Foreword

SGT University aims at sculpting young creative professionals with an intellect to thoroughly know the past, critically analyze the present and creatively shape the future.

The SGT idea of teaching is not conventional and pedagogic limiting the students to information rather it is progressive and creative facilitating them to think, experiment and discover under able guidance.

Over the past years, Research and Innovation was the forte of the post graduate students, Ph.D scholars and faculty members. However, this year, it was decided by the competent authorities to also include the undergraduate students as the spark of curiosity should be inculcated as early as possible.

The University has a scholars hub which includes all academic rank holders of the various faculties. Academic activities, guest lectures, educational tours etc are organized for these scholars. As a part of the hub activities, this year it was proposed that academic research projects/ short studies/ surveys etc be carried out by groups of these scholars under designated faculty members.

Each group carried out their study and compiled the results in the form of a scientific paper.

The aim of carrying out these projects was to give these students an exposure to the Research Methodology. A glimpse to the long, tough but immensely beautiful and satiating path of research and innovation.

So this is the compendium of all the various short studies/research projects/surveys etc carried out by the undergraduate scholars as their first step towards research.

We hope to come up with newer ideas and innovation every year.

“Excellence is a continuous process and not an accident.” - APJ Abdul Kalam
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IMPACT OF CLIMATE CHANGE ON PRODUCTIVITY OF AGRICULTURAL CROPS IN INDIA

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Climate change is a change in the statistical distribution of weather patterns that lasts for an extended period of time (i.e., decades to millions of years). It has direct or indirect effects on human life and ecology. In India, agriculture being a prime occupation, studying the impact of climate change on agriculture becomes very important. Despite a lot of technological advances, such as improved, genetically modified varieties, mechanization and irrigation systems, weather is still a key factor in agricultural productivity. The effect of climate on agriculture is related to variability in local climates rather than in global climate patterns. Small changes in temperature and rainfall have significant effects on the quality of fruits, vegetables, tea, coffee, aromatic and medicinal plants, and basmati rice. Pathogens and insect populations are strongly dependent upon temperature and humidity, and changes in these parameters may change their population dynamics. Climate change has affected the total yield of crops like apple, citrus, maize adversely, whereas on the other hand it is found that shift in weather parameters and cropping pattern is beneficial for C4 plants, pulses, and coarse grains. There is a strong need to review the crop suitability areas in India. There are huge possibilities to turn the adverse effect of climate change into positives. Over the next decades, it is predicted that billions of people, particularly those in developing countries, face shortages of water and food and greater risks to health and life as a result of climate change. Concerted global action is needed to enable India to adapt to the effects of climate change that are happening now and will worsen in the future.
A QUANTITATIVE STUDY ABOUT KNOWLEDGE, ATTITUDE AND PRACTICE TOWARDS TUBERCULOSIS PATIENT AMONG THE RADIOGRAPHERS AND M.Sc. RIT STUDENTS OF SGT HOSPITAL

By
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ABSTRACT INTRODUCTION: Tuberculosis (TB) is one of the huge causes of death worldwide in which HIV play important role and it is a big challenge to control. Further, TB can be treated by well if person would know about it early. Early diagnose of TB is very important so that latent TB not convert into active TB. There are many vaccinations and many treatments available to treat TB but unfortunately people are still suffering from TB.

AIM AND OBJECTIVE: The objective of this study is to assess the knowledge attitude of radiographers and practice towards TB patient. To knowledge about the technique used and proper procedure applied in special X-rays based radiographs. To save patient as for retake investigation and get proper diagnosis. To provide best quality service to patient and their attendants.

METHODOLOGY: A prospective study was conducted by making objective type questionnaire and filled it by radiographers which were on duty. The data of 11 radiographers 9 MRIT students was collected after that analysis was done. There is also a specific inclusion and exclusion criteria.

RESULT: A total of 20 candidates participate in which there are 11 radiographers and 9 M.Sc. RIT students. The mean value of the radiographer result is 56.9% and the mean result of the students was 56.1%.

