

CHIRAYU COLLEGE OF NURSING



E- Souvenir 2022-23



**Theme: “Digital health
and nursing practice: the
impact on patient care”.**

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ABOUT COLLEGE

Chirayu College of Nursing belongs to Chirayu Charitable Foundation that was established in the year 2001. the society marched its step towards accomplishment of their vision with Medical College and Hospital. The society further added their feathers with a College of Nursing in the year 2012 with two programs B.Sc Nursing and Diploma in Nursing and Midwifery. Chirayu College of Nursing has taken its growth gradually by offering another two programs: M.Sc Nursing and P.B.B.Sc Nursing from the academic year 2016-17. our college is affiliated to Madhya Pradesh Medical Science University, Jabalpur and recognised by Indian Nursing Council and Madhya Pradesh Nursing Registration Council.

Our college is committed in providing nursing education and services standard knowledge and skills blended with desirable attitude our goal is to prepare students to take up any situation and manage skilfully with sound knowledge base.



Vision

The College of Nursing's vision is to strive for outstanding educational outcomes exemplified by graduates whose actions, discoveries and voices strengthen and advance the health of individuals, families and communities worldwide.

Mission

1. Advance health through excellence in nursing and interdisciplinary teaching, research, practice and service.
2. Provide quality patient care based on our strong commitment to practice, education, innovation and collaboration.
3. Inspire students to become passionate healers who demonstrate integrity, caring and excellence.
4. Train nursing aspirants for leadership to cater the health care needs of the society.
5. Promote professionalism by quality and value driven education with a global outlook.
6. Demonstrate desirable values and attitudes towards self, others and the profession.

Core Values

In pursuit of its mission Chirayu College of Nursing will:

- Develop Human resource to serve the nation.
- A healthy body is a guest house for the soul.
- Recognize teaching as a unifying activity.
- Nurture integrity, creativity and academic freedom.
- Retain a willingness to experiment with new paradigms.

Philosophy

The college believes that the progress of nation is very much depends upon the health of its citizens and the educational preparation of nurses contributes tremendously towards pursuing this goal. The college believes in training professional nurses from all states of India to meet the great demand in the field of Nursing. Professional nursing is a lifelong service to the people. College prepares its students to develop ability to analyze situations and problems critically and take responsibility for their higher education to maximize professional effectiveness throughout their career. College believes that degree course in nursing prepares nurses for first level position both in the hospital and in the community. Our concept of health as per WHO i.e "Health is a state of complete physical, mental and social well being and merely absence of disease or infirmity.



**CHIRAYU CHARITABLE FOUNDATION**

Reg. No BPL/ H. Bad Division/9410/2001

Dr. Ajay Goenka
(PRESIDENT)**Aakriti Goenka**
(SECRETARY)**MESSAGE**

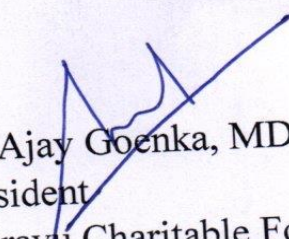
I appreciate Chirayu College of Nursing is spreading its wing-like branches in an evergreen tree and it is heartening to read about yet another e-souvenir titled "Digital health and nursing practice; the impact on patient care".

Digital health is the field of knowledge and practice associated with any aspect of adopting digital technologies to improve health. Transformation into a digitally enabled profession, maximize the benefits in healthcare. In this robotic era, integration of digital health has evolved a digitalized world in the field of nursing. Nurses need to enhance their skills to provide patient centered digital health support with effective health care delivery.

Chirayu College of Nursing started the journey in the year 2012. Every foot step of expedition was adorable and an asset in the history of the institution. Today, I am looking enthusiastically for the new venture "Chirayu University" an inspirational destination for the students and the faculty. I assure it will be a global repute with societal up gradation in the field of education.

It is with great excitement and tremendous enthusiasm that, this e-souvenir-2023 can capture the progress of the institution and give testimony to its development for the coming year. I will continue to support you as usual and congratulate Principal and all the members of the editorial committee for their effort which made into a great success.

Good luck for future endeavors


DR. Ajay Goenka, MD
President

Chirayu Charitable Foundation, Bhopal

**CHIRAYU CHARITABLE FOUNDATION**

Reg. No BPL/ H. Bad Division/9410/2001

Dr. Ajay Goenka
(PRESIDENT)**Aakriti Goenka**
(SECRETARY)**MESSAGE**

I am ecstatic to know that, Chirayu College of Nursing is releasing their 7th e-souvenir in 2023 with the title "Digital health and nursing practice; The impact on patient care".

Humanity is witness to the fact that nursing is one of the most honorable and respectable profession in health care today. However, it is also one of the most challenging and difficult career. A nurse needs to be very well qualified professional but also inculcate a positive attitude of selfless service. Nurse today must be prepared to adapt to the continual changes occurring in the health care scenario as they play a vital role in the delivery of multidisciplinary health care services, not only in India but across the world.

In this age of technology and rapid evolving world, digitalization has changed the health professional's roles and responsibilities. This umbrella term encompasses the broad range of technologies which strengthen the efficiency of care. As nurses are the primary care providers, sufficient skills in nursing digital technology enhances high quality ethical patient centric care through digital channels.

I congratulate the principal, the editorial team and the students for their immense contribution for the release of e-souvenir. A word of appreciation for Prof. Dr. Pramila R, Principal for her concerted effort for elevating the image of the institution and the quality of education.

Mrs. Neelam Goenka
Treasurer
Chirayu Charitable Foundation, Bhopal

**MESSAGE**

It gives me immense happiness to know that Chirayu College of Nursing is releasing its 7th souvenir with the theme, “Digital Health and Nursing Practise: the impact on patient care”.

The digital revolution is transforming the way healthcare is delivered and managed. In healthcare settings, nurses are the primary caregivers and thus they play an important role in the adoption and implementation of digital technologies.

The use of digital technology can have a positive impact on everyone – patients and healthcare providers. It can lead to increased operational efficiency at healthcare facilities, can decrease healthcare costs and improve diagnoses through the use of machine learning. Digital Health allows for better access of healthcare to rural and marginalized communities.

I extend my appreciation to Prof. Dr. Pramila R, Principal and her dedicated team for providing thought leadership on the subject.

Aakriti Ajay Goenka
Secretary, Chirayu Charitable Foundation



MESSAGE

It is a matter of immense pride and pleasure to know that Chirayu College of Nursing is publishing its 7th e-souvenir on "Digital Health and Nursing Practice: The Impact on patient Care."

The theme of the e-souvenir is very much relevant to the present digital age. Digital health helps in saving time, improving efficiency and provides widespread access to remote as well as advanced health care system. The e-souvenir on this topic will be of great benefit to the faculty as well as the students.

I appreciate efforts of the e-souvenir team and I wish them success in their endeavour.

A handwritten signature in blue ink, appearing to read 'Ulka', with a long horizontal line extending to the right.

Dr. Ulka Srivastava
Medical Superintendent
CMCH, Bhopal

Date: 10.05.2023



Chirayu Medical College & Hospital

CHIRAYU MEDICAL COLLEGE & HOSPITAL

(A Unit of Chirayu Charitable Foundation)

MESSAGE

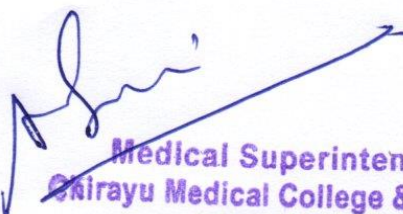


I am indeed happy to know that Chirayu College of nursing is releasing their 7th e-souvenir in 2023 with the title “Digital health and nursing practice ; the impact on patient care”. I am confident that, the title not only provides an outlet to the latent creative potential of students but also proudly showcase the milestones the college has achieved in the field of nursing education.

A souvenir is an important document which is the happy repository of the events, achievements and also a platform for revealing the glimpse of ideas of students and faculty. Nurturing creativity and inspiring innovations are two key elements of a successful educational institution which shape the students as an empowered citizen in the future.

I believe that excellence is the gradual result of always striving to do better, hence the Motto “In Pursuit of Excellence!” Chirayu College of nursing seek to instill into the students, a passion for learning that will bring the knowledge and understanding they will need to make a positive contribution to the communities in which they live and work.

I extend my greetings and felicitations to the Principal, staff and students to continue the good work with commitment and dedication.


Medical Superintendent
Chirayu Medical College & Hospital
Bhopal (M.P.)

Dr. Ashutosh Mangalgi
Medical superintendent
CMCH, Bhopal

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Chirayu Medical College & Hospital

CHIRAYU MEDICAL COLLEGE & HOSPITAL
(A Unit of Chirayu Charitable Foundation)

Dr. Manohar M. Bende
Dean
Chirayu Medical College
and Hospital, Bhopal

MESSAGE

It gives me immense pleasure to know that Chirayu College of Nursing, Bhopal is bringing out the College souvenir in the year 2023, with the theme **"DIGITAL HEALTH AND NURSING PRACTICE: THE IMPACT ON PATIENT CARE"**.

It's praiseworthy that the editorial committee has decided to publish the college Souvenir with the theme **"DIGITAL HEALTH AND NURSING PRACTICE: THE IMPACT ON PATIENT CARE"**. I hope the distinguished writer of the Souvenir will enrich the knowledge pool of the institute, the Nursing Student and the College Staff. This will bring about a positive impact on the society and the Nursing Profession.

It will develop and support nurses to work to their optimal scope of practice for Patients Care. It will also empower nurses to develop their role as part of multidisciplinary team in Health Care System. The publications are lifetime achievements to nursing institution. It reflects the manifestation of creativity of the individual nursing students, faculties and the staff. Let this publication be one among those venture that can instill a spark on innovation among its readers.

I wish the Principal of Chirayu Nursing College, the editorial team, authors and well-wishers, who are promoting this souvenir a grand success.

Dr. Manohar M. Bende
Dean
Chirayu Medical College
And Hospital, Bhopal

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**MESSAGE**

It gives me immense pleasure to know that Chirayu College of Nursing is publishing its seventh e-souvenir 2023. The theme “Digital Health and Nursing Practice: The Impact on patient Care” is indeed very apt to the present scenario. The content selected by the editorial committee covers nursing related articles on various topics.

It has been observed that students lack understanding on instruments used in various areas of nursing practice. The write up on the specified area –“Obstetrics and Gynaecology instruments” will enhance knowledge about the types & usability of instruments used in Obstetrics and Gynaecology.

Brainstorming in nursing education is an effective way to generate ideas on important core issues. The souvenir’s Quiz, MCQ & Crossword Puzzle sections will help students think critically and enhance their knowledge.

I hope the souvenir’s upcoming issue, besides helping students & faculty members, will also prove beneficial for the entire nursing fraternity in improving patient care.

Research evidences will also help nurses implement evidenced based care among patients.

I wish the organizing team members and the core committee members of the publishing team for a successful release of the souvenir.

Best Wishes!

A handwritten signature in black ink that reads "Blessy Antony".

Prof. Dr. Blessy Antony

Principal

St. Francis College of nursing

Secretary, NRSI



MESSAGE

I am happy to know that Chirayu College of Nursing is going to bring out its seventh e-souvenir -2023 on the theme- **“Digital Health & nursing Practice: The impact on Nursing Care”**.

Digital technology has become an integral part of everyday life today, and it has transformed the way we communicate, learn, work, and live. The digital age has brought about significant changes in many areas of society, including business, education as well as healthcare. In health care system digital technology has created new opportunities for research, innovation, collaboration and global connectivity. But at the same time, it is presenting new challenges such as: privacy and security concerns, digital divide and information overload.

Nevertheless, looking at the positive and brighter side of the use of digital technology, it gives us immense scope for improving health care delivery through thoughtful planning, standardizing, implementing, monitoring, supervising and evaluating the nursing care in hospitals and communities.

Nursing Informatics, has become a buzz word today, globally. It is the specialty that integrates nursing science with multiple information and analytical sciences to identify, define, manage and communicate data, information, knowledge and wisdom in nursing practice. Today is the era of research and EBP. There are countless ways in which digitalization has made it easy for nurses to collect authentic data, analyze and compare it and go for evidence Based Practice (EBP) in nursing education and nursing practice.

I am sure, the research-based articles and other reading material selected to be inserted in this e-souvenir will enlighten the readers and inspire them for further academic pursuits that will be translated into evidence-based nursing practice in future.

My best wishes for the up- coming publication of Chirayu College of Nursing, “The Seventh E-Souvenir-2023”.

Dr Usha Mullick Ukande
Founder Director, Edu SerumX, Indore

**MESSAGE**

When God sent you as Nurse to heal
God sent mHealth.
Digital health revolution by an angel with smile
But challenging data security and privacy.
Telehealth with informatics
Nurses health with well-being.
Teleconsultation booms the annual growth rate
But deployment of Nurses tender touch.
Pandemic era with tele-ICU
Post pandemic era with innovative technologies.
Ready with web-based analysis
Where wearable gadgets face new pandemic.
Still keep in touch- a fearless warrior
And take pride to say I am a Digital nurse to heal.

CONGRATULATIONS AND ALL THE BEST

**DR. ANNIE RAJA,
PRINCIPAL,
ST. ISABEL'S CON**



GEM Institute of Nursing Education & Research

(A Unit of GEM Hospital)

Affiliated to: The Tamil Nadu Dr. MGR Medical University, Chennai

Recognized by: The Indian Nursing Council, The Tamil Nadu Nurses & Midwives Council & The Tamil Nadu Govt, Chennai



*Dr. Lizzie Raveendran, M.Sc (N), Ph.D.,
Principal*

MESSAGE



Dear Dr.Pramila,

I am pleased to know that the Chirayu College of Nursing, Bhopal is bringing out an e-souvenir titled '**Digital Health and Nursing Practice: The Impact on Patient Care**'. I am overwhelmed to see the variety of topics covered from basic nursing to various specialties. It is the need of the hour to create awareness among nurses, both staff and students on how the technology can be effectively used in patient care without deviating from the norms. I believe that this souvenir will benefit its readers and help them to move forward in providing quality nursing care and enhancing patient satisfaction.

I congratulate you and your team for the wonderful initiative and wish you all success.

With regards

DR.LIZZIE RAVEENDRAN





CHIRAYU COLLEGE OF NURSING

A Unit of Chirayu Charitable Foundation

Chirayu College of Nursing

Recognized by Indian Nursing Council, New Delhi and State Nursing Council & Affiliated to Barkatullah University, Bhopal and MPMSU, Jabalpur

Ref. No. 519...../CCON/PO/2023

Date: 08/05/2023

Message from Principal



Chirayu College of nursing is continuing its mission of releasing seventh e-souvenir. The theme is "Digital health and nursing practice: The impact on patient care."

Digital health bestows with tremendous opportunities for improving and transforming health care which encompass reduction of human errors, improve clinical outcomes, facilitate care coordination, track data over time and improve practice effectiveness. The beneficiaries of digital health are not only patients housed in the hospitals but also people in the farthest place in the communities too. It also helps in clinical decision support, synchronous telemedicine, remote patient monitoring, electronic incident reporting and patient safety as well.

Many exemplars show how digital technologies already bring benefit to nursing education and practice. Eg: Telehealth programs where nurses protrade daily monitoring, coaching and triage of patients with several chronic diseases have helped reduce emergence department admissions. Slow progress in some areas has been due to lack of leadership and investment that supports nurses to champion and lead digital health initiatives.

The increasing presence and recognition of the importance of chief nursing informatics officers is a step in the right direction. Further, providing opportunities for nurses of all specialties to contribute to the development and implementation of digital health policies, locally and nationally, could increase future use of digital technologies in nursing.

An opportunity was bestowed to all faculty members and students to expose their creativity, writing skills, searching literature, critical thinking and so on.

My deep sense of gratitude is expressed to all my faculty members and students who have contributed to this souvenir.

Wishing good luck to all and we have several impressions to create and carve on our way!

Pramila R.
Principal

Prof Dr. Pramila R.
Principal

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Message from Editor – in – Chief

An editorial team was formed on 10th January 2023. The viewers of the last academic year's e-souvenir is 16,417 and 592 were downloaded. This year also we took forward the idea of publishing e-souvenir. Amidst the curricular, co-curricular and extracurricular activities, coming up with souvenir was a great challenge. Simultaneously, the team was not willing to give up the six years of consistent work. Buddha says, Leaders don't force people to follow, they invite them on a journey". This lit self motivation lamp among the editorial committee."

The self motivation of each member marched ahead with the preparation. The theme chosen was "Digital health and nursing practice: the impact on patient care". The profession must reframe how nurses interact with and care for patients in a digital world. To maximize its impact on patient care, the profession should continue to develop virtual care modalities that exploit internet, drawing on its experiences with telehealth and remote models of care.

My faculty members and students have given their best in form of articles, puzzles, cross words, multiple choice questions and so on.

Many thanks to my editorial team members who were united, coordinated and adaptable. Their responsibility, liability, obedience and accountability were highly commendable. The team efforts have given a beautiful shape of e-souvenir.

My indebtedness is recorded here to Dr. Ajay Goenka M.D, our Chief Patron, President of Chirayu Charitable Foundation for his magnanimous support, mammoth inspiration, determination and ever willing to remain as a strong pillar for the growth of our College of Nursing.

I extend my thanks to photographers who added color to our e-souvenir. My gratitude is extended to all those who have contributed directly or indirectly to this e-souvenir.

Prof. Dr. Pramila R

Editor-in-Chief

Editorial Committee



Editor – in – Chief
Prof. Dr. Pramila R

Committee Members

- 1. Mr. Pratheesh P T**
- 2. Mrs. Thamarai Selvi**
- 3. Mrs. Sherin Annie Varghese**
- 4. Ms. Grace Mary**
- 5. Mrs. Monika Sehgal**
- 6. Mrs. Anumol P A**
- 7. Mrs. Merlin Vinod**
- 8. Ms. Jyoti Majumdar**



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Evaluation Of Nursing Diagnoses Perception Among Nursing Students

Prof. Dr. Pramilaa R, Principal, Chirayu College of Nursing, Bhopal.



Introduction: Nursing process forming the basis of nursing practices is a systematic method employed in planning and providing patient specific care. Meanwhile, nursing process is a way of critical thinking focusing on finding solutions to patient problems ¹. Nursing process is one of the indispensable components of nursing education. Competence for nursing diagnosis requires education and experience ². Studies have indicated that nurses should be better educated about nursing diagnoses, signs, symptoms and etiology ³. Studies conducted on nurses have illustrated that positive or negative perceptions of nursing diagnoses influence the employment and application of nursing diagnosis ⁴.

Objectives: The present study was carried to determine nursing students' perceptions of nursing diagnoses and associate the level of perception with selected demographic variables.

Methodology: A descriptive study to evaluate the nursing students' perception of nursing diagnoses was conducted. Permission of the study was obtained by the research advisory committee was obtained. The population of the study consists of all students studying second, third and fourth year B. Sc and Second and third year GNM. Permissions letters were sent to about 150 nursing colleges across India. Of which, 120 colleges consented to participate in this study. The total number of students responded was 5303. The tool comprises of two sections. Section A contains demographic variables and Section B encompasses Nursing Diagnosis Perception Scale (NDPS), a standardized instrument. It is a five point Likert scale with 26 items and 4 subscales. The scores are calculated from 5 as 'I completely agree' to 1 as 'I completely disagree'.

Results: The results of the study demonstrated 52% of respondents were familiar about nursing diagnosis before nursing education; 87.3% were competent enough to make diagnosis; 95.1% opined that NANDA-I nursing diagnosis is necessary; 95.5% believed that nursing diagnosis produce a correct, planned and systematized care; 94.8% believed that nursing diagnoses increases patients' quality of life; majority 41% reported that nursing diagnosis is the difficult step in the nursing process; and majority 38.2% of students reported that they use 'infection risk' diagnostic label frequently. The overall perception of the students on nursing diagnosis reveals that majority 57.9% agreed and 36.9% completely agree to the scale that was used to measure. It indicated that 94.8% had positive level of perception towards nursing diagnosis. And it was found highly significant (.000) too. In relation to the association of NDPS level and demographic variables showed that except age all the variables were significantly associated.

Conclusion: The student nurses perception on nursing diagnoses was high. Positive level of perception indicates that the patient would receive high quality of care.

References:

1. Black BP. (2014). Professional nursing concepts and challenges (7th ed.), China: Elsevier.
2. Collins A. (2013). Effect of continuing nursing education on nurses' attitude toward and accuracy of nursing diagnosis. International Journal of Nursing Knowledge 24(3): 122-128.
3. Muller-Staub M, Needham I, Odenbreit M, Lavin MA, & van Achterberg T. (2008). Implementing nursing diagnostics effectively: Cluster randomized trial. Journal of Advanced Nursing .63(3): 291-301.
4. Halverson EL, Beetcher EL, Scherb EA, Olsen G, Frost M, and Orth K. (2011). Minnesota nurses' perceptions of nursing diagnoses. International Journal of Nursing Terminologies and Classifications 22(3): 123-131.



A study to evaluate the effectiveness of hot fomentation verses cold application on superficial thrombophlebitis among patients receiving intravenous therapy in selected hospital in Bhopal M.P.

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Introduction: *'Water is vital for the growth of the plant. if the plant does not get adequate water, it decays likewise any obstruction to the flow blood through the vein arteries, the entire body function would be affected'.*

In healthcare setting, peripheral intravenous catheters (PIVCs) are a critical tool in the delivery of patient care. Eighty percent (80%) of patients being admitted hospital receive intravenous therapy. The purpose of intravascular catheterization includes administration of fluids, drugs, blood products and nutritional solution etc. Although such catheters provide necessary vascular access, they are associated with some risks and complications that can have impact on the clinical status and outcome of the patient. The main aim of the study is to find evidence based answer to this dilemma that may form the basis for establishment of peripheral venous catheter induced Thrombophlebitis management protocols in the institution included in the study. Vascular access devices are used for the hemodynamic monitoring of the patient, administration of medications, fluids, nutritional solutions and blood products. The insertion and daily use of these devices is associated with risks and complications that can have impact on the clinical status and outcome of the patient. A variety of complications associated with the insertion and the utilization of venous access devices can be categorized either as local complications such as thrombosis, Thrombophlebitis, extravasations and infiltration or systemic complications like pulmonary embolism and blood stream infections that occur less frequently than local complications. Usually they are serious, may be life threatening and require immediate medical attention. A common problem encountered in intravenous fluid administration is the infiltration of fluid into the tissues near the point of entry of the catheter into the veins or arteries. Infiltration and extravasations are known complications of infusion therapy. The Infusion Nurses Society (INS) and Oncology Nursing Society defined infiltration as the inadvertent leakage of a non-vesicant solution or medication into the tissue surrounding the I/V catheter whereas extravasation is the inadvertent leakage of a vesicant medication or solution into the surrounding tissue whereas vesicant refers to any medication or fluid with the potential for causing blisters, severe tissue injury, or necrosis. This may lead to discoloration, discomfort and tissue destruction as well as lack of delivery of the intravenous fluids on drugs into the patient's system. This results in an inflammatory reaction, which is manifested as pain, swelling and erythema.

Methodology: Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. The present study is aimed to assess the effectiveness of hot fomentation verses cold application on superficial Thrombophlebitis among patients receiving intravenous therapy in selected hospital Bhopal M.P.

Conclusion: The study concludes that the cold applications are very effective in reducing superficial phlebitis and other infusion related complication. It is a very cost effective method with minimal resources, requires minimal training too, and very easy to use with little or no complications.

References:

1. Ardine G. et al (2001); Health profiles and health references of dialysis patient; Nephrology Dialysis Transplantation; 86-92.
2. Alexander F. Margaret, Fawcet N. Josephine (1994); Nursing practice hospital and home, Churchill Livingstone, Medical division of Longman group UK Ltd; 321-322.
3. Ackley B and Ladwig G (2005); Nursing Diagnosis handbook: A guide to planning care; Mosby publications; 5th edition.
4. Black M. Joyce and Hawks Hokanson Jane (2007); Medical Surgical Nursing (Volume I); Elsevier India Pvt. Ltd., New Delhi; 7th edition: 958-963.

Effectiveness of information booklet to patients on haemodialysis in selected hospitals in Gwalior.

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Introduction: End stage renal disease is a long-term chronic illness that is often treated with either dialysis or kidney transplantation. Patients with end stage renal disease (ESRD) are faced with complicated and demanding treatment regimens that include dietary and fluid restrictions, and medication schedules. Irrespective of whether the treatment is predominantly dialysis Centre-based or home-based, patients need to have sufficient knowledge, skill and ability to carryout their treatment regimen without direct supervision of healthcare personnel. Therefore patient education would seem to be an important component in the management of ESRD.

Objectives: 1. To determine the knowledge of patients regarding haemodialysis as measured by a structured knowledge questionnaire. 2. To evaluate the effectiveness of the information booklet in terms of gain in knowledge score. 3. To find out the association between knowledge score with selected variables.

Methodology: Research Design : Pre experimental study (one group pre-test post-test design). Approach: An evaluative approach (Quantitative approach). Setting: Maheshwari Hospital, GWALIOR and K. D J Hospital, GWALIOR. Population undergoing hemodialysis Patients. Sample Size : 40 Hemodialysis Patients. Sampling Technique: purposive sampling techniques.

