollution, superiority and inferiority percolated down to untouchables and erected a Dalit hierarchy under Chaturvarna hierarchy. There emerged two hierarchies within Dalits. One, Mala hierarchy, Mithal Ayyalwar at the top of the ladder and Gurram Mala at the bottom of the ladder. The other is the Madiga hierarchy under Mala hierarchy, the Sangari Madiga being at the top of it and Dakkal at its bottom. Superiority of the upper caste Dalit flows from top to bottom while the inferiority of lower caste Dalits from bottom to top. All the Dalit sub-castes treat Dakkal Madiga an untouchable in Andhra Pradesh. In Dalit hierarchy commensally restrictions are strictly practiced by all Dalits sub-castes.

Gradation of traditional occupation is very much present in traditional occupations of Dalits. The Malas, profess clean traditional occupation compared to Madigas. The Malas engaged in weaving and cultivation. While the Madigas are engaged in unclean occupations like tanning of hides, manufacturing leather goods and chappals. In view of Sarvarnas both Madigas and Malas profess inferior occupation but Malas treat Madigas inferior and untouchable on the bases of Madigas occupation. The priestly hood among Mithal Ayyalwar and Sangari Madigas considered superior to the occupations of Mala and Madigas traditional occupations. Chaturvarna system does not believe social virtue of dignity of labour, treat the working class inferior to them. The same value system is imitated by upper caste Dalits and treats lower caste Dalits inferior to them and developed Dalit hierarchy.

Social distance between Savarna and Dalits, between upper caste Dalits and lower castes Dalits is seen in physical distance in geographical location of residential quarters in villages. Physical separation of each sub-caste residential quarter in villages is a well planned Brahminic strategy to maintain social distance between castes basing on the notion of purity and pollution. In Andhra Pradesh the living quarters of Dalits are built away from living quarters of upper castes and Sudras. So also the living quarters of Malas, Madigas and Dakkals are built away from one another in villages. Physical distance between the residential quarters of different castes in village is a real indicator of division of Savarna castes and Dalits. It also indicates place of each Dalit caste in cultural and social hierarchy within castes in general and within Dalits in particular.

Dalit Movement emerged against caste system in Andhra Pradesh during 1930's but got divided on sub-caste lines due to inter-caste cleavages and personal ambitions of leaders in Andhra Pradesh in 1930s itself. Adi-Hindu Social Services League, Arundhathiyā Mahasabha worked as sub-caste organisations of Malas and Madigas respectively on the basis of sub-caste identity and carried on their activities in the interest of sub-castes. Initially, reservation benefits in legislative bodies created a competition among Dalit leaders and in turn it resulted in emergence of Hyderabad Depressed Classes Association under the leadership of B.S.Venkat Rao after the nomination of Auga Rama Swamy to Hyderabad Municipal Council before the Independence. This was the first split in Dalit Movement on personal ambition of Dalit Leaders in A.P due to reservation benefits provided by

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Research Article

In vivo Protective Role of *Amaranthus viridis* Extract and Direct Folate Treatment on the Sperms of Swiss Albino Mice

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Keywords

- Infertility
- Methotrexate
- Folate
- *Amaranthus viridis* extract

Abstract

Background: Synthetic drugs are available for treating infertility in men caused by various reasons as in use of anti-folates, poor health and environment etc. Plant supplements are preferred over chemicals due to lesser side effects and replenishment of the body through natural dietary resources.

Methods: Albino mice (*Mus musculus*) have been used as animal models for studying the benefits of *Amaranthus* leaf extract (Soxhlet extraction) and folate on the methotrexate dampened sperm conditions affecting the male fertility in mice.

Results: Methotrexate-exposed mice with abnormal sperm morphology ($p=0.034$), reduced motility ($p<0.0001$), dead sperms ($p<0.0003$) indicated significant damage induced by methotrexate. Folate and *Amaranthus* treatment reduced damage ($p^{FA}=0.30$ and $p^{AE}=0.37$). Mice showed significantly improved mean values, and drastic improvement in sperm motility ($p^{FA} = 0.0053$, $p^{AE} = 0.0024$), reduction in dead sperms ($p^{FA} = 0.0059$ and $p^{AE} = 0.0092$), and no significant impact on the head morphology ($p^{FA} 0.38$, $p^{AE} = 0.15$).

Conclusion: In our study we have observed that Folate and *Amaranthus* extract have noticeably contributed to improvement of sperm morphology in male mice. Further analysis can be done for evaluating its potential in treating fertility related complications in men.