CONCLUSION: This study shows satisfactory self-rating of knowledge of TB, the radiographers. Satisfactory knowledge implies confidence in handling patients and positive attitude towards them. Not surprisingly majority of them treats with empathy. It is possible that they behave that anyone could be the victim including themselves.
THE PURPOSE OF THE STUDY WAS TO DETERMINE THE ROLE OF PSYCHOLOGICAL FACTORS IN POLYCYSTIC OVARY SYNDROME (PCOS).

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Background: Polycystic ovary syndrome is the most common hormone abnormality of reproductive-aged women & is characterized by overproduction of the androgen testosterone, menstrual abnormalities when ovulation does not occur and enlarged ovaries containing multiple small follicles (polycystic ovaries). Psychological factors have been found to be associated with the condition. Material & method: The research design used in this research is descriptive and quantitative in nature. The sample of this study comprised of 30 women in the age range of 18 to 50 years suffering from PCOS (study group) and 30 women in the same group not having PCOS (control group) visiting two public hospitals in Delhi NCR. The study used two type of data – primary and secondary to achieve its objectives – primary data was collected using the Hospital Anxiety and Depression Scale (HADS) and the Polycystic Ovary Syndrome Questionnaire (PCOSQ). The Secondary data was a literature based conceptual framework outlining possible antecedents and consequences of PCOS. Results & Discussion: The factors that seemed to be associated with PCOS after the analysis of results were diet, body hair, and weight was found as common indicator. The current research showed that PCOS women had more anxiety and depression as compared to Control women after applying t-test, but the range in which the duo scores lied showed normal and borderline range. The results showed that more food intake was associated with anxiety and Body hair was associated with depression.
**Conclusion:** The study findings reveal that lifestyle factors such as exercise and diet play a major role in PCOS and can be used as an intervention through lifestyle modification as both of them were associated with high levels of stress. Psychological interventions can target anxiety, depression and negative body image in PCOS. The need for large sample exploratory studies, psychoeducational and intervention based further research is highlighted.

**Keywords:** PCOS, anxiety, depression, lifestyle factors, weight
ANALYZING THE IMPACT OF SOCIAL MEDIA ON YOUTH

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In recent years, Online social network has become more and more popular because it is playing an important role in empowering citizens, organization of community activism, social good and even used for coordination in emergency situations. The online social network has become integral part of the current generation. In this study, we aim to analyze the influence of social network on the users especially for Youth. This study was carried out with youngsters between age group of 18 to 29 years of age. It is a known fact that young adults and teenagers are the most avid users of such sites. Based on the findings of several research studies in the Online Social Networks (OSNs) area, it has been found that these SN sites are having a great impact on the lives of young people. Hence, the impact generated due to social networking sites/applications are studied from point of view of youngsters. These should focus the growth and give the worthwhile output to the students for using social networking sites. In this research study, a questionnaire is framed which focuses the increased use of social networking and helps to understand the background for using it.

KEYWORDS: Social Media, Youth, education, social behavior, health issues,
A STUDY OF SATISFACTION OF STUDENTS AT SGT UNIVERSITY

By

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The research focused on the level of satisfaction of the non-medical students of SGT university across 9 different faculties. The objectives of the study were to (i) analyse the existence of difference between the level of satisfaction of male and female students in the University, (ii) to analyze the difference in level of student satisfaction across different semesters and (iii) to decode the level of student satisfaction across different faculties of the University. The data for the study was collected by administering a structured questionnaire to a sample of students pursuing undergraduate programmes and post graduates programmes. A total number of 320 students from the selected faculties responded to the questionnaire. Data was analyzed on SPSS using exploratory factor Analysis (EFA). The study found out that there is no significant difference in the satisfaction level of students due to differences in gender and current semester they are studying except for the factor “quality of teachers” but across faculties there is huge difference in the satisfaction level of students. The study concluded that the satisfaction level of student is positive towards the university and the university appears to be doing a good job providing a quality educational experience to the majority of students enrolled.
However, survey identified numerous factors that should be improved in order to maximize the student’s satisfaction level which can be summarized in the following categories: improved sports facilities, clean and hygienic washrooms with adequate supply of necessary amenities, safe and secured parking facilities, ample of classroom infrastructures, qualitative and quantitative education, improved teaching pedagogy, availability of qualitative, hygienic and branded cafeterias, improved computer labs, improved syllabus and sufficient books in the library related to the curriculum, increasing industrial visits and workshops and so on.
STUDENT SATISFACTION WITH SERVICE QUALITY IN HIGHER EDUCATION-PRIVATE UNIVERSITIES IN DELHI-NCR