Result: Section I: Sample characteristics A sample of 40 patients undergoing haemodialysis were selected through purposive sampling based on the inclusion criteria. The data obtained on sample characteristics was analysed using descriptive statistics and presented 2. Age: (35%) of the patients were in the age group of 51-60 years, (25.0%) patients in 41-50 years where as 25% in >60 years and only (7.5%) were in the age group of 31-40 years. Sex: Majority (75%) of the patients undergoing haemodialysis were males and only (25%) were females. Educational status: Most of the patients (22.5%) had educational status up to diploma while only (7.5%) of them were post graduates. Marital status: Majority (57.5%) of the haemodialysis patients were married and another (15%) were single and 15% were widow/widower . Income: (42.5%) of the haemodialysis patients were having the monthly income between Rs. 5001-10,000/-. Attending of haemodialysis (37.5%) of the patients were attending the haemodialysis session for 1-5 years and for (30%) for less than one year and (22.5%) of the patients for more than 6 years. (30%) of the patients were attending dialysis sessions daily and (27.5% once & twice in week and only (5%) of the subjects were attending dialysis once in a two weeks. Among the subjects (45%) attended the dialysis sessions more than 20 times, (35%) between 21-50 times, (15%) between 51- 100 times and only (5%) more than 100 times. (37.5%) of the patients were undergoing haemodialysis due to chronic renal failure whereas (35%) for acute renal failure, (15%) were with diabetes mellitus and renal failure, (7.5%) did not know the reason for undergoing haemodialysis: another (5%) specified the health problem as hypertension with renal failure. Section II: Knowledge of patients on haemodialysis Knowledge of patients on haemodialysis was assessed using knowledge questionnaire. Among the subjects (30%) scored from 19-21 whereas (20%) of the patients scored between 13-15. The maximum score gained in the pre-test was 37. However in the post-test (40%) of the respondents scored between 40-42. The maximum score gained in the post-test was 40 and none less than 31. The 50th percentile shows that the median score of post-test (34) is higher than the median score of pre-test (20). This indicates that the post-test knowledge score are consistently higher than pre-test score. More than half (40%) of the patients on haemodialysis had average knowledge of haemodialysis while (32.5%) had poor knowledge and (22.5%) had very poor knowledge in the pre-test whereas in the posttest (57.5%) of the subjects attained very good knowledge and (42.5%) of the subject attained good knowledge . This show that mean was (34.32), median (34) and standard deviation (2.758) in post-test were higher than the pre-test mean (20.37), median (20) and standard deviation (5.162). The mean percentage knowledge score of the pre-test was maximum in the area of 'meaning purpose and type of dialysis' (58.75%) and minimum in the area of 'management of patients on long term haemodialysis (37.16%), whereas the mean percentage knowledge score of post-test was maximum in the area of 'self-care and support system' (91.66%) and minimum in the area of 'meaning purpose and types of dialysis (68.75%).'

Section III: Effectiveness of information booklet The significance of difference between the mean pre-test and post-test knowledge score on haemodialysis was analysed by adopting paired 't' test and presented in Table . The following null hypothesis was formulated to test the significance of difference. H1: There will be significant difference between the mean pre-test and post-test knowledge score of patients regarding haemodialysis. Mean, median difference, standard deviation, and 't' value of pre and post-test knowledge score of patients shows higher mean post-test knowledge score ($X_2 = 34.32$) with that of the mean pre-test knowledge score ($X_1 = 20.37$). The computed 't' value ($t_{39} = 36.37$) is higher than the table value (' $t_{39} \sim 3.55$, $P < 0.001$). Hence the null hypothesis was rejected and research hypothesis was accepted at 0.001 level of significance, that is, the mean difference between pre and post-test knowledge score was a true difference and not a chance difference. This indicates the significant effectiveness of information booklet in increasing the knowledge of patients on haemodialysis. Association between gain in knowledge score and selected variable it was interpreted that there was no significant association between the gain in knowledge score and selected variables like age($\chi^2=0.27$), educational status($\chi^2=1.800$), frequency of attending dialysis($\chi^2=0.018$) and total number of dialysis sessions attended($\chi^2=1.237$). The computed Chi-square values between gain in knowledge score and selected variables were lower than the table value ($\chi^2 (1)=3.84$), at 0.05 level. So the null hypothesis was accepted.



Conclusion: The main aim of the study was to assess the knowledge of patients on hemodialysis regarding hemodialysis and to provide information to them about it. Information was given to the patients through an information booklet which included various aspects of haemodialysis which will help the patients to carry out better self-care activities after gaining thorough knowledge regarding hemodialysis. The following conclusions were drawn on the basis of findings of the study: The pre-test knowledge of subjects regarding haemodialysis was average. The introduction of the information booklet among the subjects helped them learn more about hemodialysis, which was evident in the post-test knowledge score. The information booklet proved it to be one of the effective teaching method of information transmission. It was well appreciated and accepted by the subjects. The study proved the path to find variety of other information regarding hemodialysis.

KEY WORDS: Effectiveness, Information Booklet, Patients, Hemodialysis

References:

1. McCormich L.B. Walking down the hall again. *Family Focus* 2004; 12(1): 7.
2. Klang B. Predialysis patient education effects on functioning and well being in uraemic patients. *Journal of Advanced Nursing* 1998; 28(1): 36-44.
3. Lubkin L.M. *Chronic Illness: Impact and Interventions*. Jones and Bartlett. Boston 1998.
4. Welch J.L, Austin J.K. Stressors, coping and depression in haemodialysis patients. *Journal of Advanced Nursing* 33(2): 200-207.
5. Sandstrom M.J, Kneefe F.J. Self management of fibro myalgia, the role of formal coping skills training and physical exercise training programmes. *The American College of Rheumatology* 1988; 11(6): 432- 447.
6. Lucker K, Beaverk, Leinster SJ, Owens RG. Information needs and sources of information for women with breast cancer. A follow up study. *Journal of Advanced Nursing* 1996; 23: 487-495.
7. Grumke, King K. Missouri Kidney Programme's patient education programme – a 10 year review. *Dialysis and Transplantation* 1994; 23(12): 691-699.
8. Nitz J, Shayman D. A model for patient education. *American Nephrology Nurses Association Journal* 1986; 13: 235-255.
9. Falvo D. Educational Evaluation – what are the outcomes? *Advance in Renal Replacement Therapy* 1995; 2(3): 227-233.
10. Harrison, Woermke D.E, Graydon J.E. Perceived information needs of breast cancer patient receiving radiation therapy after excisional biopsy and axillary node dissection. *Cancer Nursing* 1993; 16(6): 449-455.
11. Hanay S. Preparing predialysis patients for treatment: the grace model. *Contemporary Dialysis and Nephrology* 14: 94-95.
12. Spiegel. Healthy People 2010 objectives: Chronic Disease. Available from: URL: <http://www.uakp.org/htrm>
13. Chung K.S, Jha V. Commerce in transplantation in the third world countries. *Kidney international* 1996; 49: 1181-1186.
14. Tsay SL, Healsted M. Self efficacy, depression and quality of life among patients receiving haemodialysis in Taiwan. *International Journal of Nursing Studies* 2002; 39: 245-251.
15. Long JM, Kee CC, Grabamm V, Saethang TB, Dames F.O. Medication Compliance's and the older haemodialysis patients. *American Nephrology Nurses Association Journal* 1998; 25: 43-49.
16. Fatima L. Effect of information book let provided to caregiver of patients undergoing haemodialysis on knowledge of home care management. *The Nursing Journal of India* 2004; Vol. XCV; 4: 81-82.
17. Veivia JA, Bailie RG, Eisele G. Haemodialysis patients knowledge on erythropoietin and iron therapy. Available from: URL www.eneph.com/Feature-archive/rHuEPO/r24nlp21.html
18. Durose C, Hold worth M, Watson V, Przygodzka F. Dietary compliance's and haemodialysis. *Nutrition Research News Letter*. 2004; 104; 34-41.
19. Polit DF, Hungler BP. *Nursing Research – Principles and methods*. 6th Edition. Philadelphia: Lippincott company; 1999.
20. Taber's. *Cyclopedia medical Dictionary*. 17th Edition. Philadelphia: F.A. Davis Company; 1996.



A pre-experimental study to assess the effectiveness of video assisted teaching module on knowledge regarding covid-19 among patients admitted in chirayu medical college and hospital, Bhopal M.P.

Ms. Smita Pandey, Lecturer, Chirayu College of Nursing, Bhopal



Introduction: On 31 December 2019, the World Health Organization (WHO) was formally notified about a cluster of cases of pneumonia in Wuhan City, home to 11 million people and the cultural and economic hub of central China. By 5 January, 59 cases were known and none had been fatal. 10 days later, WHO was aware of 282 confirmed cases, of which four were in Japan, South Korea and Thailand. There had been six deaths in Wuhan, 51 people were severely ill and 12 were in a critical condition. The virus responsible was isolated on 7 January and its genome shared on 12 January. The cause of the severe acute respiratory syndrome that became known as COVID-19 was a novel coronavirus, SARS-CoV-2. The rest is history, albeit history that is constantly being rewritten: as of 12 May, 82,591 new cases of COVID-19 worldwide were being confirmed daily and the death rate was over 4200 per day.

Objectives: To assess the pre-test and post-test knowledge scores regarding Covid-19 among patients admitted in Chirayu Medical College and Hospital, To evaluate the effectiveness of Video assisted teaching module regarding Covid-19 among patients admitted in Chirayu Medical College and Hospital To find out the association of pre-test knowledge score with selected demographic variables.

Methodology: The research approach adopted for this study was quantitative approach; the research design selected for the study is pre- experimental, pretest, post-test design. The data was obtained from 40 patients, and sample was selected using non probability purposive sampling technique. Data was collected with the help of google form. The obtained data was analyzed by using descriptive and inferential statistics.

Result: The result reveals the difference between pre and post test knowledge on Covid-19 patients admitted in Chirayu Medical Hospital. The pre- test and post test was statistically tested by applying Z- test method and formula is $Z = \frac{X - \mu}{SE}$ at the level of 0.05. In this case, the calculated value of Z-test (38.17) is higher than the table value. Therefore, the hypothesis is accepted (H_1). It is concluded that the knowledge on Covid-19 was increased among patients admitted in Chirayu Medical College & Hospital.

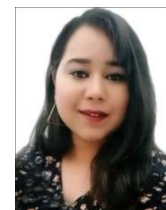
Conclusion: The result of this study revealed that knowledge be assessed both subjectively and objectively and application of Covid-19 patients admitted in Chirayu Medical Hospital, Bhopal.

References:

1. American Academy of Pediatrics. Children and COVID-19: state-level data report. 2021
2. Bailey LC, Razzaghi H, Burrows EK, et al. Assessment of 135,794 pediatric patients tested for severe acute respiratory syndrome coronavirus 2 across the United States. JAMA Pediatr. 2021.
3. Brambilla I, Castagnoli R, Caimmi S, et al. COVID-19 in the pediatric population admitted to a tertiary referral hospital in Northern Italy: preliminary clinical data. Pediatr Infect Dis J. 2020 Jul;39(7):e160.
4. Castagnoli R, Votto M, Licari A, et al. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection in children and adolescents: a systematic review.
5. Centers for Disease Control and Prevention. Data on COVID-19 during pregnancy. 2021
6. CDC COVID-19 Response Team. Characteristics of health care personnel with COVID-19: United States, February 12 –April 9, 2020.

A study to assess the effectiveness of Structured Teaching Programme (STP) on knowledge regarding attention deficit hyperactivity disorder (ADHD) among primary school teachers in a selected schools of Bhopal (Madhya Pradesh).

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Introduction: Attention Deficit Hyperactivity Disorder (ADHD) is a medical condition characterized by difficulties with inattention or hyperactivity and impulsivity. Attention Deficit Hyperactivity Disorder (ADHD) can have a profound effect on a person's quality of life. Children and adolescent with the disorder often have difficulty with socialization, school performance and behavior.

Teachers are often the main source of knowledge and play an essential role in the diagnosis, management and intervention of Attention Deficit Hyperactive Disorder (ADHD). They have direct experience of the learner in the classroom situation; a setting which requires the learner to sit still, pay attention, adhere to instructions and interact with peers and adults in suitable manner. Teachers knowledge and understanding will determine how they engage with and manage learners experiencing Attention Deficit Hyperactive Disorder (ADHD). Early identification and intervention by teachers is very important, especially as a large percentage of individuals continue to have symptoms in adolescence and adulthood. Children of elementary school age are the primary group that comes for assessment and treatment on the background of the beginning of the studies in the school and according to the development of scholastic and social difficulties. Children spend the greatest amount of their time in classrooms, they are likely to follow guidelines, behave in socially proper ways, participate in educational activities and withdraw from disturbing the learning development or activities of others. Therefore, it is a great opportunity for school nurses to identify teacher's knowledge about Attention Deficit Hyperactive Disorder (ADHD) and have the potential to facilitate a greater understanding about Attention Deficit Hyperactive Disorder (ADHD) among teachers and other staff; offer desirable recommendations about the management of children with Attention Deficit Hyperactive Disorder (ADHD) and assist in referring families to community support groups for Attention Deficit Hyperactive Disorder (ADHD).

Objectives: To assess the knowledge regarding Attention Deficit Hyperactivity Disorder (ADHD) among Primary School Teacher. Find out the effectiveness of structured teaching programme regarding Attention Deficit Hyperactivity Disorder (ADHD) among Primary School Teachers. Find out the association between the pre and post test knowledge score of the Primary School Teacher regarding Attention Deficit Hyperactivity Disorder (ADHD) with their demographic variables.

Methodology: Research approach used was quantitative and a descriptive design was used. Primary school teachers were taken as samples using simple random sampling technique. Sample size was 30. A self-structured questionnaire was used to collect the data.

Results: Most of the school teachers were aged between 31-35 years (15)50%, 40% of teachers belonged to hindu religion. 66.67% were female. 33.33% teachers were post graduate. Maximum number of teachers (33.33%) had 4-7 years experience. 50% teachers had received information through mass media. Pre test knowledge scores of primary school teachers were 30% poor knowledge, mean 8.67 and SD 1.658 and 70% had Average knowledge, mean 13.761, and SD 3.223 and 0% had good knowledge. Post test knowledge scores of primary school teachers were 0% poor knowledge and 40% had average knowledge, mean 17.916 and SD 1.564 and 60% had good knowledge, mean 24.67% and SD 2.679. Here my H_1 is proved.

The effectiveness of structured teaching programme regarding attention deficit disorder where the 't' value comes 3.94366 at Df 29 which is significant at 0.005 level $P > 2.756$, so the structure teaching Programme was effective. Here my H_2 is proved.

Conclusion: Study concluded the structured teaching programme was effective on knowledge regarding attention deficit hyperactivity disorder (ADHD) among primary school teachers.

References:

1. Lewis, Child and Adolescent Psychiatry, 2nd edition, Williams and Wilkins, pp 87
2. Frisch & Frisch, Psychiatric mental health nursing, Delmar.
3. Davis F A & Mary C Townsend, Psychiatric mental health nursing, 4th edition.
4. Wilson & Kneisl, Psychiatric nursing, 5th edition.
5. Boyd & Nihat, Psychiatry Nursing Contemporary Practice, Lippincott.
6. Davis E A, Contemporary Psychiatry; Mental Health Nursing: The Brain-behaviour Connection.
7. Carson, Butcher, Mineka, Hooley; Abnormal Psychology, 13th edition.

GORILLA ARM SYNDROME

Prof. Grace Mary, Chirayu College of Nursing, Bhopal



Introduction: "Gorilla arm" is when someone who is using a vertical or standing touch screen experiences fatigue or their arm starts to hurt, because of the awkward and not very ergonomic positioning that is required. It can also be called as carpal tunnel syndrome.

Dr K. J. Reddy, (Hyderabad) senior orthopedic surgeon, pointed out that the newer forms of virtual reality applications do not have support system for the hands and arms. "The mid-air interaction requires a lot of body strength and force. There is pressure on the arm when the movements are carried out. Constant use leads to arm fatigue and it can have a long lasting impact,"¹

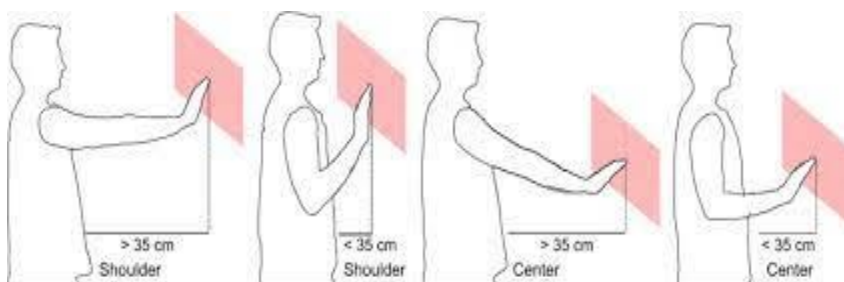
Jay Kim, an associate professor at Oregon State University's Occupational and Biomechanics Research Laboratory, has warned virtual reality users about an injury dubbed gorilla arm, which can be developed by repeatedly sticking your arms forward far away from your body.

According to Stuerzlinger, an expert on 3-D user interfaces, the "gorilla arm syndrome" is already an issue with vertical touch screens, making it a problem even beyond augmented and virtual reality systems.

Definition: "Gorilla arm" is a term engineers coined about 30 years ago to describe what happens when people try to use these interfaces for an extended period of time. It's the touchscreen equivalent of carpal-tunnel syndrome. According to the *New Hacker's Dictionary*, "the arm begins to feel sore, cramped and oversized -- the operator looks like a gorilla while using the touch screen and feels like one afterwards."³

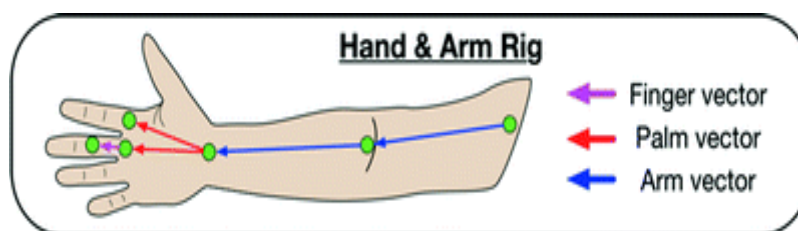
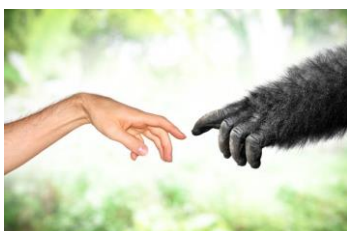
When using performing mid-air gestures for even moderate periods of time experience arm fatigue and discomfort, earning its name of the gorilla arm syndrome.

By sticking the arms forward far away from the body, that creates shoulder strain that's called gorilla arm syndrome". This happens when a person frequently uses tablets, two-in-one laptops, and other kinds of new touch screen devices.



Causes: "Gorilla arm" is when someone who is using a vertical or standing touch screen experiences fatigue or their arm starts to hurt, because of the awkward and not very ergonomic positioning that is required.

The gorilla arm syndrome occurs when the arm muscles are constantly in motion while using touch screens and other computer or mobile interactions. It is caused as people holding their arms in front of their faces and make small motions like taking a picture, hitting a virtual ball, gesturing towards the screen in a mid-air interaction while playing virtual reality games. The arm is mid-air with no support system making it feel sore, cramped and oversized.²



**Signs/ Symptoms:**

One can feel heaviness in the hand.
Accumulation of Fatigue on his/her arms.
Numbness & Severe pain.
Feel sore, cramped and oversized.
Discomfort, Unable to flex the fingers normally.
Repetitive Strain Injury

Prevention:

Prolong use of touch screen can lead to repetitive stress injuries, these ailments result from recurrent large or small movements that affect joints, muscles, tendons, and nerves damages.
The newly designed supported gestures required significantly less physical and perceived effort than the mid-air gestures and required similar exertion as the keyboard condition.²
Work with PC/ Desktop, rather than on touch screen.
Give rest to your body, and do hand exercise frequently.
In Case of children parents should restrict the use of touch screen, because it can lead to eyestrain and Computer Vision syndrome. For adult minimize the usage time of touch screen and try to safe guard your body by giving rest to your body and soul.

Conclusion:

Gorilla arm is what happens when the user interacts with a vertical touch screen for a long period of time. The arm becomes tired, and it becomes more difficult to interact with the interface.
Researchers are studying the negative impact of this movement and looking for ways to improve the current methods so that the damage caused to the arm can be reduced.
Due to advancement in technology more cases are seen in hospital, but the detail is not published, as personal feeling to be respected.

References:

1. Dr. Reddy, K. J. Health Hazards: Beware of gorilla arm syndrome' Deccan Chronicle, Hyderabad. June 2017.
2. Jeffrey T. Hansberger, Chao Peng et.al. Dispelling the Gorilla Arm Syndrome: The Viability of Prolonged Gesture Interactions, Internal conference on virtual, augmented and mixed reality, 505-520. May 2017.
3. <https://www.wired.com/2010/10/gorilla-arm-multitouch/> / Why 'Gorilla Arm Syndrome' Rules Out Multitouch Notebook Displays, OCT 21, 2010



MYOSITIS: AN AUTOIMMUNE DISEASE

Mrs. Thamarai Selvi M, Professor, Chirayu College of Nursing, Bhopal



Introduction: Myositis attacks immune system and muscles. Depending on the type of myositis difficult to move or utilize the affected muscles. Myositis is a type of myopathy. Myopathy is a general term that refers to diseases that affect the muscles that connect to your bones (skeletal muscles). Different forms of myositis affect different groups of muscles throughout your body.

What is myositis? Myositis is a disease that attacks immune system and muscles. It causes chronic inflammation — swelling that comes and goes over a long time. Eventually, this inflammation makes the muscles feel increasingly weak and cause muscle pain.¹

Incidence: Myositis can affect people of any age, including children.

Types of myositis

The five types of myositis are:

Dermatomyositis

Inclusion-body myositis

Juvenile myositis

Polymyositis

Toxic myositis

Dermatomyositis: (DM) is the easiest form of myositis to diagnose due to the purple-red rashes in the shape of the heliotrope flower. The rash develops on the eyelids, face, chest, neck, and back. It also develops over joints such as knuckles, elbows, knees and toes. Muscle weakness normally follows.¹

Causes & Risk factors: The cause of dermatomyositis remains unknown, but experts believe that a combination Trusted Source of factors plays a role, including:

Genetic Factors: People with particular human leukocyte antigen (HLA) types are at a higher risk of the condition.

Immune system: HLAs are proteins that play a role in the body's immune system. People with dermatomyositis show an abnormal immune reaction, whereby the body's immune system attacks small blood vessels, causing inflammatory changes in the: muscles, skin and blood vessels.

Environmental factors: Exposure to high frequency UV radiation is one of the main factor.

Experts have also suggested that certain viruses could trigger the condition. These include:

parvovirus

enterovirus

Coxsackie B virus

Echovirus

HIV²

Symptoms of DM include:

scaly, dry, or rough skin

Red or purple rash on sun-exposed areas that may be painful or itchy

Red or purple swelling of the upper eyelids (heliotrope)

Red or purple spots on the knuckles, elbows, knees, and toes (Gottron's papules)

Gottron's papules or Gottron's sign (bumps found over the knuckles, elbows, and knees, often with a raised, scaly breakout)

Trouble rising from a seated position

Fatigue, weakness in the neck, hip, back, and shoulder muscles

Difficulty swallowing

Hoarseness in the voice

Hardened lumps of calcium under the skin

Muscle pain

Joint inflammation

Nail-bed abnormalities

Weight loss

Irregular heartbeat

Gastrointestinal ulcers

Diagnosis:

MRI to look for abnormal muscles

Electromyography (EMG) to record electrical impulses that control your muscles

Blood analysis to check your levels of muscle enzymes and autoantibodies, which are antibodies that attack normal cells

Muscle biopsy to look for inflammation and other problems associated with the disease in a sample of muscle tissue

Skin biopsy to look for changes caused by the disease in a skin sample

**Treatment:**

Corticosteroid medications, such as prednisone, are the preferred method of treatment in most cases. Corticosteroids lower the response of your immune system, which reduces the number of inflammation-causing antibodies.

In this condition the body is producing antibodies to target skin and muscles. Intravenous immunoglobulin (IVIG) uses healthy antibodies to block these antibodies. IVIG consists of a mixture of antibodies that have been collected from thousands of healthy people who have donated their blood. These antibodies are given to you through an IV.

Physical therapy that improves and preserves your muscle strength, along with preventing loss of muscle tissue

Antimalarial medication, hydroxychloroquine, for a persistent autoimmune rash.