INTRODUCTION

Couples visiting fertility centers are treated for sperm abnormalities owing to the inability to conceive due to poor sperm count/quality. Identifying factors contributing to poor semen should be combined with adopting a healthy lifestyle to help in sperm health recovery and increased pregnancy chances. *Amaranthus viridis* and folate treatment was used in mice administered methotrexate known for its detrimental effects on fertility, to investigate their benefits in improving sperm quality. The idea was to identify an agent that can be easily incorporated into our diet that can improve sperm performance and benefit couples visiting fertility centers while planning a pregnancy.

In humans, a sperm count of 20 million/ml and above with more than 60% motility is considered adequate to confer a chance of pregnancy in the couple with a normal healthy female partner. In addition, the colour, fructose levels, pH, liquefaction are indicator tests for normal sperm quality. Low sperm count is an indication of decreased fertility as more and more germ cells

are lost during spermatogenesis [1,2]. Abnormal sperms may be due to external factors like kidney and liver disorders, unhealthy lifestyle and work atmosphere, smoking etc [3,4]. It is essential to evaluate sperm head morphology in sub-fertile men especially where the couple opts to use assisted reproductive techniques (ART) to conceive.

Studies in the past have associated higher folate levels with lower frequencies of abnormal sperms and depleted sperm count. Folic acid is a type of Vitamin B- B9 an essential nutritional requirement for the body as it participates in *de novo* synthesis of DNA in mammalian cells and is crucial to many metabolic pathways which include histidine cycle, serine and glycine cycle, methionine cycle. It also helps maintain erythropoiesis, manages homocysteine levels in blood, inter-conversion of amino acids and is essential in thymidylate and purine synthesis [5]. Zinc, a micronutrient, showed significant association with increased sperm concentration in sub-fertile males (18.5×10^6 cells/ml [$p=0.02$]) in a study conducted to evaluate the effects of folate and zinc on male fertility [6].

Deficiency in folic acid has been associated with decreased sperm count in mice. Folic acid deficiency can arise due to various reasons like cancer, poor dietary intake and use of anti-folates such as methotrexate which affects folic acid metabolism as it has a higher affinity for DHFR (Dihydrofolate reductase), resulting in irreversible inhibition of the enzyme [7].

A study by Young et al., found that lower dietary intake of antioxidants such as vitamin C and increased levels of oxidizing agents in semen have been associated with decreased motility, count, viability and abnormal morphology in both human and animal sperm [8].

Anti-folates affect all mammalian cells because they inhibit folate metabolism, for this reason they have been under scanner for causing possible damage to sperm cells in mammals [9]. Methotrexate being an anti-folate, is often used as a drug to treat diseases such as cancer and autoimmune diseases such as rheumatoid arthritis [10]. The mechanism of action of this drug is inhibition of DNA, RNA and protein synthesis by binding to DHFR enzyme which catalyzes the reduction of dihydrofolate (inactive state) to tetrahydrofolate (active state) which participates in activation of folate dependent enzymes required for DNA synthesis and methylation [11]. Methotrexate has been associated with declined fertility in mice which is seen as a result of aberrant sperm morphology i.e. abnormal head and tail which affects the sperm motility and contributes to decrease in the sperm count [12].

Amaranthus viridis also known as green amaranth is an annual herb 75-100 cm in height, numerous branches, the leaves are slender glabrous and ovate, having long petiole [13]. This herb has high nutritional value and is used for treating inflammation, boils and abscesses and purification of blood. The plant contains essential nutrients and has good levels of calcium, iron, beta carotene, folic acid and ascorbic acid [14]. The leaf extract of *Amaranthus viridis* has been used to study its anti-oxidative properties and the alkaloids were found to be pharmacologically active and potential promoter of oxidation [15-17]. A study done to evaluate nutritional and mineral compositions of green leafy vegetables in Assam (India) showed high levels of zinc content in *A. viridis* (6.50mg/100g) [18].

We conducted a mice study aimed at finding out whether increased folic acid intake or use of natural plant source such as *Amaranthus viridis* extract can be used as a dietary supplement to reduce or prevent sperm anomalies on undergoing treatment with anti-folate drug such as methotrexate which is known to cause sperm depletion and dampen the sperm motility due to irregular head and tail morphology conditions in mice.