By

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In education industry, students are the main customers. Therefore, it is necessary for private universities to provide quality services and satisfy students’ needs as well as expectations to succeed from the increasing competitiveness of this industry. This research investigates the levels of student satisfaction and the relationship between student satisfaction and the quality of service being provided in higher education-private universities in Delhi-NCR. The results showed that the service quality that has been given by university in the criteria of reasonable satisfactory. The results of this analysis are expected to assist management in improving the quality of service to the students in terms of both academic and non-academic, because private universities received the largest inflow from students.
INCIDENCE OF SAGITTAL ROOT POSITION OF MAXILLARY ANTERIOR TEETH IN OSSEOUS HOUSING FOR IMMEDIATE IMPLANT PLACEMENT IN THE POPULATION OF NATIONAL CAPITAL REGION OF INDIA: A RETROSPECTIVE CONE BEAM COMPUTERISED TOMOGRAPHY STUDY

By

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Purpose: The purpose of this study was to evaluate the relationship of the sagittal root positions of the maxillary anterior teeth to their respective osseous housings using cone beam computed tomography (CBCT) in NCR Indian Population and comparing the results with Kan's SRP Population. The aim of this CBCT study is to evaluate the incidence of each classification.

Materials and Methods: This retrospective study was approved by the Institutional Review Board of SGT University and was conducted in the Faculty of dental sciences. Pretreatment records and CBCT images were taken and reviewed for patients who received treatment between 2012 and February 2018 in Delhi NCR Region. Forty two male and 58 female patients between the ages of 19 and 72 years (mean, 45.5 years) were selected according to the following criteria: at least 18 years of age at the time of the CBCT scan; all maxillary anterior teeth (canine to canine) were present, with at least two occluding posterior teeth (premolar and/or molar) in each quadrant; no radiographic evidence of infection, severe root resorption, and/or trauma to the anterior maxillary dentition; and no radiographic evidence of surgical (guided bone/tissue regeneration) treatment in the anterior maxillary dentition.
The CBCT images were evaluated and the relationship of the sagittal root position of the maxillary anterior teeth to its associated osseous housing was recorded as Class I, II, III, or IV. The overall percentage of sagittal root position observed in NCR Indian Population was compared with Overall Percentage Kan’s SRP Classification.

Results: The frequency distribution of sagittal root position of maxillary anterior teeth indicated that, of the 600 samples, 63%, 11%, 0%, and 26.33% in Class I, II, III, and IV respectively were found and compared with overall percentage as reported in Kan’s SRP classification Conclusion:

An understanding of the clinical relevance of sagittal root position will provide adjunct data for the treatment planning of immediate implant placement and provisionalization in the anterior maxilla.

A classification system may lead to improved interdisciplinary communication in treatment planning for implant-based therapy in the anterior maxilla in Delhi NCR population.
PROBIOTICS AND ITS MULTIFACETED USAGE IN DENTISTRY: AN INVITRO STUDY

By

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INTRODUCTION: Probiotics are micro-organisms, mainly bacteria which benefit the host’s health. Many studies support the role of probiotics for improving gastrointestinal health. Several studies have been undertaken to prove its influence in oral health maintenance with the purpose of knowing the importance of using probiotics as preventive and therapeutic methods for oral infectious disease management.