Complications: Some common complications are:

- Skin ulcers
- Gastric ulcers
- Difficulty breathing
- lung infections
- Problems swallowing
- malnutrition
- Weight loss
- Dermatomyositis can also be associated with conditions such as:
- Raynaud's phenomenon
- Myocarditis
- interstitial lung disease
- Increased risk of developing cancers³

Inclusion-body myositis: (IBM) is the only myositis which occurs more commonly in men than in women. Most people who develop this condition are over the age of 50. IBM begins with muscle weakness in the wrists and fingers and also in the thigh muscles. The muscle weakness is more prominent in smaller muscles and is asymmetrical, with one side of the body affected more than the other. IBM is believed to be genetic.⁴

Symptoms of Inclusion-body myositis :

- Difficulty walking
- Tripping and loss of balance
- Frequent falls
- Trouble rising from a seated position
- Weakened hand grip and diminished hand and finger dexterity
- Difficulty swallowing
- Muscle weakness
- Muscle pain
- Diminished deep tendon reflexes
- Juvenile myositis⁵

Diagnosis:

Physical examination: A healthcare professional will check your muscles and look for signs of weakness. They will also examine your muscle function as you do certain tasks, like walking.

Muscle biopsy: A muscle biopsy is the gold standard test for diagnosing inclusion body myositis. It involves removing a sample of muscle tissue and checking for specific cellular material.

Electromyogram: This test checks the electrical activity of your muscles at rest and during contraction.

Nerve conduction test: A nerve conduction velocity test checks how fast a nerve impulse can travel through your muscle. It can help rule out other nerve disorders.

Blood tests: A healthcare professional might check your blood levels of creatine kinase. This enzyme leaks out of muscle when it's damaged. They might also test for certain electrolytes, hormones, and antibodies.

Muscle MRI: A muscle MRI is an imaging test. It can help a doctor check the structure of your muscles.⁶

Treatment:

There is currently no treatment that can reverse or rid your body of inclusion body myositis. Despite the autoimmune component, IBM doesn't respond well to immunotherapy.

Physical therapy can help maintain strength and mobility as long as possible.

Occupational therapy can help make daily activities easier and help avoid falling injuries.

Speech-language therapy can help manage swallowing problems.

Surgical treatment:

If swallowing difficulties are severe, patient might need surgery. This may include myotomy or cricopharyngeal dilation.

Myotomy involves a surgeon cutting the muscles of the cardia, which allows food and liquids to enter the stomach.

In a cricopharyngeal dilation, a surgeon stretches the muscle at the top of the esophagus to allow food to pass easily.

In severe cases, gastrostomy (feeding tube) might be needed.⁷

**Complications:**

Swallowing difficulties (dysphagia) that may lead to choking

Disrupted breathing from the weakened diaphragm

Injuries from falls

Poor mobility that may require use of assistive devices, such as a wheelchair

Pressure sores, muscle atrophy and other consequences of poor mobility⁸

Juvenile myositis: (JM) occurs in children under 18. It affects 3,000 to 5,000 American children. Girls are twice as likely to develop JM than boys. Similar to the other forms of myositis, JM is characterized by muscle weakness and skin rashes.⁹

Symptoms of Juvenile myositis :

Visible, reddish-purple rash over the eyelids or joints, sometimes in the shape of the heliotrope flower

Fatigue

Moodiness or irritability

Stomach aches

Motor function difficulties, such as trouble climbing stairs, standing from a seated position, and getting dressed

Difficulty reaching overhead, as when shampooing or combing hair

Trouble lifting the head

Swelling or redness of the skin around the fingernails

Trouble swallowing

Hardened lumps of calcium under the skin

Muscle weakness

Muscle and joint pain

Hoarse-sounding voice

Gottron's papules (bumps found over the knuckles, elbows, and knees)

Fever

Vasculitis

Lipodystrophy

Calcinosis (hard, often painful lumps or sheets of calcium that form under the skin's surface, especially in juvenile dermatomyositis)¹⁰

Diagnosis:

Blood tests: Blood tests for certain muscle enzymes such as creatine kinase (CK or CPK), aldolase, lactate dehydrogenase (LDH), aspartate aminotransferase (AST) and alanine aminotransferase (ALT).

Imaging: Magnetic resonance imaging (MRI) can detect inflammation levels in the muscle early on and locate where inflammation is occurring.

Electromyogram: An electromyogram (EMG) may be done to look for any nerve or muscle damage. Another important modality is an FDG, PET, CT, which uses nuclear imaging techniques.

Muscle and skin biopsies: A biopsy is the most definitive way to diagnose all types of myositis disease.¹¹

Treatment:

Some common medications for treating JM include:

Corticosteroids: Steroids can be given orally, by injection, or intravenously (directly into a vein) to slow the body's autoimmune response, which translates into inflammation and pain reduction and improved muscle strength. Dosage and duration of treatment depend on the severity of symptoms.

Immunosuppressants: Immunosuppressant medications, such as methotrexate, azathioprine, and cyclosporine, work to quiet the immune system. They may be given alone or with hydroxychloroquine (an anti-malaria drug) and mycophenolate mofetil.

Intravenous immune globulin (IVIG): IVIG therapy can slow down the body's autoimmune response and block harmful antibodies responsible for the inflammation that attacks the muscles and skin.

Other medications: Another medicine used to treat JM include an anti-TNF biologic drug, rituximab.

Physical Therapy

Physical therapy and physical activity are important for children with JM. They can help a child to maintain and increase their muscle strength and flexibility.¹²

Education

Family education on JM may include advice about using sunscreen to prevent irritation and damage to the child's skin and ways to keep your child active at home and at school. And because JM can affect chewing and swallowing, discussions with a dietitian about healthy and safe eating are also vital.¹³

Polymyositis

Polymyositis (PM) begins with muscle weakness in the muscles closest to the trunk of the body and then expands from there. Each case of PM is unique, and people with PM are often found to have additional autoimmune diseases.



Symptoms of Polymyositis include:

- Muscle weakness
- Muscle pain
- Difficulty swallowing
- Falling
- Trouble rising from a seated position
- Fatigue
- Chronic dry cough
- Thickening of the skin on the hands
- Difficulty breathing
- Fever
- Weight loss
- Hoarse voice¹⁴

Diagnosis:

Blood tests. A blood test to know the elevated levels of muscle enzymes, which can indicate muscle damage.

Electromyography. This test involves inserting a thin needle electrode through the skin into the muscle. Electrical activity is measured as you relax or tighten the muscle, and changes in the pattern of electrical activity can confirm a muscle disease.

Magnetic resonance imaging (MRI). MRI can assess inflammation over a large area of muscle.

Muscle biopsy: Analysis may reveal abnormalities, such as inflammation, damage, certain proteins or enzyme deficiencies.

Treatment:

Although there's no cure for polymyositis, treatment can improve your muscle strength and function.

Corticosteroids. Drugs such as prednisone can be very effective in controlling polymyositis symptoms. But prolonged use of these drugs can have serious and wide-ranging side effects, So, gradually taper the dose of medication down to lower levels.¹⁵

Therapy : Depending on the severity of your symptoms, physician might suggest:

Physical therapy. A physical therapist can show you exercises to maintain and improve your strength and flexibility and advise an appropriate level of activity.

Speech therapy. If your swallowing muscles are weakened by polymyositis, speech therapy can help you learn how to compensate for those changes.

Dietetic assessment. Later in the course of polymyositis, chewing and swallowing can become more difficult. A registered dietitian can teach you how to prepare easy-to-eat, nutritious foods.

Complications of Polymyositis:

Trouble swallowing: This could happen if the muscles in your esophagus are affected. It can lead to weight loss and malnutrition.

Aspiration pneumonia: When you can't swallow well, you're more likely to breathe food or liquid (including saliva) into your lungs. This can cause pneumonia.

Breathing problems: If your chest muscles are affected, you could have shortness of breath, or, at worst, respiratory failure.¹⁶

Toxic myositis: Toxic myositis is thought to be caused by some prescribed medications and illicit drugs. Cholesterol-lowering medications such as statins may be among the most common drugs to cause this condition¹⁷.

Symptoms of toxic myositis: Symptoms are similar to those of other types of myositis. People who experience this condition typically see improvement once they stop the medication that caused the toxicity.

The gradual onset of weakness over weeks or months, often after starting a new medication

Difficulty rising from a low-seated chair or combing one's hair

Torso or "core" weakness

Difficulty swallowing (dysphagia)

Muscle pain

Diagnostic Tests:

Medical history and will perform a thorough physical examination.

Blood test to find elevated enzymes in the blood.

Electromyography (EMG) and nerve conduction tests may be performed.

MRI of the Muscles: MRI, or magnetic resonance imaging, is a medical test that uses biological magnets and a computer to create pictures of the inside of the body. These pictures then aid doctors and specialist in determining injuries or diseases. The MRI is sometimes compared to the CT (Computed Tomography), which uses similar technology to create cross-sectional images of the body¹⁸.

Treatment: People who experience this condition typically see improvement once they stop the medication that caused the toxicity.



Dietary management:

A healthy diet can go a long way toward improving overall health. While these eating plans may take some special commitment, the anti-inflammatory plan (sometimes referred to as a Mediterranean diet) is easily adaptable and is one that all people, but especially those with an autoimmune disease, can benefit greatly from. It includes the following:

Processed and fast foods, including those with high fructose corn syrup, artificial ingredients, preservatives, and pesticides to be avoided. Instead, a wide variety of brightly colored fresh fruits and vegetables and unrefined foods shall be included.

The number of foods made with wheat flour and sugar, especially bread, pasta, and most packaged snack foods to be reduced. Instead foods containing whole grains, such as brown rice and bulgur wheat to be included.

Intake of saturated fat to be limited by eating less animal fats

Shall Use extra-virgin olive and expeller-pressed canola, sunflower, and safflower oil.

Avocados and nuts, especially walnuts, cashews, almonds, and nut butters made from these nuts shall be taken.

Shall increase omega-3 fatty acids in your diet by eating salmon, sardines, omega-3 fortified eggs, and flax seeds, or fish oil supplement.

More vegetable protein, especially from beans and soy, and choose fish, cheese, and yogurt to be increased more often than you choose animal proteins.

Drinking soda, alcohol, and choose tea instead of coffee to be avoided.

Special dietary considerations for those taking corticosteroids. People who must take corticosteroids (prednisone), especially in high doses and for longer periods of time, face a number of complications that carry considerations for what they eat.

Prednisone increases appetite. To avoid weight gain, high-calorie foods to be avoided and eat frequent small meals to help maintain steady blood sugar levels. Getting plenty of exercise will also help.

To reduce the risks of high blood pressure and fluid retention, limit salt intake to less than 1,500mg per day. You can do this by eating fresh rather than processed or canned foods and avoid adding salt food.

If patient is taking medication for high blood pressure, may need to increase intake of foods high in potassium, such as bananas, apricots, cantaloupe, baked potatoes, and tomatoes.

Prednisone can also irritate the stomach, so it is important to take it with food, not on an empty stomach.

Diabetes is also a risk when taking steroids. To keep blood sugar levels within the normal range, avoid foods high in simple carbohydrates like sugar and keep carbohydrate intake to between 45 and 60mg per day.

Dietary supplements have a wide range of products and recommended uses. The following specific recommendations are offered for those who have myositis diseases:

Calcium is a concern for those who take prednisone. Should eat foods rich in calcium, such as milk, yogurt, cheese, leafy green vegetables (kale, bok choy), almonds, and broccoli. Calcium supplements are also recommended to minimize bone loss and osteoporosis.

Vitamin D is a hormone produced in the skin in response to sunlight. It is important in calcium absorption and many other processes. Because most people do not spend enough time in the sun (and dermatomyositis patients should not spend time in the sun), most people need to take dietary supplements of Vitamin D.

Folic acid (also called folate) is a B vitamin that is abundant in leafy green vegetables, such as spinach, kale, broccoli, and other sources. Because methotrexate interferes with the way folic acid is used in the body, those who take this anti-inflammatory medication need more folic acid than can be consumed from dietary sources, so they should take folic acid supplements.

Omega-3 fatty acids, which are anti-inflammatory, and omega-6 fatty acids, which are pro-inflammatory, should be in balance in the body. Most Americans, however, eat far more omega-6 foods (vegetable oils, safflower oils, meat, poultry, and eggs), causing a more pro-inflammatory state. To bring this back into balance, you should eat more foods containing omega-3 fatty acids, including salmon, mackerel, sardines, leafy green vegetables, flaxseed, canola oil, walnuts, and enriched eggs. Omega-3 supplements are also available.¹⁹

Conclusion: Myositis is inflammation of muscles which attacks immune system and muscles. Depending on which type of myositis it is a hard time to move or use affected muscles. There's no cure for myositis, but in most cases, treatment can put it into remission, but with the life style modification and treatment can strengthen weak muscles as supportive.

References:

1. <https://www.mayoclinic.org/diseases-conditions/dermatomyositis/symptoms-causes/syc-20353188>
2. <https://www.medicalnewstoday.com/articles/dermatomyositis#causes-and-risk-factors>
3. <https://www.healthline.com/health/dermatomyositis#complications>
4. [en.wikipedia.org > wiki > Inclusion_body_myositi](https://en.wikipedia.org/wiki/Inclusion_body_myositis)
5. [www.hopkinsmedicine.org > inclusion-body-myositis](https://www.hopkinsmedicine.org/inclusion-body-myositis)
6. <https://www.healthline.com/health/inclusion-body-myositis#diagnosis>
7. <https://www.healthline.com/health/inclusion-body-myositis#treatment>
8. <https://www.hopkinsmedicine.org/health/conditions-and-diseases/inclusion-body-myositis>
9. <https://www.verywellhealth.com/juvenile-myositis-5069677>
10. <https://www.myositis.org/about-myositis/types-of-myositis/juvenile-myositis/>
11. <https://www.myositis.org/about-myositis/types-of-myositis/juvenile-myositis/>
12. <https://www.hopkinsmyositis.org/myositis/juvenile-myositis/>
13. <https://www.icliniq.com/articles/orthopedic-health/juvenile-myositis>
14. <https://www.mayoclinic.org/diseases-conditions/polymyositis/symptoms-causes/syc-20353208>
15. <https://www.webmd.com/arthritis/polymyositis>
16. <https://www.mayoclinic.org/diseases-conditions/polymyositis/diagnosis-treatment/drc-20353212>
17. <https://understandingmyositis.org/myositis/toxic-myopathy/>

GROUND GLASS OPACITY AND COVID-19

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The COVID-19 pandemic filled our vocabularies with more medical terms. The term—**ground-glass opacities**—refers to findings on computed tomography (CT) scans of people with COVID-19 that can help to diagnose and monitor the infection. Ground-glass opacities (GGOs) aren't specific to COVID-19—meaning they can show up due to other conditions and infections. But they are common among those infected with SARS-CoV-2.

Ground-Glass Opacities Look Like... According to Isabel Oliva Cortopassi, MD, senior associate consultant at Mayo Clinic and former chief of thoracic imaging at Yale Medicine, ground-glass opacities indicate abnormalities in the lungs. "Ground-glass opacities are, a pattern that can be seen when the lungs are sick". Normal lung tissue appears black on a CT scan, but GGOs are lighter-colored or gray patches.

Those lighter patches don't completely obscure the other structures in the lungs, which makes them different from lesions associated with lung cancer, which can often appear as solid. With GGOs, "there is haziness seen overlying an area of the lung, but the underlying structures of the lung (airways, blood vessels, lung tissue) can still be identified," . It resembles, well, ground glass, which is still transparent but has a matte finish.

Researchers from the University of Michigan reported the prevalence of GGOs in chest imaging among COVID-19 patients in a case series published in February 2020 in *Radiology: Cardiothoracic Imaging*. Looking at three different cases of confirmed COVID-19 patients in China, researchers discovered GGOs in each patient's CT scan. Another study published in the journal *Radiology* in February 2020, earlier in the pandemic, showed similar findings.

In the context of COVID-19 infection, Dr. Cortopassi explained that GGOs on a CT scan indicate COVID-19-related pneumonia or lung inflammation caused by the viral infection. But not all patients with COVID-19 will go on to develop pneumonia.

Residual Ground-Glass Opacities

A 2021 study published in *The Lancet Respiratory Medicine* included people hospitalized for COVID-19 and had GGOs on initial lung scans; the researchers rescanned their lungs at three and nine months following hospital discharge. Researchers found that 78% of patients had residual GGOs at three months post-discharge, and 24% had GGOs still showing up on scans at nine months post-discharge.

In another 2021 study published in the *Lancet*, researchers looked at one-year outcomes in COVID-19 hospital survivors. They found a decrease in GGOs by 12 months and that 78% of patients still had some GGOs showing up on lung scans.

Of note: Both 2021 studies showed that patients still had other respiratory issues in addition to GGOs. And study authors from both 2021 studies urged long-term follow-up for anyone who had COVID-19, especially those who had severe illness.

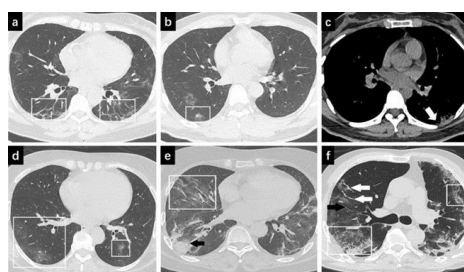
COVID-19-Associated Changes on Chest CT Scans

While GGOs are some of the most common findings seen in patients with COVID-19-related pneumonia, there are additional imaging appearances that can signal COVID-19 as well—including:

Consolidation (a white portion on a lung CT that signifies fluid is present)

Septal thickening (a thickening of the connective tissues within the lung, also indicative of fluid, fibrous tissue, or cell infiltration)

CT features of COVID-19 patients with two consecutive negative RT-PCR tests after treatment.





CT images of patients with COVID-19. (a) 56-year-old woman with moderate COVID-19. CT image shows pulmonary fibrosis in both lungs (box). (b) 37-year-old man with moderate COVID-19. CT image shows mixed ground glass opacity (box). (c) 32-year-old woman with moderate COVID-19. CT image shows pleural thickening with pleural adhesion (arrow). (d) 50-year-old woman with severe COVID-19. CT image shows ground glass opacities in both lungs (box). (e) 59-year-old woman with severe COVID-19. CT image shows ground glass opacities (box) and consolidation with air bronchogram (arrow) in the right lung. (f) 65-year-old man with severe COVID-19. CT image shows bronchial wall thickening and bronchiectasis (black arrow). Vascular enlargement is also shown (white arrows). The two boxes show pulmonary interstitium reticular thickening in both lungs.

COVID-19 diagnosis doesn't automatically lead to a worsened condition in which these GGOs will show up in a CT scan, nor does an abnormal scan definitively mean a coronavirus infection. "Some people will have completely different radiologic findings, and others will have no imaging abnormalities at all".

Ground-glass opacities are usually benign and resolve spontaneously without any complications in patients with short-term illnesses. Most of these patients may not even know that it is present.

References:

1. Ahn D.G., Shin H.J., Kim M.H. Current status of epidemiology, diagnosis, therapeutics, and vaccines for novel coronavirus disease 2019 (COVID-19). *J. Microbiol. Biotechnol.* 2020;30(3):313–324. [PMC free article] [PubMed] [Google Scholar]
2. Zhai P., Ding Y., Wu X., Long J., Zhong Y., Li Y. The epidemiology, diagnosis and treatment of COVID-19. *Int. J. Antimicrob. Agents.* 2020;55(5):105955. [PMC free article] [PubMed] [Google Scholar]
3. Jeong Cm, Xu X., Kong Sc, Luo Lp. Evaluation of chest CT and clinical features of COVID-19 patient in Macao. *Eur. J. Radiol. Open.* 2020;7. [PMC free article] [PubMed] [Google Scholar]
4. Xie C.Y., Ng M.Y., Ding J. Discrimination of pulmonary ground-glass opacity changes in COVID-19 and non-COVID-19 patients using CT radiomics analysis. *Eur. J. Radiol. Open.* 2020;7. [PMC free article] [PubMed] [Google Scholar]
5. Xiong Y., Sun D., Liu Y. Clinical and high-resolution CT features of the COVID-19 infection: comparison of the initial and follow-up changes. *Invest. Radiol.* 2020;55(6):332–339. [PMC free article] [PubMed] [Google Scholar]
6. Wang K., Kang S., Tian R., Zhang X., Zhang X., Wang Y. Imaging manifestations and diagnostic value of chest CT of coronavirus disease 2019 (COVID-19) in the Xiaogan area. *Clin. Radiol.* 2020;75(5):341–347. [PMC free article] [PubMed] [Google Scholar]

INTERPERSONAL SKILLS IN THE WORKPLACE: IMPORTANCE AND WAYS TO IMPROVE

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What are the interpersonal skills?

Interpersonal skills are also known as people skills or soft skills and sometimes emotional intelligence. It is nothing but the way you communicate and interact with others. Hence, it gets imperative for your employees to have impeccable interpersonal communication skills to handle clients and maintain good relations within the team.

As an employer, you must ensure that this is one of the top criteria to assess candidates. Regardless of the job type you're hiring for, your workers must get along well with coworkers, managers, customers, and vendors.

Why are Interpersonal Skills Important in the Workplace?

People skills play an essential role in the workplace. Nevertheless, the importance of interpersonal skills relates to having strong social skills. Aside from this, there are diverse positive reasons to acquire strong interpersonal skills.

We are surrounded by people in almost every part of our lives. Thus, to connect and bond, being socially competent is vital.

Social competence is one of the critical factors for employees to build a positive attitude for life. Building a social relationship with colleagues and people is a general factor of happiness.

Hence, interpersonal skills matter in every aspect of life, no matter how big or small.

As humans, we all want to become a part of the big picture and crave a sense of unity.

Being a part of a popular group or community feels essential for us. Being close to friends makes us happy. Life is a performance, and every one of us tries to play a social role in society.

In simple words, everyone needs support from other people to be happy and content in both professional and private life.

Therefore, employees must understand the importance of interacting with clients and peers. This builds a positive relationship among employees and creates a robust work culture.

This is why acquiring good interpersonal skills is a must-have for any employee.

If you lack these skills, it's time you take them seriously. It will transform the way you bond with employees and your perception of yourself.

9 Types of Interpersonal Skills

Having strong interpersonal skills like negotiating, problem-solving, communication, etc., are the main requirements for any job. Everybody wants the best talents to enhance the company's growth, and for that, you must look for these skills in your employees. Here are nine such examples-

1. Communication

Perhaps the most important interpersonal skill in any job is the ability to communicate well. Whether you are hiring for IT, Customer service, Real Estate, or any other industry, your workers must be able to express clearly and effectively with others both verbally and in writing.

Different job roles will require expertise in diverse forms of communication. For service centric jobs, verbal communication is a must. Similarly, an executive based job will call for excellent verbal and non-verbal skills.

There are mostly three types of communication-

Verbal- Here, your employees will have to interact with clients, customers, or teammates. Thus, you must ensure they're good at one-on-one conversations and have the ability to break a deal with clients by portraying their communication skills.

Nonverbal- E-mails, case studies, reports, are some of the forms of nonverbal communication, and one must ensure employees are trained with writing etiquettes. Having this skill ensures proper conduct at the workplace.

Public Speaking- Addressing a large audience or group of people requires tremendous communication skills, and only a few charismatic personalities can excel at this. If the job requires such skills, you must choose the best who is able to drive a mass with a convincing speech.





2. Conflict Management

No matter if you're hiring a manager or an employee, they will likely need to face conflicts at some point in their job. Whether the issue is between two staff members, between yourself and an employee, or between the client and company, you must ensure your employees will listen carefully to both sides and use creative problem solving to arrive at a solution.

Conflict management involves-

- Conflict resolution
- Constructive criticism
- Counseling
- Mediating
- Problem Solving



3. Empathy

A significant part of being a competent manager, employee, or colleague is empathizing with others. Empathy is a quality every employer must look for in their new hires.

For example, If a customer or colleague complains for any reason, employees and managers must listen to their concerns thoughtfully by expressing compassion towards their issues.

An empathetic person is able to become a better team member and also promotes better team dynamics. Empathy is an important skill which helps workers interact with other people at the workplace by showing-

- Care
- Compassion
- Diplomacy
- Diversity and Inclusion
- Kindness
- Patience
- Respect
- Sensitivity
- Sympathy



4. Leadership

Leadership qualities are not limited to a managerial position. Even a regular employee can display the ability of being a natural leader. Such an employee will be motivating, excellent collaborator, and will put the team's success above others.

You must ensure to look for leadership experience in job applicants, and that involves-

- Encouraging nature
- Ability to inspire trust
- Ability to instruct
- Management skills
- Motivation skills
- Positive reinforcement



5. Listening

Only technical skills are not enough to hire a person. If you're hiring a person with good communication skills, then being an active listener should be a prerequisite.

You must ensure that while your employees need to express their ideas, they must also diligently listen to others' opinions. Listening is an essential skill that garners clients' and colleagues' attention. And as an employer, you must have listening skills for your employees to feel valued and respected.

Listening skill helps develop- curiosity, focus and inquiry.

6. Negotiation

The skill of negotiation is essential for many positions. Depending on the job's specificity, it might involve creating formal agreements or contracts between clients or helping colleagues solve a problem and determine a solution.

You can identify a good negotiator by observing their listening skills, creative problem-solving skills, and how they arrive at an outcome that satiates everyone's requirements. A good negotiator knows to interact, persuade, and always do their research well.

7. Positive Attitude

As an employer, you will want to hire someone who makes the office a brighter place. People with a positive attitude are friendly and maintain a calm demeanor. They ensure they are not part of any office gossip and refrain from making a workplace toxic.