MATERIALS AND METHODS

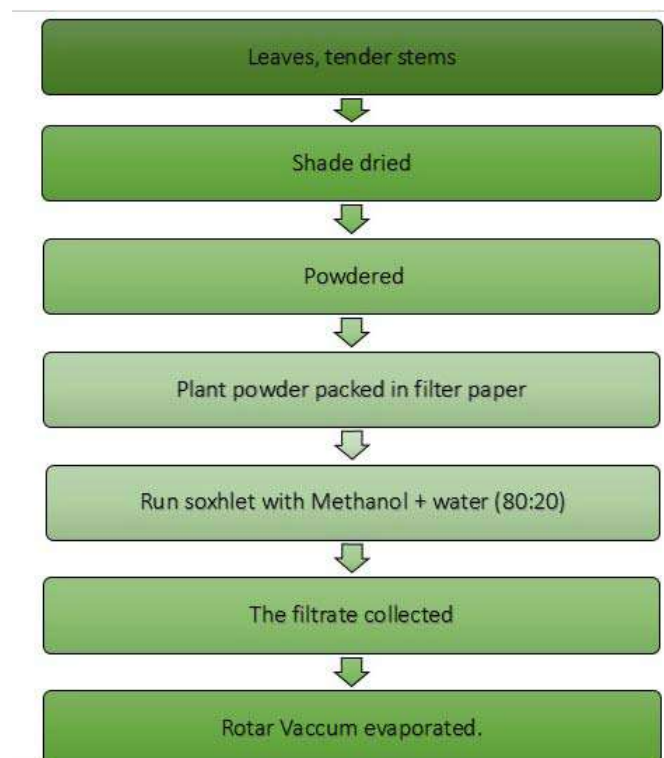
Ethics approval-The ethical standards of experiments were in accordance with the guidelines provided by the CPCSEA (Reg # 1754/PO/RC/S/14/CPCSEA).

STUDY DESIGN

Plant Extract

Amaranthus viridis (Figure 1) is commonly known as Thotakura in Telugu, India. *A. viridis* seed's were purchased from

local market, Ranga Reddy district, Telangana, India. The plants were grown in black soil with good agricultural practices. The plants were authenticated by T. Sudha Rani, Taxonomist-Sarojini Naidu Vanita Maha Vidyalaya in Hyderabad-India. After 30-45 days of vegetative growth, the stem and the leaves were used for extraction. The leaves were washed in distilled water for two or three times and shade dried. The dried leaves and the stem were coarsely crushed, powdered and stored in air tight container for further use. The sample was extracted using methanol (Hi Media) and water (80:20) with the help of Soxhlet apparatus in three replicates. The extract was further concentrated using the rotary vacuum evaporator under reduced pressure and stored at 4°C in a refrigerator.



In vitro studies

Healthy Albino mice (*Mus musculus*) around eight to ten (8-10) weeks old males, weighing 21 to 28 grams were procured and maintained in CPCSEA approved animal breeder, (Reg # 1754/PO/RC/S/14/CPCSEA) and housed in a clean room. The mice were kept at standard temperature of 22 °C (\pm 3 C) with 50% to 70% relative humidity, light and dark (12h) photoperiod was maintained. The feed used was commercially available pellets from Hindustan lever limited, Mumbai and autoclaved Milli Q water.

The mice were divided into four groups each with five animals. In each cage a minimum of two animals were kept.

Dose

Folic acid (Hi Media) 400µg per day is the daily requirement for teens and adults. In the experiment 250µg was given per dose.

Group-1: Methotrexate of 0.300mg/kg per mice, once a week for three weeks.



Figure 1 *Amaranthus viridis* plant.

Group-2: Methotrexate and folic acid 250µg per mice, once a week for three weeks.

Group-3: Methotrexate and *Amaranthus* Extract 250µg per mice, once a week for three weeks.

Group-4: The control animals were given distilled water 2ml per mice, once a week for three weeks.

The albino mice were treated with above vehicles and the animals were examined for clinical manifestations. The mice were sacrificed by cervical dislocation and the cauda epididymis was collected for sperms. From each group two mice were used, one mice was used for checking abnormalities and other for sperm count. The epididymis was minced in 0.7% saline, large fragments were removed and centrifuged for five minutes at 2000 rpm. Then the supernatant was obtained and sperm count was performed using Neubauer chamber. Similarly, one mouse was used from each group for checking sperm head abnormalities. After collecting the cauda epididymis it was minced in sodium citrate (2.2%) centrifuged at 1000 rpm for five minutes. Smears were prepared after staining in Eosin Y for observation under microscope (Figure 2).

The methotrexate in the present study induced changes in the morphology of the sperm. The shape of the sperm plays an important role in analyzing the morphological abnormalities.