AIM: The aim of this study was to design an indigenous probiotic solution and test its invitro efficacy against Streptococcus mutans, the predominant bacteria implicated in dental caries.

MATERIALS AND METHODS: 1. The aim of the present study was to design an indigenous probiotic solution and test its efficacy against S. mutans.
2. Proposed Indigenous Broth was formulated using apple pulp with honey and distilled water.
3. MRS broth (De Men, Rogosa and Sharpe agar): It is a selective culture required for the growth of lactobacillus. It was incubated at 35°C, pH 5-6.5 using 5% CO 2 for 24 hours. It was used as a control to test the uptake of lactobacilli present in the probiotic capsules which consists of: Lactobacillus acidophilus - 0.60 billion, Lactobacillus rhamnosus - 0.60 billion, Bifidobacterium bifidus - 0.60 billion, Bifidobacterium longum - 0.60 billion, Saccharomyces boulardii - 0.35 billion.
RESULTS: The proposed solution sustained growth of Probiotic bacteria and displayed inhibitory action against S. mutans. Probiotics and its Multifaceted Usage in Dentistry: An In vitro study

CONCLUSION: The proposed solution is a viable medium of probiotics formulated from completely natural ingredients. Further studies need to be undertaken to prove its clinical efficacy.
KNOWLEDGE ATTITUDE AND PRACTICES OF UNDERGRADUATE & POSTGRADUATE STUDENTS ABOUT STERILIZATION & DISINFECTION

By
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Aim & Objectives: To evaluate Knowledge Attitude and Practices of Undergraduate and Postgraduate Students about Sterilization and Disinfection in a Dental College in Gurgaon with a purpose to know how much they practically apply the knowledge they have about infection control procedures while working on patients.

Method: The present cross-sectional questionnaire based study was done with BDS and MDS students of SGT Dental College, Gurgaon. The data recorded was subjected to statistical analysis using chi-square test.

Results: A total of 300 students of a Dental College in Gurgaon participated in the study. Through the present study we found that the level of knowledge and practice of infection control measures was acceptable among dental students and the attitude towards infectious control measures was positive. However the results were found to be significantly better among postgraduate students and interns than final and third year students. It might be attributed to the fact that interns and postgraduate students have better knowledge and better training in infection control than third and fourth year students.
Conclusion: Imparting Dental education is therefore very important and this can assume an essential part in the preparation of dental specialists. So we have to guide them to embrace sufficient learning and demeanors identified with disease control measures. As students tend to forget material over time so there is a need of rigorous infection control training prior to graduation.
India is the second largest producer of horticultural produces in the world in which 88.977 million metric tonnes of fruits and 162.887 million metric tonnes of vegetables were produced for the duration of the year 2013–14. A large variety of fruits are grown in India. A significant portion of perishable produce, such as fruits and vegetables goes waste due to post-harvest losses and poor and inadequate infrastructure for perishable products. The per capita availability of fruits and vegetables is quite low because of post-harvest losses which account for 20–30 per cent of the total production. Besides, a sizeable quantity of produce also deteriorates by the time it reaches the consumer. This is mainly because of the perishable nature of the produce which requires a cold chain arrangement to maintain the quality and extend the shelf-life, if it is not meant for consumption immediately after harvest. Most of the horticultural produce requires a cooling temperature between 0°C and 15°C for safe storage and transient purposes. In the absence of cold storage and related cold chain facilities, the farmers are forced to sell their produce immediately after harvest which results in glut situations and low price realization. Cold chain infrastructure for fruits and vegetables can substantially improve storage quality and reduce wastage.
EXPLORING THE EFFICACY OF SECONDARY ENDOPHYTIC BACTERIAL METABOLITE AGAINST ESCHERICHIA COLI – AN INVITRO ASSAY

By

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New drug discovery is facing serious challenges due to reduction in number of new drug approval coupled with exorbitant rising cost and rising multi drug resistance against the existing antibiotics due to resistant strains. At this juncture, where the contemporary science face hurdles, Ayurvedic wisdom can synergize with drug discovery from plant sources. Coupling Ayurvedic concepts and practices coupled with modern technology enhances success in understanding efficacy of herbs against pathogenic bacteria in line with the principles of Ayurveda. This integrated approach helps to reveal or revalidate various methods of herb extractions against contemporary methods.