Having this interpersonal skill does not mean the worker has to be a social persona, but they must be willing to maintain a positive rapport with their colleagues as it incorporates-

- Behavioral skills
- Rapport Building
- Friendliness
- Humor
- Networking
- Social skills



8. Teamwork

When it comes to interpersonal skills, teamwork plays a pivotal role. Even if the job requires independent work, they still need to collaborate with others. Teamwork functions with good communication, listening to others, motivation from peers, and resolving conflicts collaboratively.

A good team helps promote good company culture and a respectful work environment as it allows-

- Collaboration
- Group facilitation
- Team building opportunities

9. Body Language

People often tend to overlook nonverbal communication, but you must not. As an employer, you must have an eye-for-detail and do not forget to interpret your employees' body language and gestures.

A candidate with good body language will often determine their verbal communications skills. Instead, their body language will impact their communication skills more than any other factor.

Factors to consider while you assess a candidate with the right body language-

- Eye contact
- Facial expressions
- Gestures
- Personal space
- Posture and body position

How to Improve Your Interpersonal Skills in the Workplace

1. Learn to Give Credit

As a manager, you can show your appreciation and diligence for your employees in three different ways:

When your employees do something excellent, you must praise them and highlight their strengths.

Be grateful if other teams helped you or your team. Such actions must never be taken for granted. Preach this to your team as an example to follow as well.

Appreciate creative ideas and any feedback/criticism you receive.

Self-confidence, gratitude, and acknowledgment are crucial to personal growth as it enhances the ability to work. Many employees want to hear "well done" from their managers and team members.

2. Be Considerate and Practice Compassion

Caring about your employees' well-being as an employer is a critical factor toward refining your interpersonal skills.

Empathy, otherwise known as compassion, is the ability to understand others' feelings without judging them. As an empathetic person, you must react accordingly to sadness, anger, or anxiety.

If you encounter an employee who is going through a hard time, a bad day, or a burnout, please offer a helping hand. Hear them out, find a solution to their problem, and make them feel comfortable. This strengthens your relationship with people, ultimately resulting in improved interpersonal skills.

Being compassionate with your workforce is more than just building relationships. People who empathize with others are generally less stressed in their daily lives.

3. Show Interest

Suppose you've had a bad day at work. Your manager has spoiled your day, and you're loaded with tension. You walk up to a colleague, and they want to speak to you about their problems. Both of you are having a hard time. How will you deal with it?

Showing undivided interest in others' problems is the best way to improve your interpersonal skills. Before you begin ranting in front of someone, please ask how they are feeling at the moment. Talk about hobbies, movies, interests. Always pay attention and show your interest in their concerns. This is a great practice to enhance employee engagement.

4. Try to Settle Disputes

Every office experiences disputes, fights, or banter, resulting in a toxic work environment. We have all seen one or the other conflicts among co-workers and managers. But are you the person your employee or co-worker turns up to in case of a dispute?

Having the ability to resolve a dispute requires a great amount of trust. But, you must earn this trust. Being able to be open and transparent with others is a strong interpersonal skill. Having earned the trust, you will become the person solving problems than creating them.

5. Don't be a Complainer

We all come across people who complain the most, which are the least popular ones. You must stop complaining to avoid being portrayed as a negative person in front of your employees and peers.

As a manager, you must keep an eye out for anything that may be troubling your employees. What is the source of their problems?

If something is troubling them, ask them to try alternatives like writing about their issues in a journal, talking to friends and colleagues, or directly consulting you without hesitations.

Conclusion: Interpersonal skills are something that an individual can acquire through various practices. It is a crucial requirement for any workplace to maintain positivity, productivity, and team dynamics to achieve organizational success.

Every member of an organization benefits from developing the required interpersonal skills. As a leader or an employer, you see that your workforce lacks this skill, there are ways to improve your interpersonal skills, and we just spoke about that today.

ACHALASIA CARDIA

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DEFINITION

Achalasia is a rare but serious condition that affects your esophagus, the tube that carries food from your throat to your stomach. With achalasia, your lower esophageal sphincter (LES) fails to open up during swallowing. This muscular ring closes off your esophagus from your stomach most of the time, but it opens when you swallow so food can pass through. When it doesn't open, food can back up within your esophagus.¹

TYPES OF ACHALASIA

The way muscles in the esophagus malfunction in people with achalasia varies. In all cases of achalasia, the lower esophageal sphincter that controls the passage between the esophagus and the stomach fails to relax at the right time. Based on other problems that happen at the same time, doctors identified three types of achalasia:

Type 1 achalasia is sometimes called classic achalasia. With this type, the esophagus muscles barely contract, so food moves down because of gravity alone.

In **Type 2 achalasia**, pressure builds up in the esophagus, causing it to become compressed. This is the most common type of achalasia and it often causes more severe symptoms than type I.

Type III achalasia is sometimes called spastic achalasia because there are abnormal contractions at the bottom of the esophagus where it meets the stomach. This is the most severe type of achalasia. The contractions can cause chest pain that can awaken a person from sleep and imitate the symptoms of a heart attack.³

INCIDENCE

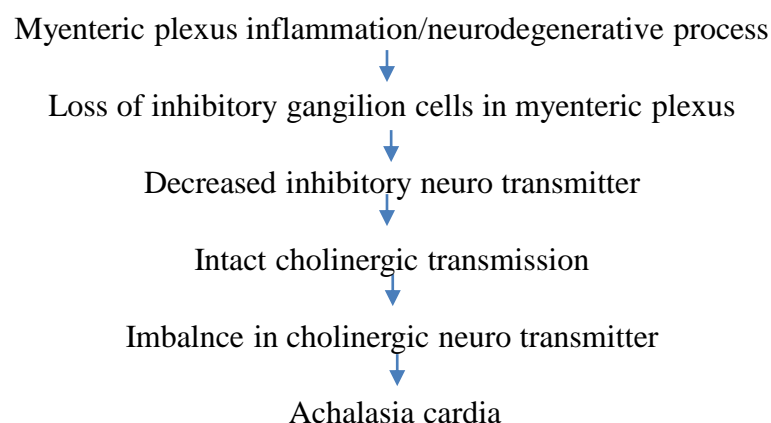
United States, about 1 in every 100,000 people develop the condition each year

All over the world, between 0.1 to 1 in every 100,000 people develop the condition each year.² This condition appears to affect people of all genders at roughly the same rates. It's less common in children. It most commonly develops after age 30 and before age 60.

ETIOLOGY

Autoimmune disease that is triggered by a virus. Your immune system attacks the nerve cells in the muscle layers of the walls of your esophagus and at the LES. Your nerve cells, which control muscle function, slowly degenerate for reasons that are not currently understood. This results in excessive contractions in the LES. If you have achalasia, the LES fails to relax and food and liquids can't pass through your esophagus into your stomach.

PATHOPHYSIOLOGY





SYMPTOMS

- Trouble swallowing (dysphagia). This is the most common early symptom.
- Regurgitation of undigested food.
- Chest pain that comes and goes; pain can be severe.
- Heartburn.
- Cough at night
- Weight loss/malnutrition from difficulty eating. This is a late symptom.
- Hiccups, difficulty belching (less common symptoms)²

DIAGNOSIS

Barium swallow: For this test, you'll swallow a barium preparation (liquid or other form) and its movement through your esophagus is evaluated using X-rays. The barium swallow will show a narrowing of the esophagus at the LES.

Upper endoscopy: In this test, a flexible, narrow tube with a camera on it – called an endoscope – is passed down your esophagus. The camera projects images of the inside of your esophagus onto a screen for evaluation. This test helps rule out cancerous (malignant) lesions as well as assess for achalasia.

Manometry: This test measures the timing and strength of your esophageal muscle contractions and relaxation of the lower esophageal sphincter (LES). Failure of the LES to relax in response to swallowing and lack of muscle contractions along the walls of the esophagus is a positive test for achalasia. This is the “gold standard” test for diagnosing achalasia.²

SURGICAL MANAGEMENT

Dilation of the Esophageal Sphincter

Dilation of a passageway means widening it. During a dilation procedure for achalasia, the patient is asleep while a gastroenterologist inserts an endoscope into the mouth and esophagus, and slowly inflates a balloon near the lower esophageal sphincter. This can decrease the pressure in the esophagus and stretch the sphincter muscles until they relax enough to allow food and liquid to pass through easily.

Balloon dilation is probably the most common approach to treating achalasia. Most patients (65% to 80%) report a significant improvement of swallowing after the procedure. However, the improvement may be temporary-achalasia symptoms can return over time, calling for further treatment.¹

Achalasia Surgery Esophageal Myotomy

During myotomy, a gastroenterologist cuts the muscles in the esophagus, esophageal sphincter and lower stomach to prevent them from tightening.

An achalasia myotomy can be performed through the mouth with an endoscope (peroral endoscopic myotomy or POEM) or through several small incisions in the abdomen (laparoscopic Heller myotomy). A lower esophageal sphincter myotomy disrupts just enough muscle to relieve achalasia symptoms but not enough to cause acid reflux. This is the most permanent solution for achalasia, but it is not appropriate for all patients.²

Cutting Edge Treatment for Achalasia POEM Procedure

Botulinum Toxin Injections

Injecting botulinum toxin into the lower esophageal sphincter has been shown to help some patients who have achalasia. These treatments are particularly useful for older patients and those who are not candidates for dilation or myotomy.

Botulinum toxin injections for achalasia work by numbing the sphincter and surrounding nerves, allowing it to relax. The injections are done with a special needle

inserted through an endoscope. They have a limited effect, which lasts about one year. Repeating injections may be necessary. Some patients may experience mild chest pain, and there have been reports of skin rashes after this treatment.⁴

NURSING MANAGEMENT

- Assessment is necessary to determine potential problems that may have lead to dysphagia as well as handle any difficulty that may appear during nursing care.
- Assess the ability to swallow by positioning the examiner's thumb and index finger on the patient's laryngeal protuberance. Ask the patient to swallow; feel the larynx elevate. Ask the patient to cough; test for a gag reflex on both sides of the posterior pharyngeal wall (lingual surface) with a tongue blade. Do not rely on the presence of a gag reflex to determine when to feed.
The lungs are usually protected against aspiration by reflexes as cough or gag. When reflexes are depressed, the patient is at increased risk for aspiration.
- Evaluate the strength of facial muscles.
Cranial nerves VII, IX, X, and XII control motor function in the mouth and pharynx. Coordinated function of muscles innervated by these nerves is necessary to move a bolus of food from the mouth to the posterior pharynx for controlled swallowing.
- Check for coughing or choking during eating and drinking.
These signs indicate aspiration.



Observe for signs associated with swallowing problems (e.g., coughing, choking, spitting of food, drooling, difficulty handling oral secretions, double swallowing or major delay in swallowing, watering eyes, nasal discharge, wet or gurgly voice, decreased ability to move tongue and lips, decreased mastication of food, decreased ability to move food to the back of the pharynx, slow or scanning speech).

These are all signs of swallowing impairment.

- Assess the ability to swallow a small amount of water.
If aspirated, little or no harm to the patient occurs.
- Reassure the patient to chew completely, eat gently, and swallow frequently, especially if extra saliva is produced. Give the patient direction or reinforcement until he or she has swallowed each mouthful.
Such directions assist in keeping one's focus on the task.
- Advance slowly, giving small amounts; whenever possible, alternate servings of liquids and solids.
This technique helps prevent foods from being left in the mouth.
- Encourage a high-calorie diet that involves all food groups, as appropriate. Avoid milk and milk products.
Dairy products can lead to thickened secretions.
- Patients pouch food to one side of their mouth, encourage them to turn their heads to the unaffected side and manipulate the tongue to the paralyzed side.
Foods placed on the unaffected side of the mouth promote more complete chewing and movement of food to the back of the mouth, where it can be swallowed. These strategies aid in cleaning out residual food.
- the patient tolerates single-textured foods such as pudding, hot cereal, or strained baby food, advance to a soft diet with guidance from the dysphagia team. Avoid foods such as hamburgers, corn, and pasta that are difficult to chew. Also, avoid sticky foods such as peanut butter and white bread.
The dysphagia team should determine the appropriate diet for the patient on the basis of progression in swallowing and ensuring that the patient is nourished and hydrated. The patient had a stroke, place food in the back of the mouth, on the unaffected side, and gently massage the unaffected side of the throat.
Massage aids stimulate the act of swallowing.
- Place whole or crushed pills in custard or gelatin. (First, ask a pharmacist which pills should not be crushed.) Substitute medication in an elixir form as indicated.
Mixing some pills with foods helps reduce the risk of aspiration.
- Encourage the patient to feed self as soon as possible.
- With self-feeding, the patient can establish the volume of a food bolus and the timing of each bite to promote effective. ⁵

COMPLICATIONS

- Pneumonia.
- Lung infections (pulmonary infections).
- Other complications include:
- Esophageal cancer. Having achalasia increases your risk of this cancer.²

DIETARY MANAGEMENT

To Eat problem foods like grisly meats, dry foods, or raw vegetables and fruits with care.

To Eat several small volume liquid or semi-liquid meals throughout the day and avoid large meals.⁶

REFERENCES

1. Achalasia: Causes, Symptoms, and Diagnosis (healthline.com)
2. Achalasia (Esophagus Disorder): Symptoms, Causes, Treatments (clevelandclinic.org)
3. Achalasia | Johns Hopkins Medicine
4. Achalasia Treatment & Management: Approach Considerations, Medical Care, Surgical Care (medscape.com)
5. ACG clinical guideline: diagnosis and management of achalasia - PubMed (nih.gov)
6. Achalasia Treatment & Management: Approach Considerations, Medical Care, Surgical Care (medscape.com)

EFFECTS OF PRANAYAMA ON DIFFERENT PARTS/SYSTEM OF BODY

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Introduction

Pranayama is the practice of breath regulation. It's a main component of yoga, an exercise for physical and mental wellness. In Sanskrit, "Prana" is breath or the vital energy in the body and on subtle levels, it represents the pranic energy responsible for life. Whereas "ayama" means control, so Pranayama basically means "Control of Breath".¹

The practice of pranayama involves breathing exercises and patterns. You purposely inhale, exhale, and hold your breath in a specific sequence. In yoga, pranayama is used with other practices like physical postures (asanas) and meditation (dhyana). Together, these practices are responsible for the many benefits of yoga.

What exactly is pranayama?

Pranayama is the ancient practice of controlling your breath. You control the timing, duration, and frequency of every breath and hold.

The goal of pranayama is to connect your body and mind. It also supplies your body with oxygen while removing toxins. This is meant to provide healing physiological benefits.



Types of Pranayama:

1. Nadi Shodhana Pranayama (Alternate Nostril Breathing)

This is the first type of pranayama and is most practised because of its soothing effects on the brain. Popularly known as a form of alternate nostril breathing, it's a slow and deep yoga breathing exercise.

In this pranayama, we close our nostrils alternatively in a way that balances the left and right brain hemispheres.

Nadi shodhan refreshes air throughout the lungs and alters autonomic activity. It significantly declines the heart rate and systolic blood pressure.

Peak expiratory flow rate improved which shows a healthy lung condition.

Due to better adaptability for mental stress-induced after practicing nadi shodhan participant's mathematical problem-solving time reduced significantly.

2. Bhastrika Pranayama (Bellows Breath)

In contrast to slow and deep breathing, bhastrika pranayama comes in fast and short breathing type pranayama. Bhastrika literally means "bellows breath"

In this pranayama, exaggerated and forceful breathing is performed engaging the diaphragm and abdominal muscles.

Bhastrika pranayama is very effective in revitalizing the working of the lungs, reduction in systolic and diastolic blood pressure and parasympathetic nervous system is also stimulated which brought a sense of calmness and reduces stress.

3. Kapalbhata Pranayama

Kapalbhata is a type of pranayama that can be categorized under fast, asymmetrical, and diaphragmatic breathing. In kapalbhata Pranayama, forceful exhalation is attributed to the complete detox of the body by cleansing the Kapal (skull).

Besides pranayama, kapalbhata is one of the purification techniques of shatkarma.

Forceful exhalation in kapalbhata decompresses the cerebrospinal fluid in the brain. It massages the brain cells and you feel lighter after performing it.

Kapalbhata is like warm up exercises for respiratory muscles to increase lung capacity.

It also increases the circulation of oxygen-rich blood in the body which in turn increases melanin proportion to glow skin.

Kapalbhata increases the metabolic rate of the body. Faster metabolism leads to increased calorie consumption and further, helps in weight loss.

kapalbhata has decreased the blood sugar level in diabetic individuals.

The pelvic floor muscles are strengthened after practising kapalbhata for four weeks and proved to be effective in reducing menopausal complications.



4. Bhramari Pranayama (Bee Breath)

Bhramari pranayama is the most relaxing breathing technique anyone can do easily to get rid of stress and anxiety instantly. *Bhramari* means humming bee.

In Bhramari pranayama, as you exhale, the ear canal is closed with index fingers and a humming sound is produced from the back of the throat. The mind is focused on the vibratory sound of a humming bee in prolonged exhalation.

When you practice it long enough, little impulses of soothing humming sound continue vibrating in your head. It keeps stress and anxiety away from you.

In a yogic intervention, it has been seen, Bhramari pranayama immediately affects the cardiovascular system which in turn reduces high blood pressure and heart rate.

Bhramari pranayama relieves the symptoms of sinusitis by increasing nitric oxide levels in the blood cells and reducing anxiety and other psychological symptoms in patients with chronic sinusitis.

In the treatment of tinnitus and sensorineural deafness, bhramari pranayama with shanmukhi mudra is a very effective breathing technique.

5. Anulom Vilom Pranayama

Anulom Vilom pranayama is a type of alternate nostril breathing performed with the right hand in Vishnu Mudra.

To perform Anulom Vilom, close the right nostril with the right thumb inhale from the left nostril. Then close the left nostril with the ring and little finger, exhale from the right nostril. Repeat in this manner alternatively.

Anulom vilom significantly improves the lung function of swimmers. It increases lung capacity and period of breath retention.

Anulom Vilom Pranayama for 30 minutes a day (for 40 days) can resolve sinus inflammation (rhinosinusitis), an RCT concluded.

It also affects the cognitive functions of the brain including learning, thinking, reasoning, remembering, and problem-solving skills.

6. Sheetali Pranayama (Cooling Breath)

Sheetali pranayama is a cooling breathing technique. Ancient yogis derived it to reduce body temperature.

In Sheetali Pranayama, the tongue is rolled in a 'U' or 'O' shape and extends out of the mouth. This is followed by long inhalation – the air is sucked in through rolled tongue and exhaled out through the nostrils. Saliva on the tongue moisturizes the air on its way through the mouth and we feel instant coolness.

Inhaling through rolled tongue in Sheetali pranayama moisturizes the dry mouth which in turn relieves from bad breath.

In some yogic texts, Sheetali pranayama is described to have hunger and thirst control ability. It has a calming effect on the entire nervous system which gives the practitioner a sense of control.

It reduces the production of bile waste that causes heartburn.

It has the ability to reduce blood pressure in hypertensive patients. It has been found in a study, Sheetali lower high bp through a combination of stress reduction and modification of the physiology of the autonomic nervous system.

7. Surya Bhedna Pranayama (Right Nostril Breathing)

In contrast to alternate nostril breathing, Surya Bhedna pranayama is a type of uninostril yogic breathing in which inhalation and exhalation are limited to the right nostril and left nostril respectively.

As the right nostril is said to be the gate of 'The Sun', Surya Bhedna pranayama increases body temperature and gives vitality to the yogi. It can be referred as 'hot pranayama' or 'right nostril breathing'.

Breathing in through the right nostril increases oxygen consumption and thereby the overall metabolic status of the yogi.

Surya bhedana has shown a positive effect on the left hemisphere of the brain. It enhances a person's logical and reasoning ability.

However, It's evidence from a differential study, Surya Bhedna pranayama has sympathomimetic effects – means it can raise blood pressure to alarming heights, particularly in hypertensive patients.

The heat produced through this pranayama practice burns up impurities and can help eliminate pathogens from the body.

8. Chandra Bhedna Pranayama

In this pranayama type, breathing is done in the opposite manner to Surya Bhedna pranayama i.e. Inhale – left nostril and exhale – right nostril.

Chandra Bhedna pranayama is a cooling breathing technique that activates the parasympathetic nervous system. Activation of the parasympathetic nervous system leads to;

Decreased oxygen consumption and load on the heart.

Immediate decrease in cardiovascular parameters such as heart rate, systolic pressure (SP), pulse pressure in hypertensive patients.

Muscular tension relaxation.

9. Sheetkari Pranayama (Hissing Breath)

Sheetkari is another classical pranayama breathing which is cooling in nature. In this pranayama, during inhalation, a 'seeehh' like hissing sound is produced from mouth which gives its cooling action. It's also called the hissing breath.

This pranayama is simply performed by closing the mouth and bringing the upper and lower teeth together. Expose them by parting the lips. Then perform Khechari mudra by folding the tongue to touch the soft palate. Inhale through the exposed teeth. Close the mouth to hold your breath for two seconds and then exhale through nostrils.

Although sheetkari produces similar effects as sheetali pranayama, in addition, Sheetkari pranayama is especially beneficial in;

Lowering blood pressure and reducing symptoms of anxiety.

Releasing emotional and psychological knots present in the body.

Inducing relaxing brain waves like delta and alpha band power in the frontal and occipital regions.



10. Ujjayi Pranayama (Victorious Breath)

Ujjayi pranayama is performed by inhaling from the nose, constricting the throat internally, and releasing the breath opening the mouth. The exhalation must produce an “HAA” sound as you open the mouth.

Many studies have shown the therapeutic benefits of Ujjayi when incorporated with Bandhas, Mantra Japa, and yoga poses; Incorporating Ujjayi pranayama in makarasana can release tension from the lower back and increase the supply of oxygen-rich blood down to the spine. It relieves from sciatica or spinal spondylitis.

Ujjayi pranayama with short and prolonged breath retention has proven positively affects oxygen consumption, leads to a higher metabolic rate in the body.

In a randomized control trial study, different physiological variables were measured after practicing ujjayi pranayama. A significant difference is observed in the resting heart rate and resting pulse rate after 8 weeks of training of Ujjayi.

When abdomen moves with breathing, internal abdominal organs also make the movement. It gives them internal massage and enhances the digestive system function.

Dirgha pranayama effects the oxygen concentration in blood to the brain.

11. Udgeeth Pranayama (Chanting breath)

There are many common names of Udgeeth Pranayama like Omkari jap, Om chanting, Omkara chanting. While performing this pranayama, Omkara sound connects you with silence within you. In this silence, our brain gets vibrations to tune in a natural frequency.

Udgeeth pranayama helps you to deal with anxiety, guilt, fear, and sadness. It cures acidity and problems related to sleep (Insomnia) and bad dreams.²

What are the benefits according to science?

The benefits of pranayama have been extensively researched.

According to scientific studies, pranayama may benefit your health in a variety of different ways. Let's look at seven of these benefits in more detail.

1. Decreases stress

In a 2013 study, pranayama reduced perceived stress levels in healthy young adults. The researchers speculated that pranayama calms the nervous system, which improves your stress response.

2. Improves sleep quality

The stress-relieving effects of pranayama may also help you sleep.

In clinical studies, a technique known as Bhramari pranayama was shown to slow down breathing and heart rate when practiced for 5 minutes. This may help calm your body for sleep.

According to a 2019 study, pranayama also improves sleep quality in people with obstructive sleep apnea. Additionally, the study found that practicing pranayama decreased snoring and daytime sleepiness, suggesting benefits for better quality rest.

3. Increases mindfulness

In a 2017 study, students who practiced pranayama displayed higher levels of mindfulness than those who didn't. The same students also showed better levels of emotional regulation. The researchers also mentioned that pranayama helps remove carbon dioxide and raises oxygen concentration, which fuels brain cells. This may contribute to mindfulness by improving focus and concentration.

4. Reduces high blood pressure

Stress is a major risk factor for high blood pressure. Pranayama can help minimize this risk by promoting relaxation.

In a 2014 study Trusted Source, participants with mild hypertension received antihypertensive drugs for 6 weeks. Half the participants also received pranayama training for 6 weeks. By the end of the study, the latter group experienced a greater reduction in blood pressure.

5. Improves lung function

As a type of breathing exercise, the slow, forceful breathing of pranayama may strengthen your lungs.

Pranayama may be a useful lung strengthening tool for many lung conditions, including asthma, allergic bronchitis and for recovery from pneumonia and tuberculosis

6. Enhances cognitive performance

In addition to benefiting your lungs, pranayama may also enhance your brain function.

A 2013 study, found that 12 weeks of slow or fast pranayama improved executive function — which includes your working memory, cognitive flexibility, and reasoning skills, auditory memory and sensory-motor performance.

7. Reduces cigarette cravings

There's evidence that yogic breathing, or pranayama, could decrease cravings in people who are trying to quit smoking.³

Conclusion

Whether you are looking to reduce stress or high blood pressure, improve concentration or find stillness in your spiritual journey, there are different pranayama breathing techniques one can choose from.

Different pranayamas come with numerous benefits and choosing one totally depends on when you're doing it or what you're expecting.