Chemical composition	(Per 100 g of edible portion).
Water	88.9
Energy (Kcal)	18
Protein (mg)	3.5
Fat (g)	0.3
CHO (g)	0.3
Fibre (g)	2.6
Ca (mg)	270
Fe (mg)	130
P (mg)	65
Mg (mg)	3.0
Carotene µg	1725
Thiamine mg	0.07
Riboflavin mg	0.22
Niacin mg	0.7
Folic acid mg	85
Ascorbic acid mg	42

Sources: Holland et al., 1991; Leung et al., 1968

It has been observed that the sperm abnormalities occurred in MTX-treated mice. After three weeks of treatment there was some difference seen in the head morphology or the tail region. The head region varied in shapes and could be microcephalic or macrocephalic, pyriform, amorphous or elongated.

The MTX + folic acid treated animals mostly showed normal features of head shape and tail than MTX primed alone.

The MTX + *Amaranthus* extract treated animals showed a decrease in the head morphological deformations when compared to MTX alone.

Med Calc version 11.5.1.0 was used for performing Odds ratio test (i) to assess damage between Control and MTX treated groups and (ii) to assess the damage in groups supplemented with Folic Acid (FA) and *Amaranthus* Extract (AE) as compared to the MTX treated groups.

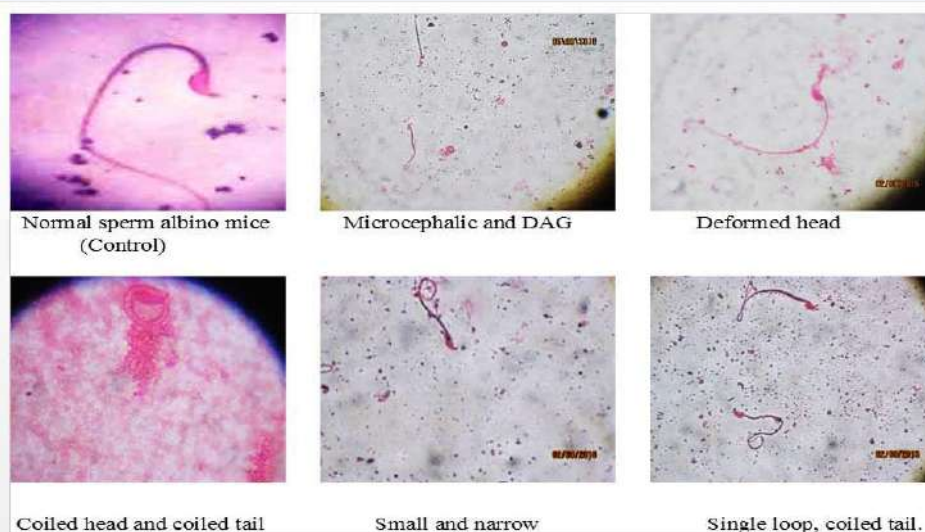


Figure 2 The abnormal sperms with head and tail defects in methotrexate treated mice.

- I. Damage induced by methotrexate on the sperm head and tail morphology is significant at $p=0.034$ when compared to the controls (Table 2 (a) and 2 (b)).
- II. Number of sperms with reduced motility ($p=0.0001$), dead sperms ($p=0.0003$) and abnormal head morphology ($p=0.015$) showing highly significant damaging effect of methotrexate on mice fertility Table 2 (c).
- III. The number of abnormal sperms decreased in FA and AE treated mice. Sperms in the AE extract and FA treated mice showed significantly improved mean values; FA and AE supplemented groups showed drastic improvement in motility ($p^{FA} = 0.0053$, $p^{AE} = 0.0024$), and reduction in number of dead sperms ($p^{FA} = 0.0059$ and $p^{AE} = 0.0092$), whereas it did not show a great impact on the head morphology ($p^{FA} 0.38$, $p^{AE} = 0.15$).
- IV. Effect of FA and AE on head morphology in methotrexate exposed cells: Reduced damage, Odds ratio not very significant at $p^{FA}=0.30$ and $p^{AE}=0.37$.

The abnormal sperms with head or tail defects are as shown in Figure 2.