The emergence of antibiotic resistance in pathogenic microbes and prevalence of potent mutated strains, have heated an alarming situation for humans and plants. Since, natural bioactive compounds are known to control pathogens, there is an urgent need for continuous and rigorous research for novel natural products from different sources including plants, microorganisms and organisms inhabiting to unique niches.

For millennia human beings have been using plants and their products for the treatment of many diseases. But, this approach has certain limitations such as biodiversity loss, high cost and intensive labor.

Azadiracta indica, also known as neem or nimba in Sanskrit, undoubtedly qualifies diverse medical applications. The presence of a spectrum of desirable properties, make it a plant of interest in this study. A. indica has an account of nearly 140 isolated and classified bioactive compounds, which make this a source of potential lead compounds for drug discovery.
The plant A. indica has been extensively studied but still the potential of the plant is yet to be explored a lot. This study, hence covers extensive approach ranging from harnessing microbial natural products from microbes, which are a major source of novel drugs for the society. There are several international and national research publications mentioning the efficacy of neem against pathogenic bacteria. But, extensive studies have not been conducted for comprehending efficiency of secondary endophytic bacterial metabolite against pathogenic bacteria. The major outcome of the study understood Zone Of Inhibition (ZOI) of secondary bacterial metabolite obtained from neem against Escherichia coli. The knowledge obtained can be further used for further application in daily life and pharmaceutics.

Key words: Endophyte, Secondary metabolite, Azadiracta indica, Antibiotic resistance

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CO-RELATION BETWEEN PRAKRITI AND ACADEMIC PERFORMANCE

By

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Ayurveda- The traditional medicine of India is based on the concept of three doshas namely “Vata-Pitta-Kapha” which helps in framing the constitution both physical and mental of an individual called “Prakriti”. According to Ayurveda, Prakriti of an individual is formed at the time of fertilization itself, i.e. it is the predominant dosha, of the three that helps determining the prakriti of the upcoming progeny. Prakriti-Analysis is based on the phenotypic characteristics like height, weight, gait, appearance etc and also on likes-dislikes, memory power, concentration etc, which undoubtedly has influence on the academic performance of an individual of any field. By knowing Prakriti of student we can apply useful guidelines to help them to make right judgment and attitude towards life and hence for betterment of the future of the students. So in this project, the academic performance of the students will be assessed with the help of Digit Span Test and will be correlated with the temperament of the individual- that is Prakriti. For this 100 healthy students will be taken randomly after taking informed consent in S.G.T University Campus and a cross-sectional, survey based study will be conducted.

KEYWORDS: Prakriti, Vata, Pitta, Kapha, Doshas, Memory
In 2018, India was declared as the fastest growing economy in the world. India being a federal state has to keep a balance between the powers given to central and state government under the constitution of India. In the past 70 years, there have been a plethora of laws related to indirect taxation system in India. However, the tax structure is still ambiguous and would need expert assistance to understand even the basics of laws related to indirect taxation. Today, the Indian system of indirect taxation is characterised by endless cascading, distorting tax on production and supply of goods and services which further leads to hampering the productivity of enterprises and fewer investment from foreign companies. Goods and Services Tax is simply an indirect tax or Value added tax levied on supply of goods and services. Indian government enacted GST act in 2016 to not only enable businesses to centralise their tax provisions but to also putting an end to multiple taxes which are levied on different products, starting from the source of manufacturing to reaching the end consumer. In this paper, the author tries to study the various provisions laid under the GST act and its impact on various sectors of the economy. The author has made a descriptive study on GST law of India by comparing it with that of the gst law of Malaysia and how the failure of Malaysia can help us better our policies related to indirect taxation in the coming future.
SURROGACY: RAY OF MIRACLE