References:

- 1.<https://www.news18.com/news/lifestyle/international-yoga-day-2021-8-types-of-pranayama-that-will-keep-your-body-and-mind-healthy-3868382.html>
- 2.<https://www.fitsri.com/articles/types-of-pranayama>
- 3.[healthline.com/health/pranayam-benefits](https://www.healthline.com/health/pranayam-benefits)

KALLMANN SYNDROME

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INTRODUCTION

Kallmann syndrome (KS) is a genetic disorder that prevents a person from starting or fully completing puberty. Kallmann syndrome is a form of a group of conditions termed hypogonadotropic hypogonadism. To distinguish it from other forms of hypogonadotropic hypogonadism, Kallmann syndrome has the additional symptom of a total lack of sense of smell (anosmia) or a reduced sense of smell.⁽¹⁾ If left untreated, people will have poorly defined secondary sexual characteristics, show signs of hypogonadism, almost invariably are infertile and are at increased risk of developing osteoporosis. A range of other physical symptoms affecting the face, hands and skeletal system can also occur.⁽²⁾

CAUSES

The underlying cause is a failure in the correct production or activity of gonadotropin-releasing hormone by the hypothalamus. This results in low levels of the sex hormones testosterone in males or oestrogen and progesterone in females. Diagnosis normally occurs during teenage years when puberty fails to start.⁽²⁾

SIGNS AND SYMPTOMS

It is normally difficult to distinguish a case of Kallmann syndrome (KS)/hypogonadotropic hypogonadism (HH) from a straightforward constitutional delay of puberty. However, if puberty has not started by either age 14 (girls) or 15 (boys) years and one or more of the non-reproductive features mentioned below is present, then a referral to reproductive endocrinologist might be advisable.⁽³⁾

The features of KS and other forms of HH can be split into two different categories; "reproductive" and "non-reproductive".⁽³⁾

Reproductive features

- Failure to start or fully complete puberty.
- Lack of testicle development in men (size < 4 ml, whereas the normal range is between 12 and 25 ml).
- Primary amenorrhoea (failure to start menstruation).
- Poorly defined secondary sexual characteristics.
- Micropenis in 5-10% of male cases.
- Cryptorchidism (undescended testicles) at birth.
- Low levels of the gonadotropins LH and FSH.
- Hypogonadism due to low levels of testosterone in men or oestrogen/progesterone in women.
- Infertility.⁽⁴⁾

Non-reproductive features

Total lack of sense of smell (anosmia) or markedly reduced sense of smell (hyposmia). This is the defining feature of Kallmann syndrome; it is not seen in other cases of HH. Approximately 50% of HH cases occur with anosmia and can be termed as Kallmann syndrome.

- Cleft palate, cleft lip or other midline cranio-facial defects.
- Neural hearing impairment
- Absence of one of the kidneys (unilateral renal agenesis)
- Skeletal defects including split hand/foot (ectrodactyly), shortened middle finger (metacarpal) or scoliosis
- Manual synkinesis (mirror movements of hands). Missing teeth (hypodontia)
- Poor balance or coordination due to cerebral ataxia.
- Eye defects such as coloboma or ptosis.
- Increased incidence of color-blindness.⁽⁴⁾



PATHOPHYSIOLOGY

The underlying cause of Kallmann syndrome or other forms of hypogonadotropic hypogonadism is a failure in the correct action of the hypothalamic hormone GnRH. The term isolated GnRH deficiency (IGD) has increasingly been used to describe this group of conditions as it highlights the primary cause of these conditions and distinguishes them from other conditions such as Klinefelter syndrome or Turner syndrome which share some similar symptoms but have a different etiology. The term hypogonadism describes a low level of circulating sex hormones; testosterone in males and oestrogen and progesterone in females. Hypogonadism can occur through a number of different mechanisms. The use of the term hypogonadotropic relates to the fact that the hypogonadism found in HH is caused by a disruption in the production of the gonadotropin hormones normally released by the anterior pituitary gland known as luteinising hormone (LH) and follicle stimulating hormone (FSH). Failure in GnRH activity can otherwise be due to the absence of the GnRH releasing neurons inside the hypothalamus. HH can occur as an isolated condition with just the LH and FSH production being affected or it can occur in combined pituitary deficiency conditions. ⁽⁵⁾

In the first 10 weeks of normal embryonic development, the GnRH releasing neurons migrate from their original source in the nasal region and end up inside the hypothalamus. These neurons originate in an area of the developing head, the olfactory placode, that will give rise to the olfactory epithelium; they then pass through the cribriform plate, along with the fibres of the olfactory nerves, and into the rostral forebrain. From there they migrate to what will become the hypothalamus. Any problems with the development of the olfactory nerve fibres will prevent the progression of the GnRH releasing neurons towards the brain. ⁽⁶⁾

DIAGNOSIS

Diagnosing KS and other forms of CHH is complicated by the difficulties in distinguishing between a normal constitutional delay of puberty or a case of KS/CHH. The diagnosis is often one of exclusion found during the workup of delayed puberty. ⁽⁶⁾

In males, the use of age appropriate levels of testosterone can help to distinguish between a case of KS/CHH from a case of delayed puberty. If no puberty is apparent, especially no testicular development, then a review by a reproductive endocrinologist may be appropriate. If puberty is not apparent by the age of 16 then the person should be referred for endocrinological review. Post natal diagnosis of KS/CHH before the age of 6 months is sometimes possible as the normal post natal hormonal surge of gonadotropins along with testosterone or oestrogen is absent in babies with KS/CHH. This lack of detectable hormones in the blood can be used as a diagnostic indicator, especially in male infants. ⁽⁷⁾

In females, diagnosis is sometimes further delayed as other causes of amenorrhoea normally have to be investigated first before a case of KS/CHH is considered. ⁽⁷⁾

Diagnosis of KS/CHH normal involves a range of clinical, biochemical and radiological tests to exclude other conditions that can cause similar symptoms. ⁽⁷⁾

Clinical tests

Comparing height to standard growth charts.

Determining the Tanner stage of sexual development. (Males with KS/CHH are normally at stage I or II with genitalia, females at stage I with breast development and both males and females at stage III with pubic hair development).

Checking for micropenis and undescended testes (cryptorchidism) in males.

Measuring testicular volume.

Checking for breast development and age at menarche in females.

Checking sense of smell using odorant panel or University of Pennsylvania Smell Identification Test (UPSIT)

Checking for hearing impairment.

Checking for missing teeth or presence of cleft lip and/or cleft palate.

Checking for pigmentation of skin and hair.

Checking for mirror movements of the hands or signs of neurodevelopmental delay. ⁽⁸⁾

Lab tests

Early morning hormonal testing including FSH, LH, testosterone, oestrogen and prolactin.

GnRH and/or hCG stimulation test to determine activity of hypothalamus and pituitary.

Sperm test

Liver function, renal function and inflammation marker testing.

Karyotype to check for chromosomal abnormalities. ⁽⁸⁾

Medical imaging

Performing wrist x-ray to determine bone age.

Brain MRI to rule out any structural abnormalities in the hypothalamus or pituitary and to check for presence of olfactory bulbs.

Ultrasound of kidneys to rule out unilateral renal agenesis.

Bone density scan (DXA) to check for osteoporosis or osteopenia. ⁽⁸⁾



TREATMENT

For both males and females, the initial aim for treatment is the development of the secondary sexual characteristics normally seen at puberty. Once this has been achieved, continued hormone replacement therapy is required for both males and females to maintain sexual function, bone health, libido and general wellbeing. In males, testosterone replacement therapy is required for the maintenance of normal muscle mass.⁽⁹⁾

Early treatment is sometimes required for male infants with suspected KS/CHH to correct undescended testes and micropenis if present with the use of surgery or gonadotropin or DHT treatment. Females with KS/CHH normally do not require any treatment before adolescence. Currently, no treatments exist for the lack of sense of smell, mirror movement of the hands or the absence of one kidney.⁽⁹⁾

Treatment for both males and females with KS/CHH normally consists of one of three options which can be used for both hormone replacement therapy and/or fertility treatment.

Sex hormone replacement (testosterone or oestrogen & progesterone).

Gonadotropin therapy (medications that replicate the activity of FSH and LH).

GnRH pulsatile therapy.⁽¹⁰⁾

PROGNOSIS

Reversal of symptoms has been reported in between 10% to 22% of cases. Reversal cases have been seen in both KS and normosmic CHH but appear to be less common in cases of KS (where the sense of smell is also affected). Reversal is not always permanent and the precise genetic causes are not yet fully understood.⁽⁹⁾

REFERENCES

1. "Kallmann syndrome". Genetics Home Reference. US Library of Medicine. National Institutes for Health. Genetic and Rare Diseases Information. June 26, 2016. Retrieved December 17, 2017.
2. Balasubramanian R, Crowley WF Jr (2017). "Isolated Gonadotropin-Releasing Hormone (GnRH) Deficiency". SourceGeneReviews. PMID 20301509.
3. Boehm U, Bouloux PM, Dattani MT, de Roux N, Dodé C, Dunkel L, Dwyer AA, Giacobini P, Hardelin JP, Juul A, Maghnie M, Pitteloud N, Prevot V, Raivio T, Tena-Sempere M, Quinton R, Young J (September 2015). "Expert consensus document: European Consensus Statement on congenital hypogonadotropic hypogonadism--pathogenesis, diagnosis and treatment". *Nature Reviews. Endocrinology*. 11 (9): 547–64. doi:10.1038/nrendo.2015.112. PMID 26194704.
4. Dunkel L, Quinton R (June 2014). "Transition in endocrinology: induction of puberty". *European Journal of Endocrinology*. 170 (6): R229–39. doi:10.1530/EJE-13-0894. PMID 24836550.
5. Lima Amato LG, Latronico AC, Gontijo Silveira LF (June 2017). "Molecular and Genetic Aspects of Congenital Isolated Hypogonadotropic Hypogonadism". *Endocrinology and Metabolism Clinics of North America*. 46 (2): 283–303. doi:10.1016/j.ecl.2017.01.010. PMID 28476224.
6. Laitinen EM, Vaaralahti K, Tommiska J, Eklund E, Tervaniemi M, Valanne L, Raivio T (June 2011). "Incidence, phenotypic features and molecular genetics of Kallmann syndrome in Finland". *Orphanet Journal of Rare Diseases*. 6 (Jun 17): 41. doi:10.1186/1750-1172-6-41. PMC 3143089. PMID 21682876.
7. Kallmann FJ, Schönfeld WA, Barrera SE (1943–1944). "The genetic aspects of primary eunuchoidism". *Am J Ment Defic*. 48: 203–236. synd/2549 at Who Named It?
8. Maestre de San Juan, Aureliano (1856). "Teratología: falta total de los nervios olfatorios con anosmia en un individuo en quien existia una atrofia congenita de los testiculos y miembro viril". *El Siglo Médico*. 3: 211–221.
9. Kim SH (December 2015). "Congenital Hypogonadotropic Hypogonadism and Kallmann Syndrome: Past, Present, and Future". *Endocrinology and Metabolism*. 30 (4): 456–66.



PROLONGED GRIEF DISORDER

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INTRODUCTION: PGD is a reaction to loss in which individuals experience yearning, emotional numbness, feelings of detachment from others and disengagement from their environment, loss of meaning and purpose, feeling “stuck” in their grief, bereaved survivors feel unsure of who they are and/or feel like a part of them is missing; they feel unwhole or incomplete, individuals suffering from PGD experience difficulty accepting the death and protest the reality of the loss, PGD uniquely includes “separation distress” (yearning and pining for the deceased), which is not seen in other mental disorders, PGD has been empirically distinguished from depressive and anxiety disorders.

Grief is a natural response to the loss of a loved one. For most people, the symptoms of grief begin to decrease over time. However, for a small group of people, the feeling of intense grief persists, and the symptoms are severe enough to cause problems and stop them from continuing with their lives. Prolonged grief disorder is characterized by this intense and persistent grief that causes problems and interferes with daily life.

PROLONGED GRIEF DISORDER ADDED IN ICD 11 & DSM 5 by APA

Following a proposal by an international work group, prolonged grief disorder (PGD) was introduced in the 11th edition of the International Classification of Diseases (ICD-11) in 2018. Americans have faced several disasters that have caused death and suffering, such as COVID-19, the wind-down in Afghanistan, floods, fires, hurricanes and gun violence. While many Americans are mourning, some may experience prolonged grief disorder, which is characterized by incapacitating feelings of grief. Prolonged grief disorder was recently added to the Diagnostic and Statistical Manual of Mental Disorders (DSM), a volume published by the American Psychiatric Association (APA) that defines and classifies mental disorders. It can happen when someone close to the bereaved person has died within at least 6 months for children and adolescents, or within at least 12 months for adults. In prolonged grief disorder, the bereaved individual may experience intense longings for the deceased or preoccupation with thoughts of the deceased, or in children and adolescents, with the circumstances around the death. These grief reactions occur most of the day, nearly every day for at least a month. The individual experiences clinically significant distress or impairment in social, occupational, or other important areas of functioning.

CAUSES

- Factors that may contribute to prolonged grief reactions are maladaptive thoughts (e.g., blame), avoidance behaviors, inability to manage painful emotions, differences in health and social status, and lack of social support that interferes with adaptation to loss.
- Although much research is improving the understanding of grief and associated psychopathology, the predictors and etiology of these diverse outcomes remain insufficiently understood. Some studied risk factors for development of prolonged grief include demographic characteristics, preexisting psychiatric conditions, nature of the death, and inadequate social support.
- Demographic risk factors include female gender, older age, and lower socioeconomic status. Prolonged grief prevalence is also higher among individuals with a history of a mood disorder (e.g., bipolar disorder, major depression) as well as those who experienced childhood adversity. Furthermore, depression that is present in early bereavement may increase risk of developing prolonged grief.
- Those bereaved by sudden losses (e.g., suicide, homicide, or accident) also may be more likely to develop prolonged grief conditions. In addition, bereaved caregivers may have unique risk factors; development of prolonged grief in this population is predicted by severe preloss grief and depressive symptoms, being a partner of the deceased, and education level.

SYMPTOMS

- Identity disruption (such as feeling as though part of oneself has died).
- Marked sense of disbelief about the death.
- Avoidance of reminders that the person is dead.
- Intense emotional pain (such as anger, bitterness, sorrow) related to the death.
- Difficulty with reintegration (such as problems engaging with friends, pursuing interests, planning for the future).
- Emotional numbness (absence or marked reduction of emotional experience).
- Feeling that life is meaningless.
- Intense loneliness (feeling alone or detached from others).



DIAGNOSTIC CRITERIA

1. **Event:** Bereavement (loss of a significant other)
2. **Separation Distress:** The bereaved person experiences yearning (e.g., craving, pining, or longing for the deceased; physical or emotional suffering as a result of the desired, but unfulfilled, reunion with the deceased) daily or to a disabling degree
3. **Cognitive, emotional, and behavioral symptoms:** The bereaved person must have **five (or more)** of the following symptoms experienced daily or to a disabling degree:
 - Confusion about one's role in life or diminished sense of self (i.e., feeling that a part of oneself has died)
 - Difficulty accepting the loss
 - Avoidance of reminders of the reality of the loss
 - Inability to trust others since the loss
 - Bitterness or anger related to the loss
 - Difficulty moving on with life (e.g., making new friends, pursuing interests)
 - Numbness (absence of emotion) since the loss
 - Feeling that life is unfulfilling, empty, or meaningless since the loss
 - Feeling stunned, dazed or shocked by the loss
4. **Timing:** Diagnosis should not be made until at least six months have elapsed since the death.
5. **Impairment:** The disturbance causes clinically significant impairment in social, occupational, and other important areas of functioning (e.g., domestic responsibilities).
6. **Relation to other mental disorders:** The disturbance is not better accounted for by Major Depressive Disorder, Generalized Anxiety Disorder, or posttraumatic stress disorder

TREATMENT:

For most people, grief-related symptoms following the death of a loved one decrease over time and do not impact their everyday functioning. Although feelings and symptoms of grief may sometimes increase at different points in time, they do not usually require mental health treatment. However, for people who develop the more intense, ongoing symptoms of prolonged grief disorder, evidence-based treatments are available. Treatments using elements of **cognitive-behavioral therapy (CBT)** have been found to be effective in reducing symptoms.

One type of treatment, complicated grief treatment, incorporates components of CBT and other approaches to help adapt to the loss. It focuses on both accepting the reality of the loss and restoration—working toward goals and a sense of satisfaction in a world without the loved one.

- CBT can also be helpful in addressing symptoms that occur along with prolonged grief disorder, such as sleep problems.

- Research has shown that CBT for insomnia is effective in improving sleep. Research also suggests that CBT can be effective with children and adolescents experiencing symptoms of prolonged grief.

- Bereavement support groups can also provide a useful source of social connection and support. They can help people feel less alone, thus help avoid the isolation that could increase the risk for prolonged grief disorder. There are currently no medications to treat specific symptoms of grief.

•REFERENCES

1. <https://www.psychiatry.org/patients-families/prolonged-grief-disorder>
2. <https://www.webmd.com/mental-health/prolonged-grief-disorder>
3. https://scholar.google.co.in/scholar?q=prolonged+grief+disorder&hl=en&as_sdt=0&as_vis=1&oi=scholar

SUICIDE: A PSYCHIATRIC EMERGENCY

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INTRODUCTION

“Suicide is the act of deliberately killing oneself.”

According to WHO, Suicide is defined as the intentional taking of one's life in a culturally non-endorsed manner. The Attempted suicide is an unsuccessful suicidal act with a nonfatal outcome.

One of the commonest psychiatric emergencies. Commonest cause of death among psychiatric patients.

EPIDIOMOLOGY

Majority of suicides were reported in Maharashtra (18,916), followed by 13,493 in Tamil Nadu, 12,665 in West Bengal, 12,457 in Madhya Pradesh and 11,288 in Karnataka, accounting for 13.6 per cent, 9.7 per cent, 9.1 per cent, 9 per cent and 8.1 per cent of total such deaths, respectively.

These five states together accounted for 49.5 per cent of the total suicides reported in the country and the rest 50.5 per cent suicides were reported in the remaining 24 states and 7 UTs, the data showed.

Maximum cases of mass/family suicide were reported from Tamil Nadu (16) followed by Andhra Pradesh (14), Kerala (11), Punjab (9) and Rajasthan (7), the NCRB data showed.

In terms of education, 12.6 per cent victims of suicide were illiterate, 16.3 per cent up to primary level, 19.6 per cent up to middle level and 23.3 per cent up to matric level.

Only 3.7 per cent of total suicide victims were graduates and above, it showed.

The World Health Organization (WHO) states that suicide is a serious public “health problem” and is “preventable” with timely, evidence-based and often low-cost interventions.

TYPES

1. Hanging
2. Jumping in front of running vehicle or train
3. Jumping from height (above 10 meters eg. From fourth floor)
4. Consuming pills (overdosing)
5. Poisoning
6. Suffocation
7. Burning
8. Drowning
9. Self injury

AETIOLOGY

1. Psychiatric disorders

- Major depression
- Schizophrenia
- Drug or alcohol abuse
- Dementia
- Delirium
- Personality disorder

2. Physical disorders

Chronic or incurable physical disorders like



**CLINICAL MANIFESTATION****Psychological symptoms**

- Feeling or appearing to feel trapped or hopeless.
- Feeling intolerable emotional pain.
- Being preoccupied with violence, dying, or death.
- Having mood shifts, either happy or sad.
- Talking about revenge, guilt, or shame.
- Experiencing agitation or a heightened state of anxiety.
- Experiencing changes in personality, routine, or sleep patterns.

Physical symptoms

- Increasing the use of drugs or alcohol.
- Engaging in risky behavior, such as driving carelessly or taking drugs.
- Getting their affairs in order and giving things away.
- Getting hold of a gun or substances that could end a life.
- Experiencing depression, panic attacks, or impaired concentration.
- Isolating themselves.
- Talking about being a burden to others.
- Experiencing psychomotor agitation, such as pacing or wringing the hands.
- Experiencing a loss of enjoyment.
- Goodbye to others as though it were the last time.
- Experiencing a loss of enjoyment in previously pleasurable activities, such as eating, exercise, social interaction, or sex.

MEDICAL MANAGEMENT**Mood stabilizer**

Lithium (in case when patient is very depressed, bipolar mood disorder)
(300 to 450 mg)

Anti depressants

Sertraline (25 mg/ day)

Citalopram (20 mg /day)

Anti psychotic medications

Clozapine (atypical antipsychotic)

Quetiapine (50 mg /day)

Olanzapine (10 mg /day)

- Antianxiety drugs

Lorazepam (2mg /day)

PSYCHOTHERAPY

Cognitive behavior therapy

Family therapy

Group therapy

Problem solving therapy

Counselling and guidance

NURSING MANAGEMENT

- Be aware of the warning signs.
- Monitor the patients safety needs.
- Take all suicidal threats or attempts seriously.
- Search for toxic agents such as alcohol or drugs.
- Do not leave the drug tray within the reach of patient.
- If patient is in poisoning, immediately give stomach wash.
- Make sure that daily medication is swallowed.
- Remove straps and clothes such as belts.
- Patient should be never left alone.
- Structure and stay with the patient.



CONGESTIVE HEPATOPATHY

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Introduction: Congestive hepatopathy refers to hepatic manifestations attributable to passive hepatic congestion, as occurs in patients with right-sided heart failure. Passive congestion often coexists with reduced cardiac output, making their relative contributions to hepatic injury intertwined.

Definition: Congestive hepatopathy describes the manifestations of chronic, passive congestion of the liver in the setting of heart failure or other cardiac defects that result in elevation of the central venous pressure.

Signs and symptoms: Signs and symptoms depend largely upon the primary lesions giving rise to the condition. In addition to the heart or lung symptoms, there will be a sense of fullness and tenderness in the right hypochondriac region. Gastrointestinal catarrh is usually present, and vomiting of blood may occur. There is usually more or less jaundice. Owing to portal obstruction, ascites occurs, followed later by generalised oedema. The stools are light or clay-colored, and the urine is colored by bile. On palpation, the liver is found enlarged and tender, sometimes extending several inches below the costal margin of the ribs.

Pathophysiology: Increased pressure in the sublobular branches of the hepatic veins causes an engorgement of venous blood, and is most frequently due to chronic cardiac lesions, especially those affecting the right heart (e.g., right-sided heart failure), the blood being dammed back in the inferior vena cava and hepatic veins. Central regions of the hepatic lobules are red-brown and stand out against the non-congested, tan-coloured liver. Centrilobular necrosis occurs.

Macroscopically, the liver has a pale and spotty appearance in affected areas, as stasis of the blood causes pericentral hepatocytes (liver cells surrounding the central venule of the liver) to become deoxygenated compared to the relatively better-oxygenated periportal hepatocytes adjacent to the hepatic arterioles. This retardation of the blood also occurs in lung lesions, such as chronic interstitial pneumonia, pleural effusions, and intrathoracic tumors.

Diagnosis: It is diagnosed with laboratory testing, including liver function tests, and radiology imaging, including ultrasounds.

Management: Treatment is directed largely to removing the cause, or, where that is impossible, to modifying effects of the heart failure. Thus, therapy aimed at improving right heart function will also improve congestive hepatopathy. True nutmeg liver is usually secondary to left-sided heart failure, causing congestive right heart failure, so treatment options are limited.

Treatments for heart failure include medications, an intra-aortic balloon pump, a ventricular assist device, heart valve replacements, extracorporeal membrane oxygenation (if the heart failure worsens suddenly and especially if an infection was the cause), an artificial heart, or a heart transplant (from a deceased human donor, or from a pig). Some patients may need a liver transplant; an artificial liver can be used for a short period of time (about two weeks or so) as a bridge to a transplant, or until the liver recovers.

Reference:-

1. Giallourakis CC, Rosenberg PM, Friedman LS (2002). "The liver in heart failure". Clin Liver Dis. 6(4): 947-67, viii-ix. doi:10.1016/S1089-3261(02)00056-9. PMID 12516201
2. Kumar, Vinay; Abbas, Abul K.; Aster, Jon C. (2021). Robbins & Cotran pathologic basis of disease James A. Perkins (illustrator) (Tenth ed.). Philadelphia, PA. ISBN 978-0-323- 53113-9. OCLC 1191840836
3. Alvarez, Alicia M.; Mukherjee, Debabrata (2011). "Liver Abnormalities in Cardiac Diseases and Heart Failure". The International Journal of Angiology. 20 (3): 135-142. doi:10.1055/s-0031- 1284434 PMC 3331650. PMID 22942628
4. Morales A, Hirsch M, Schneider D, González G. Congestive hepatopathy: the role of the radiologist in the diagnosis. <https://doi.org/10.5152/dir.2020.19673>
5. ^ "Congestive Hepatopathy - Hepatic and Biliary Disorders" Merck Manuals Professional Edition. Retrieved 7 January 2020.

PROCRASTINATION - PUTTING OFF TASKS WE DON'T ENJOY IS COMMON, DESPITE THE CONSEQUENCES

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Procrastination is the act of delaying or putting off tasks until the last minute, or past their deadline. Some researchers define procrastination as a "form of self-regulation failure characterized by the irrational delay of tasks despite potentially negative consequences."