DISCUSSION

According to Lock and Soares (1980) sperm evaluation is said to provide a quantitative measure for identifying genetic damage via estimating the count, morphology and motility in addition to other aspects of the seminal fluid [19]. Dietary corrections may be found beneficial in providing respite to individuals having unsuccessful attempts in conception. It has been found that dietary intake of vitamin C improved sperm count, vitamin E intake improved total progressively motile sperms, and beta-carotene uptake improved both sperm count and motility. *A. viridis*, a natural source of folate has become a point of interest because it could prevent or reverse sterility in men undergoing methotrexate treatment and also in the other cases with general folate insufficiency.

Methotrexate is an anti-metabolite agent that is used in treatment of neoplastic disorders and other ailments like rheumatoid arthritis etc. Exposed individuals reported a decrease in sperm count. Sussman and Leonard reported that the sperm

count often returned to normal after the drug was discontinued [20]. Shamberger et al., also reported Azoospermia in patients using MTX while studying the effects of postoperative adjuvant chemotherapy and radiotherapy on testicular function in men undergoing treatment for soft tissue Sarcoma [21]. A decrease in sperm count was reported by Van Scott & Reinertseon in men who underwent treatment of two weeks of intravenous MTX injection [22]. De Luca et al., however reported minimal to no suppression of spermatogenesis using the drug MTX [23].

Mouse is a mammalian model for studying the effect of drugs representing the total effects seen in the animal model with similar effects in humans. Anti-folates are used frequently in treatment of cancers and other neoplastic disorders, autoimmune disorders such as rheumatoid arthritis and have been under scrutiny due their impact on fertility in men. This concern has led to finding out ways of reducing and even reversing the impact of methotrexate and other similar kinds of drugs on spermatogenesis. This study aimed at finding out whether folic acid or *A. viridis* extract administered to mice exposed to methotrexate showed any improvement in the declining condition of germ cells during spermatogenesis. The control group provided comparison as to how the sperm count declined and morphology was affected when mice were administered methotrexate alone or in combination with either folic acid or along with *A. viridis* extract. Low mice sperm count and deformities were found to be significantly reduced in the mice being administered methotrexate along with a dose of folic acid and also in mice which were given methotrexate combined with *A. viridis* extract. When compared to the group administered methotrexate along with folate, the group given a combination of methotrexate and *A. viridis* extract showed better results, this could be attributed to the other nutrients and metabolites such as ascorbic acid and β -carotene present in the plant extract.

The results observed in mice could serve as information about whether dietary intake of folate and natural plant source could reduce the side of effects of drugs and medicines taken during the course of treatment and help prevent male sterility. Since *A. viridis* extract showed promising results, a study with higher dose and longer duration could help us find out if natural plant sources could be supplemented in the diet for reducing the overall impact of drugs on the spermatogenesis in mice. Studies

Table 2 (a): Damage induced by methotrexate on the sperm head and tail morphology.

Dose	No. of sperms examined	No. of abnormal Sperms	Mean %.	Amorphous	Pyriform	Elongate	Micro-cephalic	Macro-cephalic	Tail Abnormalities
Control	2000	90	4.5	40	-	-	18	23	09
MTX	2000	120	6	52	7	14	20	7	20
MTX+FA	2000	105	5.25	43	09	14	14	15	10
MTX+AE	2000	107	5.35	41	08	18	13	17	10

Table 2 (b): Damage induced by methotrexate on the sperm head and tail morphology is significant at $p=0.034$.

Dose	No. of sperms examined	No. of abnormal Sperms	Odds ratio (95% CI)	p value
Control	2000	90	-	-
MTX	2000	120	1.35 (1.02-1.79)	0.034
MTX +FA	2000	105	1.66 (0.66-1.13)	0.30
MTX+AE	2000	107	0.88 (0.67-1.15)	0.37

Table 2 (c): Sperm Motility, dead and abnormal sperms.

Groups	Sperm motility Mean%	Odds ratio 95% CI	P value	Dead sperms Mean %	Odds ratio 95% CI	P value	Sperm-head abnormalities Mean %	Odds ratio 95% CI	P value
Control	180/200= 90	-	-	14/200 = 7	-	-	8/200 = 4	-	-
MTX	140/200 =70	3.85 (2.22-6.66)	0.0001	40/200 = 20	3.32 (1.74-6.32)	0.0003	21/200 = 10.5	2.81(1.21-6.5)	0.015
MTX + FA	164/200 =82	0.51 (0.31-0.82)	0.0053	20/200 = 10	0.44 (0.24-0.79)	0.0059	16/200 = 8	0.74 (0.37-1.46)	0.38
MTX + AE	166/200 =83	0.47 (0.29-0.77)	0.0024	21/200 = 10.5	0.46 (0.26-0.82)	0.0092	13/200 = 6.5	0.59 (0.28-1.21)	0.15

conducted in mice could help us in finding out alternate therapies for reducing male sterility in men arising due to similar kind of drugs and involving similar metabolic pathways.