By
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Surrogacy is considered to be a ray of miracle. Infertility is generally known as a social stigma in India. Infertility does not claim the life of an individual but it inflicts devastating influence on life of an individual for not fulfilling the biological role of parenthood for no fault of his or her own. Surrogacy is the union of science, society, services and person that make it a reality. Indian society has got a very stable family structure, strong desire for children and particularly for son to carry forth the lineage or Vansh. With the enormous advances in the field of medicine, the infertility can now be treated using the new medical technologies collectively called as Assisted Reproductive Technology (ART) such as in vitro fertilization (IVF) or intra cytoplasmic sperm injection (ICSI), etc.

The infertile couple is able to fulfill their most important desire and the surrogate mother receives the suitable reward. Surrogacy is a very controversial practice around the world, raising difficult moral, social and legal as well as religious issues. As a result, the legal situation varies considerably. Many countries do not have laws which specifically deal with surrogacy. Some countries ban surrogacy outright, while others ban commercial surrogacy, while allowing altruistic surrogacy. Some countries allow commercial surrogacy, with few restrictions. Some jurisdictions extend a ban on surrogacy to international surrogacy.

To give a womb for rent means to nurture the fertilized egg of another couple in your womb and give birth to the child with a specific intention, the intention here being either money, or service, or because of altruistic reasons, is surrogacy.
CREDIBILITY OF NEWS ON SOCIAL MEDIA WITH SPECIAL CONTEXT OF WHATSAPP

By
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Social Media has become a very powerful tool nowadays. Many people including new generation are using this tool every day. In social media WhatsApp has a different identity. Basically WhatsApp is a messaging application. This has impact on the life of many people. 2016 has seen WhatsApp being used as a platform to circulate news, fake or otherwise. Such news shared, got forwarded, almost virally by people who did not bother to check its authenticity creating quite a ruckus in some cases.

When we talk about fake news purported through WhatsApp, the matter that comes into most significance is demonetization. During demonetization, no doubt, WhatsApp spread fake news. It happens in many cases also. Some people still believe the stories they read on WhatsApp are based on facts so they generally forward with the caption – ‘Please share to create maximum awareness’. But without checking we should not send any information.

This research paper focuses on the credibility of news on social media with special context of WhatsApp. Questionnaire technique has been used to know the views of people about fake news on WhatsApp.
ESTIMATION OF SALIVARY CORTISOL LEVELS AS MARKER OF STRESS IN YOUNG UNIVERSITY STUDENTS

By

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Introduction: Psychological stress is very common and has profound effects on physiological functions of the body. Everyday life stress affects the hypothalamic-pituitary-adrenal pathway.

Aim: The aim of our study was to find levels of salivary cortisol in young adults under stress and compare these values when they are not under stress.

Materials and Methods: In this cross sectional study, 100 university students in the age group of 18 to 25 years were included. Salivary amylase levels of all these persons were estimated twice, once without any examination stress and once again during professional examination which increases the stress levels manyfold. The data were analysed using SPSS and Graph Pad prism software. The values under stress and without stress were compared using Student’s t-test on SPSS and Graph Pad software. A p-value <0.05 was considered statistically significant.

Results: The mean salivary cortisol levels were 1324±54 during stress and 498±23 when not under stress. The values of salivary cortisol significantly higher in persons during stress as compared with values when not under stress with p value of <0.0001.

Conclusion: Salivary cortisol levels are non-invasive biomarker of stress and can be used as rapid screening method for estimating the amount of stress.
A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING REPRODUCTIVE HEALTH AMONG YOUNG ADOLESCEN GIRLS WITH A VIEW TO DEVELOP A PLANNEDS TEACHING AT SELECTED SCHOOLS OF GURUGRAM