According to Joseph Ferrari, a professor of psychology at DePaul University in Chicago and author of "Still Procrastinating: The No Regret Guide to Getting It Done," around 20% of U.S. adults are chronic procrastinators.

No matter how well-organized and committed you are, chances are that you have found yourself frittering away hours on trivial pursuits (watching TV, updating your Facebook status, shopping online) when you should have been spending that time on work or school-related projects.

Whether you're putting off finishing a project for work, avoiding homework assignments, or ignoring household chores, procrastination can have a major impact on your job, your grades, and your life.

CAUSES

Remember that time that you thought you had a week left to finish a project that was really due the next day? How about the time you decided not to clean up your apartment because you "didn't feel like doing it right now?"

We often assume that projects won't take as long to finish as they really will, which can lead to a false sense of security when we believe that we still have plenty of time to complete these tasks.

One of the biggest factors contributing to procrastination is the notion that we have to feel inspired or motivated to work on a task at a particular moment.

The reality is that if you wait until you're in the right frame of mind to do certain tasks (especially undesirable ones), you will probably find that the right time simply never comes along and the task never gets completed.

WHY DO YOU PROCRASTINATE?

We often come up with a number of excuses or rationalizations to justify our behavior. According to researchers, there are 15 key reasons why people say they procrastinate:

- Not knowing what needs to be done.
- Not knowing how to do something.
- Not wanting to do something.
- Not caring if it gets done or not.
- Not caring when something gets done.
- Not feeling in the mood to do it.
- Being in the habit of waiting until the last minute.
- Believing that you work better under pressure.
- Thinking that you can finish it at the last minute.
- Lacking the initiative to get started.
- Forgetting
- Blaming sickness or poor health.
- Waiting for the right moment.
- Needing time to think about the task.
- Delaying one task in favor of working on another.



TYPES OF PROCRASTINATION

Some researchers classify two types of procrastinators: passive and active procrastinators.

- Passive procrastinators: Delay the task because they have trouble making decisions and acting on them
- Active procrastinators: Delay the task purposefully because working under pressure allows them to "feel challenged and motivated"



Others define the types of procrastinators based on different behavioral styles of procrastination, including:

- Perfectionist: Puts off tasks out of the fear of not being able to complete a task perfectly
- Dreamer: Puts off tasks because they are not good at paying attention to detail
- Defier: Doesn't believe someone should dictate their time schedule
- Worrier: Puts off tasks out of fear of change or leaving the comfort of "the known"
- Crisis-maker: Puts off tasks because they like working under pressure
- Overdoer: Takes on too much and struggles with finding time to start and complete task.

THE NEGATIVE IMPACT OF PROCRASTINATION

It is only in cases where procrastination becomes chronic and begins to have a serious impact on a person's daily life that it becomes a more serious issue. In such instances, it's not just a matter of having poor time management skills, it's a major part of their lifestyle.

Perhaps they pay their bills late, don't start work on big projects until the night before the deadline, delay gift shopping until the day before a birthday, and even file their income tax returns late.

Unfortunately, this procrastination can have a serious impact on a number of life areas, including a person's mental health and social, professional, and financial well-being:

- Higher levels of stress and illness
- Increased burden placed on social relationships
- Resentment from friends, family, co-workers, and fellow students
- Consequences of delinquent bills and income tax returns

HOW TO OVERCOME PROCRASTINATION

You might find yourself wondering, How can I stop procrastinating?

Fortunately, there are a number of different things you can do to fight procrastination and start getting things done on time. Consider these your procrastination exercises:

Make a to-do list: To help keep you on track, consider placing a due date next to each item.

Take baby steps: Break down the items on your list into small, manageable steps so that your tasks don't seem so overwhelming.

Recognize the warning signs: Pay attention to any thoughts of procrastination and do your best to resist the urge. If you begin to think about procrastinating, force yourself to spend a few minutes working on your task.

Eliminate distraction: Ask yourself what pulls your attention away the most—whether it's Instagram, Facebook updates, or the local news—and turn off those sources of distraction.

Pat yourself on the back: When you finish an item on your to-do list on time, congratulate yourself and reward yourself by indulging in something you find fun.

REFERENCES

1. <https://www.verywellmind.com/the-psychology-of-procrastination-2795944>
2. <https://jamesclear.com/procrastination>
3. <https://procrastination.com/what-is-procrastination>
4. <https://www.nytimes.com/2019/03/25/smarter-living/why-you-procrastinate-it-has-nothing-to-do-with-self-control.html>
5. <https://solvingprocrastination.com/procrastination/>

SOCIAL MEDIA AND MENTAL HEALTH

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The role social media plays in mental health

Human beings are social creatures. We need the companionship of others to thrive in life, and the strength of our connections has a huge impact on our mental health and happiness. Being socially connected to others can ease stress, anxiety, and depression, boost self-worth, provide comfort and joy, prevent loneliness, and even add years to your life. On the flip side, lacking strong social connections can pose a serious risk to your mental and emotional health.

In today's world, many of us rely on social media platforms such as Facebook, Twitter, Snapchat, YouTube, and Instagram to find and connect with each other. While each has its benefits, it's important to remember that social media can never be a replacement for real-world human connection. It requires in-person contact with others to trigger the hormones that alleviate stress and make you feel happier, healthier, and more positive. Ironically for a technology that's designed to bring people closer together, spending too much time engaging with social media can actually make you feel more lonely and isolated—and exacerbate mental health problems such as anxiety and depression.

The positive aspects of social media:

Social media enables you to:

1. Communicate and stay up to date with family and friends around the world.
2. Find new friends and communities; network with other people who share similar interests or ambitions. Join or promote worthwhile causes; raise awareness on important issues.
3. Seek or offer emotional support during tough times.
4. Find vital social connection if you live in a remote area, for example, or have limited independence, social anxiety.

The negative aspects of social media:

1. Inadequacy about your life or appearance.
2. Isolation.
3. Depression and anxiety.
4. Self-absorption



What's driving your social media use?

Social media platforms are designed to snare your attention, keep you online, and have you repeatedly checking your screen for updates. It's how the companies make money. But, much like a gambling compulsion or an addiction to nicotine, alcohol, or drugs, social media use can create psychological cravings. When you receive a like, a share, or a favorable reaction to a post, it can trigger the release of dopamine in the brain, the same "reward" chemical that follows winning on a slot machine, taking a bite of chocolate, or lighting up a cigarette, for example. The more you're rewarded, the more time you want to spend on social media, even if it becomes detrimental to other aspects of your life.

Signs that social media is impacting your mental health:

1. **Spending more time on social media than with real world friends:-** Using social media has become a substitute for a lot of your offline social interaction. Even if you're out with friends, you still feel the need to constantly check social media, often driven by feelings that others may be having more fun than you.
2. **Comparing yourself unfavorably with others on social media:-** You have low self-esteem or negative body image. You may even have patterns of disordered eating.
3. **Experiencing cyber bullying:-** Or you worry that you have no control over the things people post about you.
4. **Being distracted at school or work:-** You feel pressure to post regular content about yourself, get comments or likes on your posts, or respond quickly and enthusiastically to friends' posts.
5. **Having no time for self-reflection:-** Every spare moment is filled by engaging with social media, leaving you little or no time for reflecting on who you are, what you think, or why you act the way that you do—the things that allow you to grow as person.
6. **Suffering from sleep problems.**

How to modify social media use to improve mental health:

1. Use an app to track how much time you spend on social media each day. Then set a goal for how much you want to reduce it by.
2. Turn off your phone at certain times of the day, such as when you're driving, in a meeting, at the gym, having dinner, spending time with offline friends, or playing with your kids. Don't take your phone with you to the bathroom.
3. Don't bring your phone or tablet to bed. Turn devices off and leave them in another room overnight to charge
4. Are you using social media as a substitute for real life? Is there a healthier substitute for your social media use? If you're lonely, for example, invite a friend out for coffee instead. Feeling depressed? Take a walk or go to the gym. Bored? Take up a new hobby.
5. Take time for reflection. Try keeping a gratitude journal or using a gratitude app. Keep track of all the great memories and positives in your life—as well as those things and people you'd miss if they were suddenly absent from your life. If you're more prone to venting or negative posts, you can even express your gratitude on social media—although you may benefit more from private reflection that isn't subject to the scrutiny of others.
- P6. Practice mindfulness. Comparing yourself unfavorably to others keeps you dwelling on life's disappointments and frustrations. Instead of being fully engaged in the present, you're focused on the "what ifs" and the "if onlys" that prevent you from having a life that matches those you see on social media. By practicing mindfulness, you can learn to live more in the present moment, lessen the impact of FOMO, and improve your overall mental wellbeing.
7. Volunteer. Just as human beings are hard-wired to seek social connection, we're also hard-wired to give to others. Helping other people or animals not only enriches your community and benefits a cause that's important to you, but it also makes you feel happier and more grateful.

Helping a teen with unhealthy social media use:

1. Parental control apps can help limit your child's data usage or restrict their phone use to certain times of the day.
2. Enforce "social media" breaks. For example, you could ban social media until your child has completed their homework in the evening, not allow phones at the dinner table or in their bedroom, and plan family activities that preclude the use of phones or other devices.
3. Encourage exercise and offline interests. Get away from social media by encouraging them to pursue physical activities and hobbies that involve real-world interaction. Exercise is great for relieving anxiety and stress, boosting self-esteem, and improving mood—and is something you can do as a family. The more engaged your child is offline, the less their mood and sense of self-worth will be dependent on how many friends, likes, or shares they have on social media.



References:

1. Hunt, Melissa G., Rachel Marx, Courtney Lipson, and Jordyn Young. "No More FOMO: Limiting Social Media Decreases Loneliness and Depression." *Journal of Social and Clinical Psychology* 37, no. 10 (December 2018): 751–68.
2. Riehm, Kira E., Kenneth A. Feder, Kayla N. Tormohlen, Rosa M. Crum, Andrea S. Young, Kerry M. Green, Lauren R. Pacek, Lareina N. La Flair, and Ramin Mojtabai. "Associations Between Time Spent Using Social Media and Internalizing and Externalizing Problems Among US Youth." *JAMA Psychiatry* 76, no. 12 (December 1, 2019): 1266.
3. Anderson, Monica. (2018, September 27). A majority of teens have been the target of cyberbullying, with name-calling and rumor-spreading being the most common forms of harassment. Pew Research Center: Internet, Science & Tech.
4. Kross, Ethan, Philippe Verduyn, Emre Demiralp, Jiyoung Park, David Seungjae Lee, Natalie Lin, Holly Shablack, John Jonides, and Oscar Ybarra. "Facebook Use Predicts Declines in Subjective Well-Being in Young Adults." *PLOS ONE* 8, no. 8 (August 14, 2013).



SUPERIORITY COMPLEX

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What is superiority complex?

A superiority complex is when someone acts better than others to escape feelings of insecurity.

Someone who behaves like they're better than others may have a superiority complex. However, though they may tend to exaggerate their accomplishments and abilities, they may in fact be doing so in order to overcompensate for feelings of inferiority.

Having a superiority complex is quite common, according to Aimee Daramus, PsyD, a licensed clinical psychologist and author of "Understanding Bipolar Disorder." Daramus. In fact, according to a 2013 study, most people are biased toward themselves and would rate themselves as superior to the average person.

Some people have a superiority complex about one issue, such as their appearance or their finances; whereas for others, trying to appear better than others becomes their most dominant personality trait.

— Aimee Daramus, PsyD

This article explores the characteristics, effects, potential causes, and diagnosis of a superiority complex as well as some coping mechanisms that may be helpful.

Characteristics of a Superiority Complex

These are some of the characteristics of a superiority complex are:

- Making exaggerated claims of one's accomplishments or abilities.
- Constantly comparing themselves with others.
- Overcompensating for real or imagined inadequacies.
- Disregarding others' opinions or contributions and placing excessive value on their own.
- Overreacting to situations that dig deep into their insecurities.
- Dismissing, bullying, or putting down others who may be better at them at something.
- Engaging only in situations where they feel like they're ahead or winning.

For instance, someone with a superiority complex may enjoy playing a game if they're winning, but think that the game is stupid if they're losing. "They may try to shut down the competition, throw shade at the winners, or overreact to losing because it triggers their insecurities and makes them feel stupid."

Effects of a Superiority Complex

These are some of the ways a superiority complex can affect someone's life

Low self-worth: Internally, the person may focus excessively on their flaws and feel like they're less worthwhile as a human being because of it. Overtly, they may project an air of being better than others in order to mask their sense of inferiority.

Relationship difficulties: The person may have a hard time maintaining relationships, except maybe with people who are equally insecure.

Career problems: The person may have career problems if they bluff or fake their way into positions they aren't qualified for. On some level, they may recognize that they're not qualified and feel extremely anxious about it.

Causes of a Superiority Complex

The concept of a superiority complex, and its counterpart, the inferiority complex, was first described by Alfred Adler, an Austrian psychologist who founded the school of thought known as individual psychology.

A 2022 study that reflects on Adler's work, including the superiority complex theory, explains that according to Adler, childhood upbringing and mental health conditions are potential causes of a superiority complex, for the reasons explained below.

Childhood Upbringing

According to Adler, children who were overly pampered when they were young may have gotten used to having everything handed to them and have yet to have the chance to apply themselves and build their confidence and capabilities.

They may feel entitled and think the world revolves around them, which can dampen their creativity, initiative, and courage. However, once they go out into the world and interact with others who are more capable, they may feel inferior. Rather than learning to cooperate with others and adjust, they develop a superiority complex instead as a way to avoid coping with reality.



Mental Health Conditions

According to Adler, people living with mental health conditions may also develop superiority complexes because they may have difficulty coping and become deeply discouraged. This in turn can cause them to develop feelings of inferiority and feel the need to overcompensate.

Diagnosing a Superiority Complex

A superiority complex is not a mental health condition recognized by the American Psychiatric Association's diagnostic manual, the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5).

However, mental healthcare providers who recognize that someone has a superiority complex can work with them to address it by understanding the root cause of their insecurities and developing healthier coping mechanisms.

According to Dr. Daramus, narcissistic personality disorder (NPD) is the closest diagnosis, but it's not exactly the same, because some people with narcissistic personality disorder are insecure and have a superiority complex, but others are narcissists who genuinely believe in their own superiority, which is a different challenge.

Furthermore it's a good idea to check whether patients with a superiority complex also have learning or attention problems, in case they've been struggling because they're neurodivergent and haven't been diagnosed yet.

Coping With a Superiority Complex

If you or a loved one has a superiority complex, these are some coping strategies that may be helpful.

- Avoid exaggerating: Be honest with yourself about your abilities and accomplishments. Practice communicating with others without exaggerating.
- Learn to accept imperfections: It's natural to have flaws and being imperfect doesn't diminish your worth as a human being. Work on accepting your imperfections—and others' too.
- Don't make comparisons: It's important to be able to recognize others' abilities and celebrate their successes without comparing yourself to them or feeling bad about yourself.
- Work on building empathy: Remember that your words and actions can hurt other people. Recognize and acknowledge the hurt you have caused to others. Treat them with kindness and empathy.
- Seek therapy: People with superiority complexes often tend to experience other mental health conditions such as anxiety, perfectionism, or depression, as well as other dysfunctional beliefs about how people with imperfections (in other words, everyone else) should be treated. Therapy can help diagnose and address these issues.

References

1. American Psychological Association. Superiority complex.
2. Yamada M, Uddin LQ, Takahashi H, et al. Superiority illusion arises from resting-state brain networks modulated by dopamine. *Proc Natl Acad Sci USA*. 2013;110(11):4363-4367. doi:10.1073/pnas.1221681110
3. McCluskey MC. Revitalizing Alfred Adler: An echo for equality. *Clin Soc Work J*. 2022;50(4):387-399. doi:10.1007/s10615-021-00793-0



OREM'S THEORY OF SELF CARE DEFICIT

Ms. Vibha Malviya, MSc (N) II year, Chirayu College of Nursing, Bhopal



CASE SCENARIO

Mr. Ramprasad 51yr old male admitted in TB chest ward with fever and bodyache he was apparently alright one month ago since he developed breathlessness, loss of appetite, bodyache and fever, he have no medical history of communicable disease, jaundice, hypertension, diabetes and no surgical history also there is no family history of tuberculosis and his vitals are blood pressure – 110/70mmhg, pulse- 88 beat/min, temperature- 99.1°F he is a farmer, he has a habit of tobacco chewing and cigarette smoking since 30 years.

INTRODUCTION

Dorothea Orem's Self-Care Deficit Theory focuses on each "individual's ability to perform self-care, defined as 'the practice of activities that individuals initiate and perform on their own behalf in maintaining life, health, and well-being.'" The Self-Care or Self-Care Deficit Theory of Nursing is composed of three interrelated theories: (1) the theory of self-care, (2) the self-care deficit theory, and (3) the theory of nursing systems, which is further classified into wholly compensatory, partially compensatory and supportive-educative.

METAPARADIGM CONCEPT

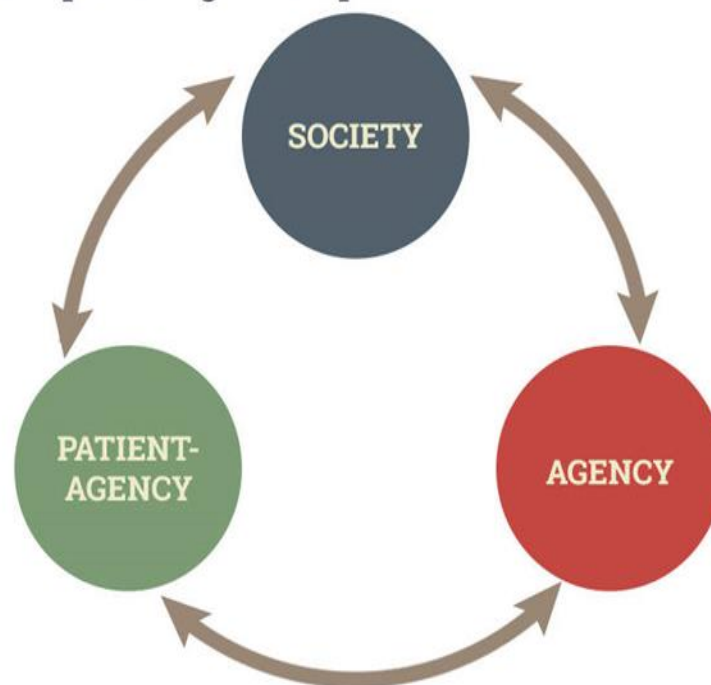
Person: - Mr. Ramprasad is having weakness and difficulty in breathing he is depend on others for doing his work.

Environment: - Mr. Ramprasad belongs to rural area he is a farmer currently he is admitted in the hospital.

Health: - Patient looking weak and dull and his weight is also reduced he is not able to breathe properly, his daily activities is low.

Nursing:- Assess the condition of the patient he is not able to breath properly provide him 2 litre of oxygen and also having fever cold sponging done by the nurse.

Orem's Self-Care Theory: Interrelationship among concepts



nurseslabs



NURSING CARE PLAN

ASSESSMENT	NURSING DIAGNOSIS	PLANNING	IMPLEMENTATION	EVALUATION
Subjective data:- The patient says that his body has warm. Objective data:- Observe that patient having fever.	Altered body temperature related to disease condition as evidence by taking temperature.	<ul style="list-style-type: none"> Assess the vital sign. Provide cold sponging. Provide keep and calm environment. Administer antipyretic medication as prescribed by the doctor 	<ul style="list-style-type: none"> Vital sign checked and recorded. Cold sponging provided. Administered medication. 	Patient temperature has been reduced.
Subjective data:- Patient verbalized that he doesn't have the appetite to eat. Objective data:- Observe that patient looking thin. Weight loss from 54kg to 48 kg Weak and pale looking.	Imbalance nutrition less than body requirement related to loss of appetite as evidence by verbalization of losing appetite being thin and weak.	Short term goal: <ul style="list-style-type: none"> After 8 hours of nursing intervention patient will be able to regain considerable appetite of food. Long term goal: <ul style="list-style-type: none"> Patient will gradually Gain weight after a week of continued good appetite. Promote timely fluid intake. 	<ul style="list-style-type: none"> Promote pleasant relaxing environment including socialization. Promote adequate and timely fluid intake limit fluid 1 hour prior to meal. Provided proper nourishment as body required. 	Patient appetite has improved as evidence by weight gain.
Subjective data:- I am having breathing difficulty verbalized by the patient. Objective data:- Observe that patient having cough and secretion.	Ineffective airway clearance related to thickened mucus secretion.	<ul style="list-style-type: none"> Assess respiratory rate, depth, Pursed lip breathing and inability to speak. Elevate head of the bed. Encourage deep slow or pursed lip breathing. Routinely monitor skin and mucus membrane color. Encourage expectoration sputum; suction when indicated. 	<ul style="list-style-type: none"> Assessed the condition of patient. Head of bed is elevated. Deep slow or pursed lip breathing is encouraged. Monitored skin and mucus membrane color. Encouraged expectoration sputum. 	Patient condition is improved.

CONCLUSION

The theory was developed for encouraging people to overcome their limitations and become independent in caring for themselves and managing their health conditions.

REFERENCES

1. BT Basavanthappa, textbook of nursing theories, 1st edition 2007, published by jaypee brothers. Pg.no: 72-85
2. M E. Doenges, M. Frances moorhouse, textbook of application of nursing process and nursing diagnosis, 4th edition, published by jaypee brothers.
3. L.Juall carpenito, textbook of nursing care plan, 7th edition, published by Wolters Kluwer.



NURSING EDUCATION: THE PAST, PRESENT AND FUTURE

Ms. Sakshi Gangele, B.Sc. (N) IV year, Chirayu College of Nursing



Introduction: Nurses constitute the greatest number of health care workers in the United States (US) and globally increasingly the role they play in meeting societal demands for safe, evidence-informed, quality care is being recognized. Moreover, more evidence is being generated that support the nurse's level of education makes a significant impact on patient outcome. This investigation report states that patient mortality decreases when the number of nurses prepared at the baccalaureate level increased. However, Felberet et al report contrary results when non vs educated nurses are employed in US hospitals except in instances when 'patient to nurse ratios are lower than average'. This education may not be the only factor contributing to patient outcomes.

Nonetheless, despite increasing evidence, debate about what constitutes the most appropriate education for nurse continues in the US and elsewhere. In many countries, nurses continue to be educated by physicians, programmes of study are extremely short, and opportunities for continuing education are limited. In the US, an individual can choose one of three programmes for their initial education in nursing: Hospital- Based, community college or 4- year college or university. The purpose of this article is to provide a brief overview of the evolution of nursing education, describe the current and projected state of nursing education and discuss some pressing challenges that charge to prepare nurses to care for more complex patients situated in ever- changing healthcare systems.

Evolution of nursing education

The Past:-Donahue in her illustrated history of nursing from ancient times, highlights times in which the profession of nursing was either present or noticeably absent. While beyond the scope of this article, one must be cognized of the impact societal changes have had on nursing education is critical to the discussion. Thus issues such as disease, revolutions and women's right have helped drive the need for and education of nurses. Although there are records of men and women nurses during early civilizations, most scholars consider the work done by Florence Nightingale connotes the birth of modern nursing. Her efforts had a profound impact on standards of nursing care and on the education nurses received.

The concept of different levels of educational preparation for nurses continued into the 1950s. During which a 2- year associate degree curriculum was put forth as means of meeting workforce needs. Consequent to World War II in addition to the existing hospital or university based programmes.

The present (2000 forward) While there continues to be many ways by which countries address the initial preparation of nurses all are committed to providing a workforce equipped to care for increasingly complex patients situated in increasingly complex healthcare system. To that end 'national (Institute of medicine '2010: front line care, 2010) and global bodies (department of human Resources for health who 2010) now recognize the need to increase the education level of nurses. In the US the institute of medicine's (IOM).

The future of nursing: leading change, Advancing Health report has a significant impact on how nurse are prepared. Two recommendations are particularly relevant to nursing education. The first that by 2020, 80% of nurses should initially be prepared at the baccalaureate level has galvanized nurse leaders and educators to develop innovative strategies, healthcare organizations are increasing baccalaureate degree, Educators are challenged to expand the capacity of ADN to-master's in nursing programme tracks.



The Future :

The Tom recommendation that nurses should practice to the level of their education, and the recommendation that more nurses need to be prepared at the doctoral level has had a significant impact on how the education of nurses is perceived in the us and else where.

Although nurses in some countries such as the us will continue to have choice. Relative to their initial level of education. More countries will move to the baccalaureate degree as emphasis will be placed on all nurses. Moreover greater emphasis will be placed on all nurses furthering their education, irrespective of their initial level of that facilitate seamless transition from one level to another will be a priority,

Given faculty projections that call for an increased need consequent to faculty retirement, one can anticipate more nurse pursuing a doctoral degree. Having sufficient numbers of both professional practice doctorates (DNP) as well as research doctorates (PhD).

Challenges: Although there have been significant advance in how nurses are educated several –challenges remain .The looming faculty shortage not only threatens the profession's ability to prepare nurses to meet societal healthcare needs , but equally important . It also highlights and increases the need to prepare nurses to assume faculty roles.