CONCLUSION

In humans the association between sperm quality and male infertility has been known now for forty years. Motility and morphology are excellent markers for evaluating sperm fertilizing capacity. However, abnormal sperm morphology may not be the only factor associated with recurrent spontaneous abortions. In the present work, dietary supplementation with FA and AE improved sperm motility and reduced dead sperm count to a highly significant extent however, it might be noted that the sperm head abnormalities in these mice improved only marginally as was the induction of damage (low). The study emphasizes that this kind of dietary supplementation would prove to be highly beneficial to sub-fertile men not subjected to MTX therapy.

A. viridis as a natural source of dietary supplementation of folate may be a good alternative to direct folic acid given in the form of tablets to individuals with folic acid deficiency due to various health and lifestyle issues. Folic acid supplements are routinely given to pregnant women; in addition to this, it might help to include these supplements in the male partner to resolve a good deal of infertility in couples with sperm anomalies as the primary cause for lack of conception and aid in improving chances for a healthy pregnancy in these couples.

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متاع لب

دستیبا

حسلی کچھ ایسی ہوا بسند ہوگئی وہ کتاب
لکھا تھا جس میں گزشتہ محبتوں کا حساب
(الیاس عشقی)

ان دنوں مشاعروں، سمیناروں کا موسم خوشگوار ہے، کیا شہر
کیا اضلاع ہر جگہ مشاعرے ہو رہے ہیں۔ اللہ کے فضل و کرم
سے شاعری کی زمین بڑی زرخیز ہے۔ اسی وجہ سے ان دنوں کئی
شاعروں کا اضافہ ہوا ہے۔ یہ ان استادوں کا کرشمہ ہے جو اپنے
شاگردوں میں اضافہ کئے جا رہے ہیں اور مخصوص مشاعروں کی
محفل میں شاعر اپنے استاد محترم کی موجودگی میں استاد ہی کا لکھا
ہوا کلام پڑھنے کا شرف حاصل کرتا ہے۔ (انسوس اس سے اُردو
ادب کو رسوائی کے سوا کچھ ہاتھ آنے والا نہیں)

اس دور کے مشاعرے پڑھنے والے چند شعراء کے سوائے
باقی ادکاری، مترنم اور بے توکی شاعری سنا کر داد تحسین حاصل
کرنے کے ہنر سے خوب آشنا ہیں۔ یوں کہا جائے تو بیجا نہ ہوگا
کہ مشاعرے اب ادبی دنگل بن کر رہ گئے ہیں۔ سامعین میں
ایسے ہی افراد کی بھرمار ہوتی ہے جو تکبیدی والی شاعری کو پسند
کرتے ہیں اور وہی مشاعرے زیادہ کامیاب ہوتے ہیں جس
میں شاعرات صرف اپنے دل لہجائی والی آواز، ناز و نخروں اور
اداؤں سے متاثر کرتی ہیں۔ کلام کی کوئی اہمیت نہیں۔ ان
متشاعرات کو اپنی ان غیر مہذب حرکات و فقروں کا استعمال
کرنے پر ہی انہیں داد سے نوازا جاتا ہے، ان کا کلام سن کر
نہیں۔ (ان کے چاہنے والے ہر عمر کے سامعین ہوتے ہیں)
انسوس صدانسوس کہ آج کے مشاعروں کے تصور سے یوں
لگتا ہے کہ اُردو کو کسی چوراہے پر سنگسار کیا جا رہا ہے اور وہ بری
طرح لہو لہان ہو کر دم توڑ رہی ہے۔

ادارہ

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۵	پروین شاکر	ماضی کی سوغات
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۲۶	ڈاکٹر مسعود جعفری	نئے سال کی آہٹ پر
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۳۲	رضیہ چاند	ماں
۳۳	سعید باز ہر	قیصر حکمیں

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جیلانی بانو اردو فکشن کی مشہور و معروف افسانہ نگار و ناول نگار ہیں۔ انہوں نے اپنی تخلیقات کے ذریعہ سماج کے گونا گوں مسائل خاص کر حیدرآباد دکن کی معاشرتی و سیاسی فضاء اور تہذیبی و ثقافتی زندگی کے مختلف پہلوؤں کو اجاگر کرنے کی کوشش کی ہے۔