By

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A Descriptive Study to Assess the Knowledge Regarding Reproductive Health Among Young Adolescent Girls With a View to Develop PTP at Selected Schools Of Gurugram with the objectives: to assess the knowledge regarding reproductive health among young adolescent girls, to provide information through PTP regarding reproductive health among young adolescent girls, to find out association between selected socio-demographic variables and knowledge regarding reproductive health among young adolescent girls; was conducted. The data collection procedure was carried out in month of June 2018. The samples were taken from Gurugram. Sample consisted of 100 adolescent girls of secondary schools Gurugram. The tools consisted of demographic variables, which was to collect personal information about the subjects and questionnaire to assess the knowledge regarding reproductive health. The tool was validated by 9 experts, tried out and was found reliable. At the time of data collection the purpose of the study was explained and informed consent was obtained from the samples. Gathered data was analyzed by using descriptive and inferential statistics. Findings of socio-demographic variables showed that most of the participants were of age 9-10 years 51(51%). Most of the participants were from middle class socio-economic status i.e. 92(92%). Most of the participants were from rural community i.e. 82(82%). Most of the participants were Hindu i.e. 98(98%). Most of the participants had mothers with senior secondary education level i.e. 69(69%).
Most of the participants had mothers who were housewives i.e. 88(88%). status most of the participants were of age 9-10 years 51%. Results revealed that that majority of adolescent girls i.e. 72% had average knowledge regarding reproductive health, 12% had good knowledge and 16% had poor knowledge. The knowledge was found significantly associated with age, socio-economic status, religion, community, mother’s education and mother’s occupation. The sample size was limited and therefore, generalization could not be made. Recommendations offered for future research include: A comparative study may be conducted to compare the knowledge of adolescent boys and girls regarding reproductive health; A comparative study may be conducted to compare the knowledge of adolescents living in urban and rural areas; An experimental study may be conducted to assess the effectiveness of structured teaching program regarding reproductive health among adolescent girls and boys.
“UNDERSTANDING PATIENT'S PSYCHOLOGY WITH RESPECT TO GENERIC DRUGS IN COMPARISON TO BRANDED DRUGS”

By

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Survey of 100 local populations, 50 pharmacists was carried out to throw light on generics versus branded medicines scenario in India particularly in state of Delhi and Haryana. It is obvious from survey that educated and non educated would like to have access to generic medicine and want to have more knowledge and information about the generics from the doctors as most of them do not like to violet prescription. Thus it could be suggested that doctors have to write prescription for generic versions because the major problem among patients is that they cannot want any alternative over the prescribed medicines. The patients have a strong belief that if doctor can prescribed branded drug it cannot be changed and generic alternative have less effect. There is also a myth amongst people that the generic products are of low cost because they are not of good quality. The reason for less sale of generic drugs is due to lack of prescriptions of generic medicines received from physicians. Another one major factor for less sale of generic medicines is willingness from the side of pharmacist due to their more profit over the sale of branded drugs. The major problem over the reach of generic drugs to each and every patient is mindset of people regarding generic drugs. Majority of people think that generic drugs are of poor or substandard quality. Even though the Food and Drug Administration has stringent rules and regulations in bringing out generic medicines in public use thus there is no reason to believe that generics are substandard than branded drugs.
The problem of teacher’s professional competence is relevant in terms of sustainable development of education. The learner will not be able to understand the educational material, if the learner does not feel the need to study it. Therefore, it is necessary to develop the formation of the learner’s interest. The interest formation for physics in the context of sustainable development of education will be analyzed by taking into consideration curiosity, attempts to understand, strong knowledge, and scientific research. This scheme shows the transition from a situational interest to an individual interest.