The need for creating opportunities for inter professional education will only increase. Faculty will need to make concerted and consistent efforts to structure a variety of formal learning opportunities efforts to structure a variety of formal learning opportunities each member of the care team bring to meeting the needs of patients.

Conclusion: Nursing education has evolved from an apprentice style of education to one that requires an education grounded in liberal arts and calls for the development of critical thinking abilities. The evolution of nursing education has resulted in several approaches to initial preparation as well as the establishment of both master's and doctoral programmers. The creation of doctoral programmers has resulted in the preparation of nurse scientists who continue to make significant contributions to our understanding of the patient experience. The future of nursing education holds great promise.

References:

1. Institute of medicine, the future of nursing leading change, advancing, health, washington DC: The national Academies press 2011.
2. Kerfoot k, Douglas KS. The impact of research on staffing : An interview with linda Aiken – Part 1 nurse Econ 2013;31 :216-53
3. Scheckel M Nursing education Past, present , future in G. Roux and K. Halstead (Eds) .Issues and treands in nursing . Essential knowledge for today and tomorrow, ch.2 burlington MA. Jone & Batlett Learning :2009 P.27-55
4. Rebeats SJ Gold C Faculty roles : Dilemmas for the future of nursing education nurse forum 2013 ; 48:99-105
5. Department of human resources for health world health organization Global standards for the initial education of professional nurses and midwives geneva, Switzerland: world health Drganization (WHO / HRH/ HPN/086) 2009.



ETHICAL AND LEGAL ISSUES

Ms. Vinita Kori, B.Sc. (N) IV year



Introduction: The contribution of nursing to the alleviation of suffering and to protection and promotion and restoration of health is a proud chapter in the history. The image of any organization depends upon the behavior of people who institute it so, there is great obligation on the part of employees to behave in an ethical way at the work place.

This is equally applicable to the nurses who are working in different sectors of health care delivery system. The way nurses behave, reflect the image of that organization today the nurses face a variety of ethical problems than ever before .

Meaning - The word ethics is derived from Greek word "Ethos" which means customs or guiding beliefs.

Definition of Ethics: It can be view as a generic term for several ways of examining the morale of life. **-Beauchamp TL**
Ethics is the study of good conduct, character and motives. **-Potter**

Ethical Principles:

Beauchamp and Childress (2009) development four ethical principles:

- Respect for autonomy
- Beneficence
- Non-Maleficence
- Justice
- Respect for autonomy – Autonomy can be defined as " self with nocontrol undue influence or interference from other.
- Beneficence – This can be defined as " the principle of doing well and providing care to other .
- Non-maleficence - Obligation not to inflict harm on others. Goes hand in hand with beneficence.
- Justice- Simply defined as " equal treatment of equal case. Treating everyone the same.

Rowson (2006) ethical framework F.A.I.R

Fairness

Respect for autonomy

Integrity

Veracity

Fidelity

Ethical Rights of Patient:

Right to Personal Dignity

Right of complain and obtain changes in care

Right to individualized care

Right to assistance towards independence

International Code of nursing ethics

The ICN code of ethics for nurses – An international code of ethics for nurses was first adopted by the international council of nurses in 1953. It has been revised and reaffirmed at various times since, most recently with this review and revisions completed in 2005.

The ICN code – The ICN code of ethics for nurses has four principal elements that outline the standards of ethical conduct.

Elements of the code-

Nurses and people – The nurse primary professional responsibility is to people requiring nursing care.

Nurses and Practice – The nurse carries personal responsibility and accountability for nursing practice and for maintaining competence by continual learning

Nurses and the profession –The nurse assumes the major role in determining and implementing adaptable standards of clinical nursing practice, management, research and education.

Nurses and Co workers – The nurses sustains a co-operative relationship with co-workers in nursing and other fields.

Nurses and society- participate and share responsibility with other citizens and other health professionals.

**INC code of ethics for nurses in India:**

The nurse respects the uniqueness of individual in provision of care.

The individualizes the care considering the care considering the beliefs, values and cultural sensitivity.

Appreciates the place of the individual in provision family and community and facilitates participation of significant other in the care.

Develops and promotes trustful relationship with individuals.

INC code of professional conduct for nurses in India:

Professional responsibility and accountability.

Nursing practice

Communication and interpersonal relationships

Valuing human being

Management

Professional advancement

Types of ethical theories:

Duty oriented ethical theories – A duty oriented ethical theory is a system of ethical thinking having the concept of duty or obligation.

Right oriented ethical theories

Goal oriented ethical theories

Intuitionist ethical theory

Ethical dilemmas: A dilemma is define as a situation requiring a choice between two equally desirable or undesirable alternatives.

Too many patients but scarce resources

Don't resuscitate

Euthanasia

Right of psychiatry patient etc.

Roles and functions' of administration ethical issues:

- He or she is self aware regarding own values and basic belief about the right, duties and goals of human beings.
- Accepts that some ambiguity and uncertainty be a part of all ethical decision – making.
- Demonstrates risk taking in ethical decision making.
- Actively advocates for clients, subordinates and the profession.
- Clearly communicates expected ethical standards of behavior.

Meaning of legal- The word law is derived from an Anglo – Saxon term meaning that which is aid down or fixed.

Definition-Law is a rule of a body of rules of conduct inherent in human nature and essential to or binding upon human society and guide human functions.

Types of law:

- Public law
- Civil law

Importance of law in nursing:

- It protects the patient /Clients against deliberate and inadvertent injury by a nurse
- It protects the nurse also against the suits a if she renders right care.

Legal liability in nursing:

Un international torts – These types of torts are accidents that cause injury to another person or property.

- Negligence
- Malpractice

Intentional Tools – These types of torts are decelerate actions in which the intent is cause injury to a person or property

- Assault
- Battery

Quasi intentional torts – It is usually situations of communication and often a person reputation personal privacy or civil rights

- Defamation
- Fraud

**Legal issues in nursing practices area:**

- Controlled substances – One of the legal issue that might arise for nurse involves the use of controlled substances.
- Patients property – Many of the unconscious patients admitted in emergency their belongings should be listed, checked by two nurses and put in safe keeping
- Caring patients with AIDS – The care of AIDS and HIV patient has legal implication for nurses confidential information must be protected of HIV Patients.
- Living wills and health care surrogates - Living wills are documents instructing physician to hold or withdraw life sustaining procedures whose death is imminent.
- Death and dying – There are many legal issues regarding definition of death.
- Autopsy and organ donation – Legally competent persons are free to donate their bodies or organs for medical use consent forms are available for the purpose.

Important legal safeguard:

- Licensure – Nurse employed for the nursing service required possessing a valid registration certificate issue by respective state nursing council / India Nursing council
- Standards of care – Each institution / hospital need to have the policies and procedures defining the standards of care for the nurses of different levels.
- Standing orders – Nurses are required to execute prescribed orders. In case of emergency or the doctor/medical personnel is not available each nursing service are a should have standing instruction.
- Informed consent – It is a client agreement to allow something to happen.
- Correct identity – All babies born in the hospital are correctly labeled at birth and to ensure that no time they are placed in the wrong cot or handed to the wrong mothers,
- Documentation- Keeping accurate and comprehensive record are essential in any health care facility.
- Drug maintenance – Checking the unlawful use to drug dependence.

Legal responsibilities of nurses:

At administrative and supervisory level -

- Quality control
- Material management
- Disaster management
- Staff management

At operational level-

- Carrying out physicians orders
- Verbal orders
- Do not resuscitate
- Alert for mishap
- Use of safe equipment
- Patient care issues
- Nursing shortage
- Low salaries
- Standard care
- Management issues
- Turnover
- Funding
- Workload
- Employment issues-
- Issues in nurse migration
- Exploitation and discrimination
- Nursing care standards

Conclusion:

Legal aspects of medical practice in Nepal is incredibly under- developed /or completely non-existent.

Some legal provision with respect to criminal investigations are irrelevant out dates and unscientific

Ethical guidelines for all level medical professional are currently inadequate and need to be development urgently.

References:

1. Joseph K Wells, Indian Journal for medical ethics case study, ethical dilemma and resolution a case scenario DOI.
2. Legal and ethical issues in nursing – issues in india prepared by migron rubin M.Sc Nursing.



INSERVICE EDUCATION



Ms. Pooja Chaudary and Ms. Rachna Yadav, B.Sc. (N) IV year, Chirayu College of Nursing, Bhopal

Introduction: Nursing education focuses on education and health care of people about effective way to deliver the health care to patients. It educates nurses about how to administer different medicine, to examine patient and deliver best services to patients. The aim of nursing education is development of the nursing profession.

In-services education is designed for the manpower development of the school system and the educational enterprise as a whole. A programme of instruction or training provided by an agency or institution for its employees. The programme is held in the institution or agency and the employees in a specific area.

Definition: Inservice education is a planned learning experience provided by the employing agency for employees. The need for in services education for nurses can not be underestimated. It is necessity in enhancing work performance and motivation of nurses in the field. Absence of in services education of nurses will retard professional growth of nurses as well as “mooing gaps” Between demand and actual achievement level. Inservice education allows for such activities that may include seminar, workshop, conference, and exhibition etc that are designed to develop and improve employees in an organization.

Principles of in-service education:

A Scientific approach, humanism, democracy, unity, inclusiveness, personalization and through nature. Compliance with state regulation of educational standards.

Goals of in-services education:

- To provide an opportunity to acquire new skill another specialization on the basic of degree programme professional training or vocational experience acquired earlier develops professional knowledge and skill.
- To fulfill the demand of national economy with qualified personal, provide continues development of each specialist professional abilities develop his / her intellectual and overall cultural level.
- To introduce a flexible system of continues education and self education to provide adult continues education.

Organization of in-service education: Organization of course in merely a method and visible channels of communication and decision making and action that will facilitate whatever it is an institution or a less formalized group want to do.

Methods used for in-service education: Ward teaching, Conference, Discussion, Laboratory, Workshop, Seminar, Field trip, Forum and Simulation

Benefits of in-service Education:

- There is no doubt that in-service education will continue to fill the mission lingo created by the changing society between pro services education and nurse's effectiveness in the world of work.
- To increase the exiting knowledge bias of nursing practice in clinical nursing
- To improve and maintain high standard of nursing care to the patients at hospital.

Problems in in-service education:

- Non cooperation of adults
- Problems of social education with workers
- Problems of attendance
- Problem of vocational training
- Problem of equipment
- Problem of social backwardness
- Problem of suitable literature
- Problem of finances

Conclusion and Recommendation:

There is need to have a well planned in service education progarmme with daily defined objective growth and improvement of instruction and leadership skill.

In-service education should be recognized as part of institutional or organizational activity designed.

References:

1. T. Ambu, Text book of management of nursing services and education, third edition, EMMEDSS medical publishers.

BUDGETING IN NURSING ADMINISTRATION

Ms. Pragati Brahmwanshi, B.Sc. (N) IV year



Introduction:

A Nursing budget is a systematic plan that is informed best estimate by nurses administration of nursing revenues and expenses. It projects how revenues will meet expenses and project a return on equity or profit.

Definition:

A forecast of the resources required to deliver the services offered by the organization.

A budget is a financial plan that includes estimated expenses as well as income for a period of time.

Purpose:

- To plan the objectives, programs and activities of nursing services and the fiscal resources to accomplish them.
- To motivate nurse manages and nursing workers through analysis of actual experience.
- To evaluable the performance of nurse administration and mange and increase awareness of the costs.

Principles of Budgeting:

- Flexible
- Synthesis of past, present & future
- Product of joint venture or participation of executive at different level.
- It should be clearly defined
- Form of statistical standard said down in specific numerical form.
- Represent expected revenue as compared with anticipated expenses.
- Facilitate goal achievement.

Importance of Budgeting:

- An essential management tool.
- Budget tell you how much money you need to carry out your activities.
- Budget enables to monitor income and expenditure.
- The budget is basic for financial accountability and transparency.

The steps or the process of budgeting:

- 1st step review past performance
- 2nd step review the organization goals and projection
- 3rd step review of the variances with higher level.
- 4th step actual preparation of the budget.

Various types of Budget

- Capital Budget
- Operating Budget
- Cash Budget
- Personal Budget

Capital Budget

Fund needed for the capital items for the growth.

The decision on capital budgeting is primarily is based on.

Need of patients and existing alternatives.

Effects of additional equipment on income and expenditure.

Availability of funds.

**Operating budget**

It provides an overview of agencies functions by projecting the planned operations usually for the upcoming year. The nurse manager might include personal salaries, employees, benefits, insurance, Medical surgical supplies, offices supplies, rent heat light and housekeeping.

Cash Budget

Cash budget are planned to make adequate fund available as needed and to use any extra fund profitably.

The ensure that the agency has enough but not too much, each on hand during the budgetary period.

Personal Budget

Estimate the cost of direct labor necessary to meet the nursing needs of the estimated patient population. It includes recruitment hiring, assignment, lay off and discharge of personal.

The current staffing patterns nurse of unfilled position and last year report can provide a base.

Role of Nurse Manager:

- The administrator required sufficient fund to support sound program.
- The administrators submit a budget request and a justification for the proposed expenditure.
- Budget is presented to the president
- The budget is reviewed analyzed and modified on the basis of discussion of president and budget committee.
- Once revisions are made, president presents the budget to board of trustee for approval.
- When the budget is approved, it has given authorization to make expenditure and to collect income as indicated in the budget.
- When the budget is adapted, administrative is committed to support the budget.
- Once the budget is approved, it is the responsibility of the administrator to see that expenditure do not exceed the approximates made to the institution.

Summary:

A budget is a financial plan that includes estimated expense as well as income for a period of time.

Fixed or variable either controllable at non controllable.

Fixed expenses do not vary with volume, where navigable expense etc.

References:

1. Textbook of management of nursing services and education, Emmess publication, 3rd edition, page no. 137 – 138.
2. Kaur Sukhbir and Kaur Jagit, Textbook of nursing management of service Jaypee publication Page no:-242-243.

NURSE PRACTITIONERS

Ms. Renuka, B.Sc. (N) IV year



Primary care Nurse Practitioner:

Primary care nurse practitioners are generalists who work in family health clinics or conduct checkups, treat illness, order lab test and prescribe medication for children and adults.

A nurse practitioner is an advanced practice nurse that helps with all aspects of patient care. Including diagnosis, treatments and consultations they may work in both inpatient and outpatient situation and can perform independently or as part of a treatment team generally, nurse practitioners perform the important task of educating patients about preventative care and prescribe treatments. They may also conduct physicals, order test and serve as a patients primary healthcare provider some nurse practitioners are also able to prescribe medications.

Duties and responsibilities:

Although there are common duties and responsibilities of all nurse practitioners they generally vary by specialty to specialties which include primary care, dietetics, geriatrics, oncology and psychiatric care

Role:

The nurse practitioner is a licensed. Independent practitioner who is responsible for managing health problem and coordinating health care for the preparation and postoperative clinical management is conducted in collaboration with other health care those members.

Essential Responsibilities:

Functions independently to perform age appropriate history and physical examinations for complex acute, critical and chronically ill preoperative patients.

Order and interprets diagnostic and therapeutic test elective to patients age specific need.

Prescribes appropriate pharmacologic fragments modalities

Implements intervention to support the present patient to regain or maintain physiologic stability, including but only not limited serving in the first assisting role.

Monitors the effectiveness' of interventions.

Collaborates with multidisciplinary teams within and between health care setting eg, admitting transferring and discharging patients

Collaborates with multidisciplinary team members by making appropriate referrals

Facilitates staff, patients and family decision making by recovering educational tools.

Minimum qualifications:

Graduate of an accredits school of nursing

Graduate of an accredits nurse practitioner program

Current advanced practice registered nurse (APRN) licensure

Current nurse practice certification in specialty Area

Strong computer skill, including word, excel and power point

Eligible for hospital privilege.

References:

1. <https://my.clevelandclinic.org/health/articles/24651-nurse-practitioner>
2. <https://medlineplus.gov/ency/article/001934.htm>



OBSTETRICS AND GYNAECOLOGY INSTRUMENTS

Mr. Abhay Raj and Mr. Sanjay Malviya, B.Sc. (N) III year



1. What is the use of Hodge pessary?

- a) Suturing
- b) To support the uterus
- c) To visualize vagina
- d) To prevent Vaginal Infection

2. Indication for Sims uterine sound:

- a) To retract vagina
- b) To Suture the uterus
- c) To measure the length of uterine cavity
- d) To remove clots

3. Cervical dilator's are used for:

- a) Dilating cervix
- b) To wash cervical cavity
- c) Measure the uterine cavity
- d) Insert IUCD

4. Amnihook is used for which test?

- a) puncture the cyst
- b) puncture the membranes containing amniotic fluid
- c) Rennies test
- d) Webers test

5. Ventouse cup with traction device is used:

- a) to extract the fetal head
- b) to suck the fluid from uterus.
- c) to rotate the fetal head
- d) to pull out the baby out

Note: Please check your answers with the answer keys given at page number 153.

WHO I AM?

Ms. Deepika Bhandari and Ms. Divya Lokhande, B.Sc. (N) III year



1.



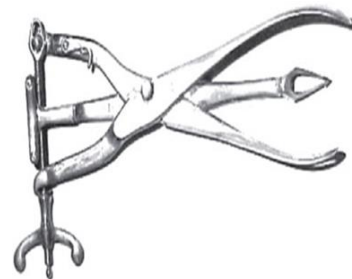
2.



3.



4.



5.



6.



7.



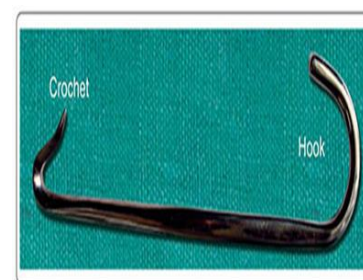
8.



9.



10.



Note: Please check your answers with the answer keys given at page number 153.

GYNAEC OT INSTRUMENTS

Ms. Rituparna, GNM III YEAR



1. It is a horn type instrument, used to listen to the heart rate of a foetus during pregnancy. Tell the name of the instrument?



2. This instrument is used for cutting the umbilical cord.



3. It is also called a 'hobby knife' a sharp bladed instrument used for surgery, anatomical dissection, podiatry and various arts and write its name?



4. Which instrument is used for performing pelvic examination pap smears and examines the cervix?



5. An instrument used to gauge the depth and position of uterine cavity. Tell its name?

6. Write the name of the instrument?



7. It is a stainless steel container to store sterile and clean dressings and useful for holding ointments and medicine. Tell its name?



8. Which instrument is used for introducing a snare around the different part of the foetus at the time of holding the dystocia?



Note: Please check your answers with the answer keys given at page number 153.

FUNCTIONS OF OT INSTRUMENTS

Ms. Nabamita Majhi & Ms. Sapna Nagar, GNM III Year



1. Identify the instrument shown in image.



2. What is another name of Sims speculum?
3. What is the use of artery forceps?
4. What is another name for an artery forceps?
5. What are the different types of artery forceps?
6. What is the use of Sims speculums?
7. What are the different types of Sims speculum?
8. Identify the instrument shown in image.



9. What is the shape of “Hegar dilator”?
10. What is the size of Hegar dilators”?
11. Identify the image show in image.



12. What is the use of “Episiotomy scissors”?
13. What is the length of “Episiotomy scissors” ?
14. What is the length of sponge holding forceps?
15. What is the use of sponge holding forceps?

Note: Please check your answers with the answer keys given at page number 153.



KNOWLEDGE ABOUT PREGNANCY

Ms. Nandita Tiwari, GNM III Year



1. During pregnancy deficiency of which nutrient leads to neural tube defects?
2. What is the name of the first secretion from the breast following delivery?
3. During which stage of labour the placenta is delivered?
4. Which of the following condition is screened by pap smear?
5. Who discovered the partograph?
6. Which abdominal grip is used to assist the descent of the head in pregnant woman?
7. First movement of the baby feel by the mother are known as?
8. Why does bed rest is essential in preeclampsia?
9. Which time is the most difficult to control diabetes during the maternity cycle?
10. What is the hazard of Induction of labour with Pitocin?
11. Which is the ideal female pelvis?
12. Which hormone is helpful in the growth of ovarian follicle?
13. What is the reason for the golden colour of amniotic fluid?
14. How much additional calories should be taken by a pregnant women as per WHO?
15. What is the highest diameter of the female pelvis?

Note: Please check your answers with the answer keys given at page number 154.

KNOWLEDGE REGARDING INFLAMMATIONS

Ms. Tanisha Meena & Ms. Saniya Bala, B.Sc.(N) II Year



1. Which is the most important infection control precaution for the prevention of Hepatitis B ?
2. Which type of splints is indicated for metacarpal bone?
3. Arthritis is the disease of?
4. Conjunctivitis is an infection primarily related to?
5. Name the two endocrine glands which secrete their hormones when they receive orders from the pituitary through its hormones ?
6. Wermer's syndrome is considered as _____
7. Which type of immunoglobulin consists 75-85% in blood?
8. Large amount of citrated blood given over a short period of time cause _____
9. Which type of shock occurs due to failure of the heart?
10. What is the other name of gas gangrene?
11. Which immunoglobulin is known as macroglobulin?
12. An Inflammatory response to a pathogenic organism is termed _____
13. Management of Hyperkalemia is _____
14. Thick filament are composed of protein ?
15. Inflammation of tissue surrounding the wall is known as _____
16. Diabetes insipidus is due to deficiency of _____
17. Peak action of regular insulin is _____
18. Removal of entire lung is called _____
19. Chemical burn of eye is treated with _____

Note: Please check your answers with the answer keys given at page number 154.



ANTIDOTES

Ms. Sreelakshmi. G., B.Sc. Nursing II Year



1. Antidote of Morphine ?
2. Antidote of heparin?
3. Antidote of Warfarin?
4. Antidote of Digoxin?
5. Antidote of Benzodiazepines?
6. Antidote of Cyanide?
7. Antidote of Penicillin?
8. Antidote of Beta Blockers?
9. Antidote of Insulin?
10. Antidote of lead?



Note: Please check your answers with the answer keys given at page number 154.



KEY POINT OF NURSING

Ms. Saloni Rajender Verma, B.Sc (N) II Year



1. The bacteriolytic enzyme present in saliva?
2. Eustachian tube opens on the lateral wall of ?
3. Troponin I positive indicates ?
4. Normal value of ESR in men ?
5. The antidote of paracetamol?
6. Which type of shock occurs in the acute stage of burns ?
7. The position given to a patient with increased intracranial pressure ?
8. Which lab test is to be monitored while the client is aminoglycosides therapy ?
9. Heart is supplied with which Nerve ?
10. The difference between systolic and diastolic pressure is known as ?
11. The inflammation of gall bladder know as ?
12. Athlete's foot is caused by ?
13. Blood in sputum is called ?
14. The spinal cord extends from the brain stem to the level of which vertebrae ?
15. Normal birth weight of a new born baby ?
16. The wheezing sound of asthmatic patient is due to ?
17. Causative organism for infection mononucleosis?
18. The instrument used for measuring intraocular pressure ?
19. The complication that nurses should monitor after a liver biopsy is ?
20. Which of the following term represents store in the salivary gland ?

Note: Please check your answers with the answer keys given at page number 154.



BASIC KNOWLEDGE ABOUT NURSING

Ms. Hanshu Mankar, B.Sc.(N) II Year



1. Who is known as the father of microbiology ?
2. Who introduced the techniques of sterilisation ?
3. How many essential amino acids?
4. Which organisms have a thick peptidoglycan layer ?
5. Generation time of mycobacterium tuberculosis ?
6. Bacteria which can grow all temperature between 25°C and 40°C are known As ?
7. Temperature and time period used in hot air oven is ?
8. Which company made first covid vaccine in India ?
9. Steam sterilisation at 100°C for 20 minutes of three successive days is known as:
10. "Man is a social animal" who said ?
11. Sociology is the science of social institution" who mentioned ?
12. Sociology is a pure and independent science said by ?
13. Sociology is a general not a pure science said by?
14. Positive philosophy is the famous work of ?
15. Who said, "Social relationships, the network of relationship we call society"?
16. Ian Robertson wrote the book titled 'sociology' in the year ?
17. when the Hindu marriage act got passed by the Government of India ?
18. In which year special marriage act has passed ?
19. Who were the first peoples to practice agriculture on large scale?
20. The choice of mate is caste system is generally
21. Child marriage restraint act' was passed in the year?

Note: Please check your answers with the answer keys given at page number 155.



REVIEW OF GENETICS

Ms. Rani Malviya, B.Sc. (N) II year



1. The book “ Micrographia” written by:
2. What is the meaning of germplasm?
3. World’s first DNA vaccine for covid:
4. Gene bank of India located at:
5. Single strand DNA virus is:
6. Which is the site of protein synthesis?
7. Which type of cells are found in bacteria and BGA?
8. RNA synthesis is in which organ:
9. Who is the father of modern microbiology?
10. Mutation first defined by:
11. Cell theory given by:
12. DNA Double helix structure was given by:
13. The theory of ‘One gene one enzyme hypothesis’ was given by:
14. Genetic male sterility found in which crop?
15. Is hybrid homozygous or heterozygous?
16. Quickest method of plant breeding is:
17. The main source of male sterility in sorghum:

Note: Please check your answers with the answer keys given at page number 155.