جیلانی بانو خود افسانہ نگاری کے تعلق سے لکھتی ہیں:

”کسی بڑے نقاد نے کہا ہے کہ لکھنے والا اس وقت بولتا ہے جب وہ خاموش نہیں رہ سکتا۔ میں نے بھی کہانیاں اسی لیے لکھیں کہ میں خاموش نہیں رہ سکتی تھی۔“

جیلانی بانو کی پیدائش 14 جولائی 1936ء کو اتر پردیش کے شہر بدایوں میں ہوئی۔ ان کے آباؤ اجداد ضلع بدایوں اتر پردیش کے رہنے والے تھے۔ لیکن ان کے والد حیرت بدایونی نے مع اہل و عیال حیدرآباد میں سکونت اختیار کر لی۔ لہذا جیلانی بانو کی پرورش حیدرآباد میں ہوئی ہے۔ یہی وجہ ہے کہ مصنفہ حیدرآباد کو ہی اپنا وطن مانتی ہے۔

”بدایوں میرے والدین کا وطن ہے اس لئے مجھے عزیز ہے لیکن حیدرآباد میرا وطن ہے اس لئے مجھے حیدرآباد سے بے انتہا لگاؤ ہے۔“

جیلانی بانو نے جس وقت دہلی زندگی کا آغاز کیا وہ ترقی پسند تحریک کے عروج کا آخری زمانہ تھا۔ حیدرآباد سیاسی انتشار اور ہنگامی دور سے گزر رہا تھا۔ ہر طرف غیر یقینی صورتحال تھی۔ حیدرآباد کی مخصوص روایات اور تہذیب دم توڑ رہی تھیں۔ جاگیر دارانہ ماحول و معاشرے کا خاتمہ ہو رہا تھا۔ ایک نئی تہذیب وجود میں آرہی تھی تقسیم ملک کے باعث ہر طرف افراتفری کا عالم تھا۔ اس عہد میں جیلانی بانو نے اپنے ادبی سفر کا آغاز کیا۔

وہ بلاشبہ فکری و فنی اعتبار سے اردو افسانے کا عہد زرین رہا ہے۔ کرشن چندر، سعادت حسن منٹو، احمد ندیم قاسمی، اوپیندر ناتھ اشک، غلام عباس، بیدی، عصمت چغتائی، قرۃ العین حیدر، ممتاز مفتی، حیات اللہ انصاری، رام لعل، ہاجرہ مسرور، شوکت صدیقی وغیرہ جیسے بلند پایہ اور صاحب

طرز افسانہ نگاریوں کی لمبی قطار تھی۔ جیلانی بانو افسانے، ناول، اور بچوں کی کہانیوں کے علاوہ تنقیدی مضامین، ترجمے، تبصرے، مزاحیہ مضامین پر طبع آزمائی کی ہے۔ ان کی تقریباً گیارہ کتابیں چھپ کر منظر عام پر آچکی ہیں۔ ان کی کتابوں کی فہرست پیش نظر ہے۔

(۱) روشنی کے مینار (۲) نروان (۳) بات پھولوں کی۔ افسانوں کے مجموعے (۴) ایوان غزل (۵) بارش سنگ (۶) نغمے کا سفر (ناول) (۷) جگنو اور ستارے (۸) جیتی جاتی کہانیاں (۹) ملیالم کہانیوں کا ہندی سے اردو ترجمہ (۱۰) پرایا گھر (کہانیوں کا مجموعہ)۔

جیلانی بانو کے افسانوں کا پہلا مجموعہ ”روشنی کے مینار“ ۱۹۵۸ء میں پاکستان سے شائع ہوا۔ روشنی کے مینار پندرہ افسانوں پر مشتمل ہے (۱) موم کی مریم (۲) ڈریم لینڈ (۳) مٹی کی گڑیا (۴) دیوداسی (۵) بھندر اور چراغ (۶) بچوں کی رائے (۷) جو یاد آئی (۸) چھٹکارا (۹) بہاروں کے بیچ (۱۰) ایک اتار (۱۱) چھمیا (۱۲) نئی

عورت (۱۳) آگ اور پھول (۱۴) تلچھٹ (۱۵) روشنی کے مینار۔ اس مجموعہ کو ادبی حلقوں میں بہت سراہا گیا۔ اس مجموعہ میں انہوں نے ۱۹۴۷ء کے بعد کے سیاسی عہد اور سماجی حقیقتوں کو پیش کیا ہے۔ جیلانی بانو کے افسانے ”روشنی کے مینار“ کے تعلق سے محندوم جی الدین لکھتے ہیں:

”باوجود قید و بند کے زندگی سے نزدیک ہو کر اس کی تصویر بنانے کی کوشش کی ہے قابلیت اور تحریروں کے نقش مضمون نے انہیں بہت جلد ہندوپاک کے ادبی حلقوں میں مقبول و مشہور بنا دیا۔“

جیلانی بانو کے افسانے میں موم کی مریم، دیوداس، ایک انار، آگ اور پھول، ایسے افسانے ہیں جو سب سے زیادہ مقبول ہوئے اور کئی کئی مرتبہ مختلف انعامی سلسلوں میں منتخب کئے گئے اور انعام سے بھی نوازے گئے۔

اس میں ”موم کی مریم“ جو فلیش بیگ کی تکنیک پر لکھا گیا ہے بہت ہی عمدہ اور موثر افسانہ ہے۔“

موم کی مریم: یہ کہانی خود سر، ضدی، سرکش، اوباش لڑکی قدسیہ کی ہے۔ کہانی یوں ہے:

قدسیہ کی موت کے بعد اس کا

چچا زاد بھائی اس کی زندگی کی کہانی کو یاد کرتا ہے۔ قدسیہ جو کہ اپنے والدین کی گیارہویں اولاد تھی۔ جس کی پیدائش پر نہ کسی کو خوشی ہوئی اور نہ کسی نے خوش آمدید کہا تھا۔ آس پاس کے ماحول نے اُسے حساس بنا دیا تھا جسے ہر کوئی حقارت کی نظروں سے دیکھا تھا۔ جس نے اپنے وجود کو منوانے کی قسم کھالی تھی۔ اس کا اقتباس ملاحظہ فرمائیے:

”مجھے معلوم ہے کہ تم نے اس محبت کو کامیاب بنانے کی کتنی کوشش کی۔ لیکن ریاض تمہارے ہاں کا لے پالک تھا۔ تمہارے دسترخوان کے ٹکڑوں پر پلٹا تھا پھر چچا ابا کو اس محبت کی سن گن ملی تو ریاض گھر ہی سے نہیں شہر سے نکال دیا گیا اور تم نے بڑے تحمل سے محبت کی اس لاش کو دل کے قبرستان میں دفن کر دینا چاہا۔ لیکن شاید ایسا نہ ہو سکا کیونکہ مردار کھانے والے گدھ، جو ایسے موقعوں کی تلاش میں پھرتے ہیں اس لاش کو باہر کھینچ لائے۔ جی بھر کے لطف اٹھایا اور چیز پھاڑ کر پھینک دیا۔ تمہاری بیماری کو بڑے معنی پہنائے گئے یعنی یہ سب

ریاض کی امانت کا ٹھکانے لگانے کی) انتظار (۲) میں (۳) دو سالہ (۴) کتاب بہانے میں اور تم اپنے بند کمرے میں نہیں پڑی رہتی بلکہ ریاض کے ساتھ

فرار ہو چکی ہو۔“ پھر کہتا ہے: ”یہ افواہیں میں نے بہت دور بیٹھ کر سنیں اور ہر بات کو یقین کے خانے میں ڈالتا گیا۔ یہ کوئی ناقابل یقین بات بھی تو نہ تھی۔ بقول عائشہ کے تم اپنی اہمیت کا احساس دلانے کا فیصلہ کر چکی تھیں اور تم نے ساری دنیا کو ٹھکرا کے اپنی من مانی کرنے کا ارادہ کر لیا تھا۔ پھر تم جیسی محبت کی ماری لڑکیاں اس سے زیادہ اپنی اہمیت کا ثبوت کیا دے سکتی ہیں۔“

(روشنی کے مینار) اس کہانی میں انہوں نے معاشرے کی اس کڑوی سچائی کو بتانے کی کوشش کی ہے کہ متوسط طبقہ میں لڑکی کو بوجھ سمجھا جاتا ہے اور توجہ نہیں دی جاتی۔ بعض لڑکیاں اتنی حساس ہوتی ہیں کہ توجہ نہ ملنے پر بغاوت پر اتر آتی ہے یہی ہمارے معاشرے کی سچائی ہے۔

جیلانی بانو کا دوسرا افسانوں کا مجموعہ ”نروان“ ہے جو چودہ افسانوں پر مشتمل ہے۔ جسے پہلی بار ۱۹۶۳ء میں مکتبہ جامعہ دہلی سے شائع کیا۔

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