The technique of strengthening the formation of learner’s interest in physics in the context of sustainable development of education has been developed in the present study. The active means of training and active learning methods will be the components of this technique. The pedagogical experiment was conducted in M.Sc. (Physics), B.Sc. (Non-medical) classes of SGT University Gurugram and 12th class students of Central Colonel Academy Senior Secondary School Gurugram, Kendriya Vidalaya Sector 12, Dwarka, New Delhi, Kendriya Vidyalaya Sector 05 Dwarka, New Delhi and Government Sarvodaya Vidalaya Jafferpur, Delhi, in April 2018. Faculty will use the questionnaire’s method and will identify three types of research questions focused on description, cause and process. Each learner’s undergoes the questionnaire’s test.
To analyze the results of experiment, regression statistical analysis technique has been used to justify the significance of performance level of students at 10+2, graduate and post-graduate course in the study. The short-term objective of the study is the formation of learner’s interest in physics as a subject and long-term objective is the formation of learner’s interest in physics as a science. The aim of this study is to make students more engaged and active learners and help them to develop multiple perspectives, gain deeper conceptual understanding, engage in critical thinking, enhance their communication skills and develop positive peer relationships. The proposed study for the formation of learner’s interest can be used in teaching other natural sciences for providing the sustainable development of education.

**Conclusion**

In the present study, the perspectives of physics learning in Educational Institutions have been investigated using questionnaires’ method. The regression analysis has been carried out to correlate the performance level of learners at 10+2, B.Sc. and M.Sc. levels. The concrete findings of the study are:

(i). the percentage of students having strong commitment in physics learning are observed to be almost same at all levels.

(ii). the learners having positive commitment (Average students) improve their performance at higher stages.

(iii) Regression analysis reveals that there is positive correlation among the learners at all levels and for all categories but their degree of correlation significantly varies.

(iv). Experience of the learners in different environments, quality of teaching learning process and motivational & social factors plays significant role in their performance.

(v). 10+2 is the write stage for conceptual understanding of physics while B.Sc. is the write stage for understanding research concepts, latest developments in science and contribution of Physics in an advanced world.

(vi). The regression analysis reveals that, in logical thinking, creative thinking and conceptual understanding of Physics, on the average, there is positive correlation among the students of 10+2 and B.Sc. & among the students of B.Sc. and M.Sc.
ROLE OF PHYSIOTHERAPY DURING PALLIATIVE CARE: A SYSTEMATIC REVIEW

By

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Background and purpose of the study

Palliative care is the multidisciplinary therapeutic approach for people with life limiting illness. It focuses on providing relief from symptoms such as pain, fatigue, physical stress and mental stress at any stage of illness. There has been limited research conducted to investigate the importance of role of physiotherapy in palliative care setting. So, the purpose of this study is to contribute a review to the current research involving the importance of physiotherapy during palliative care in patients who are suffering from life limiting illness. The importance of physiotherapy in life limiting diseases prevention and management has become generally well accepted.

Methods: This study was completed by independently screening and reviewing the eighteen year studies that were published between the years 2000 to 2018 related to the role of physiotherapy during palliative care. There are number of research interventions and publications examining the benefits of physical activity in life threatening illnesses. The databases and journals searched included Google Scholar, PUBMED, MEDLINE and PEDro.

Results: Throughout all of the 20 reviewed articles, it was reported that physiotherapy results in improvements in a variety of aspects of patient’s functions and relief of symptoms. These benefits signify the valuable role that physiotherapy plays in caring for patients during palliative care and the impact it can have on patients’ functions and symptom management.
COMPARATIVE STUDY OF PHYSIOTHERAPY EDUCATION SYSTEM AMONG INDIAN AND INTERNATIONAL UNIVERSITIES

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This research was emphasised on comparing the educational system which is required to practice as a legal physiotherapist in developed and developing countries. The main objective of this study was to examine the minimum required conditions to become a physiotherapist in India, USA, UK, Canada, Australia, New Zealand and Singapore and to compare the educational system across these countries with Indian Physiotherapy educational system. This was an observational non-experimental research design in which study samples were taken from 5 institutes of above mentioned country which were randomly selected. The data was gathered through either the University or Physiotherapy Council website of each country. Physiotherapy educational system was compared in these countries according to the following domains: i) The minimum eligibility course to practice physiotherapy in the country; ii) course accreditation agency and its goals, iii) minimum eligibility criteria for entry in the course, iv) license examination after completing the course and v) fee structure. This study shows the disparity among Indian Physiotherapy educational system when compared to other institutes of these countries.