BLOOD AND ITS COMPONENTS

Prof. Grace Mary, Chirayu College of Nursing, Bhopal



Instruction: Kindly read the question carefully and put a tick mark (✓) to the appropriate answer given below.

1. How many components are present in the blood?

- a) 5 components
- b) 3 components
- c) 10 components
- d) 4 components

2. Which substance is carried throughout the whole body?

- a) Immune and Heinz Bodies
- b) Antigen and Antibodies
- c) Oxygen and Nutrition
- d) Minerals and Vitamins

3. In which year the 1st blood transfusion performed?

- a) 1975
- b) 1986
- c) 2021
- d) 1788

4. Who performed the 1st transfusion successfully?

- a) James Blundell
- b) William Harvey
- c) William Churchill
- d) Jone Willington

5. Name the person who discovered the circulation of the blood.

- a) Wilson
- b) William Harvey
- c) Gibbon
- d) Gilbert

6. In which year the circulation of the blood was discovered?

- a) 1860
- b) 1922
- c) 1628
- d) 1780

7. Who is the father of blood grouping?

- a) Karl Landsteiner
- b) Soutter
- c) Calmette Guerin
- d) Virginia Apgar

8. Which is the type of blood group that has the lowest risk of heart attack?

- a) B
- b) O
- c) A
- d) AB

9. Which is the cleanest type of blood group?

- a) B +ve
- b) O -ve
- c) A+
- d) AB +

10. Which of the following are the main components of blood?

- a) Antibodies
- b) Immune
- c) Electrolyte
- d) All the above



11. Name the area where stem cells are produced in your body.

- a) Heart
- b) Liver
- c) Spleen
- d) Bone Marrow

12. To which organ blood is supplied for removal of waste products?

- a) Brain & Neuron
- b) Heart & Liver
- c) Kidney & Lung
- d) Muscle & Bones

13. In which components is the antibodies seen in the blood?

- a) Albumin
- b) Plasma
- c) Cryoprecipitate
- d) Serum

14. What is the cause (Reason) for the blood to be salty in taste?

- a) 85 % Salt
- b) 100 % Salt
- c) 50% sugar
- d) 10% Suagr

15. Which is the oldest blood group?

- a) Type B
- b) Type AB
- c) Type A
- d) Type O

16. What is the color of the blood that leaves the heart?

- a) Bright Red
- b) Pinkish Red
- c) Bluish
- d) No Colour

17. What is the percentage of blood for pregnant women than an adult person?

- a) 30-50%
- b) 40-60%
- c) 20-30%
- d) 70-80%

18. Why do we called AB +ve as the luckiest blood group?

- a) Universal Recipients
- b) Universal Donor
- c) No Idea
- d) Both a & b

19. What is the real shape of the human red blood cells?

- a) Round
- b) Convex
- c) Concave
- d) Biconcave Disk

20. Name the organ in your blood which does not have blood supply.

- a) Skin
- b) Hair
- c) Cornea
- d) Ear

21. How Much (ml) amount of blood can be donated at time?

- a) 470 ml
- b) 550 ml
- c) 150 ml
- d) 300 ml

22. How much amount of blood to be present in a human body?

- a) 4.5-5.5 liters
- b) 5.5-6.5 liters
- c) 10 Liters
- d) 2-3 liters

Note: Please check your answers with the answer keys given at page number 156.



ALL ABOUT GENES

Ms. Divya Yadav, B.Sc. Nursing II Year



Q.1 A Substance that when introduced into an animal elicits the formation of specific antibodies is known as:

- (a) Immunity
- (b) Antigen
- (c) Antibody
- (d) Foreign body

Q.2 Which of the following is a type of isolation consist of plastic tent that completely shields the patient from environment?

- (a) Positive isolation
- (b) Laminar airflow room
- (c) Reverse isolation
- (d) Life island

Q.3 The type of cells which constantly multiply through out life replacing those cells being destroyed:

- (a) Bone cells
- (b) Permanent cells
- (c) Labile cells
- (d) Stable cells

Q.4 Which one of the following is not included in four classical signs of inflammation?

- (a) Callous
- (b) Calor
- (c) Tumour
- (d) Rubor

Q.5 Which immunoglobulin is known as macroglobulin?

- (a) IgD
- (b) IgA
- (c) IgG
- (d) IgM

Q.6 An inflammatory response to a pathogenic organism is termed as:

- (a) Inflammation
- (b) Anaphylaxis
- (c) Allergy
- (d) Infection

Q.7 Transplant rejection is an example of:

- (a) Type 1 hypersensitivity
- (b) Type 3 hypersensitivity
- (c) Type 2 hypersensitivity
- (d) Type 4 hypersensitivity

Q.8 The Characteristic smile present in tetanus due to the stiffness of neck and spasm of facial muscle is known as:

- (a) Moon face
- (b) Lock jaw
- (c) Dichotomous
- (d) Rises sardonicus

Q.9 What is the full form of 'TIGH'?

- (a) Tetanus Immune globulin human
- (b) Time incidence goal and hormone
- (c) None of these
- (d) Total intake of growth hormone.

Q.10 In stress the sympatho adrenal medulla secretes:

- (a) B-Lymphocytes
- (b) Epinephrine and nor epinephrine
- (c) thyroid hormone
- (d) Mast cells.



Q.11 Which of the following factor is not affecting the healing process?

- (a) Colour of the skin
- (b) Hormonal influence
- (c) Age
- (d) Foreign Bodies

Q.12 which type of immunoglobulin consists 75-85% in blood?

- (a) IgE
- (b) IgG
- (c) IgM
- (d) IgA

Q.13 Cystic fibrosis is:

- (a) Sex linked recessive disorder
- (b) Autosomal dominant disorder
- (c) Autosomal recessive disorder
- (d) Sex linked dominant disorder

Q.14 Large amount of citrated blood given over a short period of time causes:

- (a) Hyperkalaemia
- (b) Hyponatremia
- (c) Hypocalcaemia
- (d) Hypercalcemia

Q.15 What is the other name of gas gangrene?

- (a) Candidiasis
- (b) Septicaemia
- (c) Dost radial myositis
- (d) Myonecrosis

Q.16 If bacteria spread from local site into the blood stream is known as:

- (a) Bacteraemia
- (b) Toxins
- (c) Secondary infection
- (d) Septicaemia

Q.17 The causes of neurogenic shock may includes all of the following except:

- (a) Psychic trauma
- (b) Surgery
- (c) Spinal anaesthesia
- (d) Pulmonary embolism

Q.18 Why gamma globulin preparation is not administered through intravenously?

- (a) Thick preparation causes severe anaphylactic reaction
- (b) Not effective
- (c) Thick preparation
- (d) Large quantity

Q.19 Which of the following is a wrong statement about clostridium tetani?

- (a) It is a anaerobic bacteria
- (b) It is gram positive bacteria
- (c) It is a spore forming bacteria
- (d) It is a coma shaped bacteria

Q.20 An infection that involves the soft tissue of the fingertip is called:

- (a) Felon
- (b) Paronychia
- (c) Tender sheath infection
- (d) Lymphangitis

Note: Please check your answers with the answer keys given at page number 156.



GENES AND ITS MUTATIONS

Ms. Ravina, B.Sc. Nursing II Year



Q.1 The following defects are all partially associated with marfan's syndrome expect:

- (a) Aortic aneurysm
- (b) Retinal detachment
- (c) Kyphosis
- (d) Pectus deformity

Q.2 Which retroviruses family HIV-I belongs to?

- (a) Lenti virus
- (b) Tachy virus
- (c) Paromo virus
- (d) Parvo virus

Q.3 Cysts of echinococcus are seen most commonly in:

- (a) Liver
- (b) Lungs
- (c) Abdominal cavity
- (d) Brain

Q.4 A liver hydatid is best imaged by:

- (a) plain X-ray abdomen
- (b) TC X-ray isotope scan
- (c) Ultra sound
- (d) CT scan

Q 5. In a wound abscess the commonest bacterium found is:

- (a) Staphylococcus allures
- (b) Streptococcus pyogenes
- (c) Pseudomonas aeruginosa
- (d) Bacteroides

Q.6 Which pathogen causes diabetic foot?

- (a) Staphylococcus aureus
- (b) E coli
- (c) Clostridium kluyveri
- (d) Thiobacillus novellus

Q.7 How many cells does the human cochlea contain?

- (a) 15,000
- (b) 150,000
- (c) 1,500,000
- (d) 15,000,000

Q.8 The following is not a complication of tracheostomy:

- (a) Subcutaneous emphysema
- (b) Pneumomediastinum
- (c) Pneumothorax
- (d) Increased work of breathing

Q.9 Immediate treatment of dog bite:

- (a) Hospitalize
- (b) Application of anti septic
- (c) Wash the wound with soap & water
- (d) Suturing

Q.10 Most common cause of aortic aneurysm:

- (a) Trachoma
- (b) Atherosclerosis
- (c) Syphilis
- (d) Trauma



Q.11 Most common site of carcinoma in pancreas:

- (a) Head
- (b) Body
- (c) Tail
- (d) None

Q.12 Who discovered liver function test:

- (a) Aristotle
- (b) Francis Glissol
- (c) Augustin Leo
- (d) Robert Hook

Q.13 Which cardiac marker raised first in Myocardial Infarction?

- (a) CK-MB
- (b) SGOT
- (c) Myoglobin
- (d) Troponin

Q.14 Most serious complication of fracture:

- (a) Septicaemia
- (b) Dizziness
- (c) Fat embolism
- (d) Dehydration

Q.15 Most important nursing intervention for an unconscious patient:

- (a) Maintain proper circulation
- (b) Maintain patent airway
- (c) Provide mouth care
- (d) Provide skin care

Q.16 Commonest type of fracture is seen in children:

- (a) Pott's fracture
- (b) Green stick fracture
- (c) Clavicle fracture
- (d) Colley fracture

Q.17 Most important assessment for patient who have very severe allergic reaction.

- (a) Skin colour
- (b) Blood pressure
- (c) Heart rate
- (d) urine output

Q.18 Respiratory centre are stimulated by:

- (a) O₂
- (b) lactic acid
- (c) carbon dioxide
- (d) calcium

Q.19 Most common cause of chronic asthma:

- (a) Allergy
- (b) Improper lifestyle
- (c) Poor hygiene
- (d) None of the above

Q.20 Main clinical symptom of hiatal hernia:

- (a) Vomiting
- (b) Diarrhoea
- (c) Heart burn
- (d) Lower abdomen pain

Note: Please check your answers with the answer keys given at page number 156.



SPECIMEN REAGENTS AND VALUES

Ms. Parvati Namdev, B.Sc. Nursing II Year



Q.1 Which is the best all round preservative for urine?

- (a) Formalin
- (b) Boric acid
- (c) Toluene
- (d) Concentration HCL

Q.2 Reddish brown urine is due to:

- (a) Blood pigment
- (b) Bile pigment
- (c) Fresh blood
- (d) Urobilinogen

Q.3 Specific gravity of urine has to be corrected for:

- (a) Albumin
- (b) Temperature
- (c) Glucose
- (d) All of the above

Q.4 The indicator used in allistic is:

- (a) acridine orange
- (b) Orth toluidine
- (c) Tetrafluorophenol flue
- (d) Toluidine flue

Q.5 Rubens's test detects:

- (a) fructose
- (b) Lactose
- (c) galactose
- (d) Pentose

Q.6 Rose Waller test is used for diagnosis of:

- (a) Leprosy.
- (b) Rheumatoid arthritis
- (c) Rheumatic fever
- (d) brucellosis

Q.7 Multiple myeloma is characterized by:

- (a) Monoclonal gammopathy
- (b) Osteolytic bone lesion
- (c) Bone marrow lesion
- (d) All of the above

Q.8 PSA is useful in diagnosis of:

- (a) Lung cancer
- (b) Hepatic cell carcinoma
- (c) Ovarian cancer
- (d) Prostate cancer

Q.9 Target cells are found in:

- (a) Thalassemia
- (b) Haemoglobin disease
- (c) Iron deficiency anaemia
- (d) All the above

Q.10 A diagnostic marker for tumour of the breast:

- (a) Alpha-fetoprotein
- (b) CEA
- (c) CA15-3
- (d) CA 19-9

Note: Please check your answers with the answer keys given at page number 156.



OVERVIEW OF COMMUNITY HEALTH NURSING

Ms. Kareena Fulwani, B.Sc. (N) II year



1. Which type of rehabilitation in which restoration of body function?

- a) Vocational rehabilitation
- b) Primary prevention
- c) Social rehabilitations
- d) Restorative rehabilitation

2. Which of following is not a live attenuated vaccine?

- a) BCG
- b) Salk
- c) Sabin
- d) Measles

3. How does vertical transmission occur ?

- a) Through mosquitoes
- b) Through direct contact
- c) Through drop lets
- d) Through placenta

4. Night blindness is caused due to the deficiencies of:

- a) Vitamin A
- b) Vitamin B
- c) Vitamin C
- d) Vitamin D

5. In which study one can obtain the relative risk of disease ?

- a) Case study
- b) Cohort study
- c) Case Cohort study
- d) Experimental study

6. Which vaccine is contraindicated during pregnancy ?

- a) Rubella
- b) OPV
- c) Tetanus
- d) Influenza

7. Which category describes that keeping the frequency of illness within acceptable limits?

- a) Control
- b) Prevention
- c) Eradication
- d) Surveillance

8. Which of the following statement is incorrect regarding cholera vaccine ?

- a) It is given at interval of 6 months
- b) Long – lasting immunity
- c) Not useful in epidemics
- d) Not given orally



9. **Active and passive immunization is done simultaneously in all except ?**
- a) Hepatitis B
 - b) Measles
 - c) Rabies
 - d) Tetanus
10. **Which of the following vitamin is also known as ascorbic acid?**
- a) Vitamin A
 - b) Vitamin B
 - c) Vitamin C
 - d) Vitamin D
11. **During a nutritional assessment bleeding gums and gingivitis indicate which vitamin deficiency?**
- a) Vitamin D
 - b) Vitamin C
 - c) Vitamin A
 - d) Vitamin B
12. **Oral contraceptive pills can have:**
- a) Estrogen and progesterone
 - b) Estrogen only
 - c) Both (a) and (b)
 - d) None of the above
13. **What is the full name of “ ELISA”?**
- a) Enzyme licensed immune solution activity
 - b) Enzyme linked immune sorbent assay
 - c) Enzyme linked integrated solution activity
 - d) Enzyme lyses immune solution assay
14. **Name of the malaria parasite is:**
- a) Plasmodium
 - b) E. Coli
 - c) Amoeba
 - d) Euglena
15. **PMJAY is an acronym for:**
- a) Pradhan Mantri Jan Arogya Yojana
 - b) Pradhan Mantri janai Arogya Yojna
 - c) Pradhan Mantri Jan Swashthya Arogya Yojana.
 - d) None of these
16. **Within how many population is a primary health center established?**
- a) 3000-5000
 - b) 20000-30000
 - c) 30000-200000
 - d) 2 Lakhs
17. **Hepatitis B vaccination schedule in adults:**
- a) 0,1,2 Month
 - b) 2,4,6 Month
 - c) 0,6,12 Month
 - d) 0,1,,6 Month

Note: Please check your answers with the answer keys given at page number 156.



A GLANCE INTO PHARMACOLOGY

Ms. Monali Ramteke, B.Sc. (N) II Year



1. Glucocorticoids are used in the treatment of:

- a) Inflammation
- b) Allergy
- c) Inflammation and allergy
- d) Skin infection

2. Main side effects of thiazide diuretics is:

- a) Hypokalemia
- b) Blood dyscrasias
- c) Nausea
- d) Vomiting

3. Lovastatin is useful in the treatment of:

- a) High blood pressure
- b) Hyper lipoproteinemia
- c) Arrhythmia
- d) Angina pectoris

4. The mechanisms of drug action is called:

- a) Pharmacokinetics
- b) Pharmacotherapeutics
- c) c. Transport
- d) D Pharmacodynamics

5. Which effect the nurse expects may occurs when using cholinergic agonists?

- a) Dry mouth
- b) Tachycardia
- c) Pupil dilation
- d) Loss of bladder control

6. Which Drug does the nurse recognize as a catecholamine?

- a) Dopamine
- b) Albuterol
- c) Prazosin
- d) Labetalol

7. Chlorpropamide metabolism is enhanced by:

- a) Ethyl Alcohol
- b) Diazepam
- c) Lorazepam
- d) Chloridazepoxide

8. Methanol causes blindness due to its:

- a) Hypersensitivity reactions
- b) Conjugated products
- c) Idiosyncratic reaction
- d) Oxidative products

9. Which anticholinergic agent is used to treat patients with COPD?

- a) Atropine
- b) Pantoprazole
- c) Budesonide
- d) Ipratropium Bromide

10. Urinary tract antispasmodics are used to treat:

- a) Overactive bladder
- b) Erectile Dysfunction
- c) Hypertension
- d) seizures

11. Desflurane is which type of anesthetic?

- a) General
- b) Topical
- c) Local
- d) IV

Note: Please check your answers with the answer keys given at page number 156.



REVIEW OF PATHOLOGY

Ms. Pooja Mewada, B.Sc. (N) II Year



1. Who was known for the father of Modern Pathology ?

- a) Rudolf Virchow
- b) Gregor Mendel
- c) Issac Newton
- d) John Mathew

2. The Study of remains one of the main domains of pathology?

- a) Organogenesis
- b) Spermatogenesis
- c) Neurogenesis
- d) Pathogenesis

3. The application of pathology to legal purpose where investigation of death in suspicious circumstances is _____

- a) Chemical Pathology
- b) Toxicology
- c) Forensic Science
- d) Light Microscopy

4. Which of the following stain nucleus and cytoplasm ?

- a) Hematoxylin
- b) Eosin
- c) Phloem
- d) Both (a) And (b)

5. Pathology term is the study of

- a) Diseases
- b) Birds
- c) Red blood cells
- d) Fungus

6. What does the word “ pathology” mean?

- a) Teaching about sick events
- b) Teaching about illness
- c) Training on pathological conditions
- d) Teaching about pathological processes

7. What will a histopathology lab deal with?

- a) Cells
- b) Tissues
- c) Organs
- d) Organ system

8 . Which is the best all round preservative for urine ?

- a) Formalin
- b) Thymol
- c) Toluene
- d) Conc: HCL

9. Reddish Brown urine is due to:

- a) Blood pigment
- b) Bile pigment
- c) Fresh blood
- d) Urobilinogen



10. The acetic acid used in heat & acetic acid test is ideally:

- a) 1%
- b) 3%
- c) 5%
- d) Glacial

11. The antidote for heparin is:

- a) Penicillinase
- b) Protamine sulphate
- c) Persulphate
- d) Potassium sulphate

12. In the histology pathology was used for cutting about 3.5 micron.

- a) Endonuclease
- b) Microtome
- c) Scissor
- d) Cutter

13. Which is the internal factor that mainly affects the photosynthesis process?

- a) Protoplasmic Factors
- b) Temperature
- c) CMU
- d) Carbon Dioxide

14. The rate of photosynthesis is equal to the rate of.....

- a) Excretion
- b) Digestion
- c) Respiration
- d) Ingestion

15. What is the temperature which is maintained by the freezers in the pathology lab?

- a) 10 c
- b) 0c -10c
- c) -10c-60c
- d) -100

16. What solution is used to maintain sterility in labs?

- a) Sodium chloride
- b) Sodium Hypochlorite
- c) Sodium cyanide
- d) Sodium sulphate



Note: Please check your answers with the answer keys given at page number 156.



CLINICAL PRACTICE

Ms. Ritu Panwar, B.Sc.(N)II Year



1. While performing physical examination of the newborn, testes could not be palpated in the scrotum. The failure of the testes to descend normally through the inguinal canal is called as:

- a) Chordee
- b) Epispadias
- c) Hypospadias
- d) Cryptorchidism

2. Cause of peripheral cyanosis is:

- a) Arterial Obstruction
- b) Venous obstruction
- c) Cold exposure
- d) All of these

3. All are the features of irritable bowel syndrome EXCEPT:

- a) Pain in abdomen
- b) Diarrhea
- c) Constipation
- d) Vomiting

4. The single most important risk for oral cancer is:

- a) Tobacco Chewing
- b) Alcohol Consumption
- c) Chronic traumas for oral mucosa
- d) Sun burn

5. If iodine deficiency left untreated then it can lead to severe:

- a) Hyperthyroidism
- b) Hypothyroidism
- c) Gout
- d) Anemia

6. Name the two endocrine glands which secrete their hormones when they receive orders from the pituitary through its hormones:

- a) Adrenal and pancreas
- b) Thyroid and testis
- c) Adrenal and thyroid
- d) Pancreas and ovary

7. Minimum and maximum score of GCS are:

- a) 8-9
- b) 8-12
- c) 12-13
- d) 3-15

8. Which congenital cardiac defect does not cause heart failure?

- a) ASD
- b) VSD
- c) TGA
- d) PDA

9. Wermer's syndrome is considered as:

- a) MEN I
- b) MEN II
- c) MEN III
- d) MEN IV



10. Needle gauge preferred with blood transfusion is:

- a) 16G
- b) 18G
- c) 20G
- d) 22G

11. Which immunoglobulin is known as macroglobulin?

- a) IgG
- b) IgM
- c) IgA
- d) IgD

12. Which type of immunoglobulin accounts for 75-85% in blood?

- a) IgA
- b) IgE
- c) IgG
- d) IgM

13. Tuberculin reaction is an example of?

- a) Anaphylactic reaction
- b) Cytotoxic reaction
- c) Cell mediated reaction
- d) Immune complex reaction

14. What is the other name of gas gangrene?

- a) Diabetic foot
- b) Candidiasis
- c) Clostridial myositis
- d) Septicemia

15. An inflammatory response to a pathogenic organism is termed as?

- a) Allergy
- b) Infection
- c) Inflammation
- d) Anaphylaxis

Note: Please check your answers with the answer keys given at page number 156.



KNOWLEDGE ABOUT CARDIOVASCULAR SYSTEM

Mr. Hariom Yadav, BSc (N) II YEAR



1. The first branch of the human aorta is:

- a) left subclavian artery
- b) Brachiocephalic trunk
- c) Coronary artery
- d) Left common carotid artery

2. Hepatic portal system originates from:

- a) kidney
- b) diaphragm
- c) Liver
- d) Different part of the alimentary canal

3. Least blood pressure is present in

- a) aorta
- b) capillary
- c) vein
- d) Vena cava

4. The function of the spleen in adults is:

- a) phagocytes of old RBCs
- b) Secretion of hormones
- c) Formation of blood
- d) Development of macrophage

5. Extracellular fluid are rich in the following except :

- a) K⁺
- b) HCO₃
- c) Na⁺
- d) CA²⁺

6. The left border of the heart is formed by:

- a) Right ventricle
- b) Left ventricle
- c) Left atrium & left ventricle
- d) Left atrium

7. The thickest layer in the heart is:

- a) Endocardium
- b) Myocardium
- c) Epicardium
- d) Pericardium

8. A blood clot inside the blood vessels is known as:

- a) Thrombus
- b) Fibrinolysis
- c) Thrombosis
- d) Clot

9. Aorta pierces the diaphragm at the level of :

- a) T8
- b) T12
- c) T10
- d) C6

10. What is the function of platelets?

- a) Aid in coagulation of blood
- b) Digest bacteria
- c) Carry hemoglobin
- d) Transport CO₂

Note: Please check your answers with the answer keys given at page number 156.



REVIEW OF MEDICAL SURGICAL NURSING

Ms. Heera Mahesan, B.Sc. Nursing II year



1. What clinical finding indicates to a nurse that a client may have hypokalemia ?

- a) Edema
- b) Muscles
- c) Spasms
- d) Kussmaul breathing
- e) Abdominal

2. A client with hypothermia is brought to the emergency –department what treatment does the nurse anticipate ?

- a) Core rewarming with warm fluids
- b) Ambulation to increase metabolism
- c) Frequent oral temperature assessments
- d) Gastric tube feeding to increase fluid volume

3. A nurse is caring for a client with an impaired immune system which blood protein associated with the immune system is important for the nurse to consider :

- a) Albumin
- b) Globulin
- c) Thrombin
- d) Hemoglobin

4. Which among the following foods item is restricted in renal failure:

- a) Carbohydrate
- b) Fat
- c) Protein
- d) Vitamin

5. Which type of shock occurs in the acute stage of burns?

- a) Anaphylactic shock
- b) Septic shock
- c) Distributive shock
- d) Hypovolemic shock

6. A patient who has a pacemaker might be ineligible for which of the following investigations?

- a) Computed tomography
- b) Electromyography
- c) Magnetic resonance
- d) Electroencephalography

7. The wheezing sound of asthmatic patient is due to:

- a) Increased thickness of respiratory secretion
- b) Use of accessory muscles during respiration
- c) Tachypnea and tachycardia
- d) Movement of air through narrowed airway

8. A patient with Parkinson's disease would be at risk of following as a result of :

- a) Quick movements
- b) Unsteady shuffling gait
- c) Hemiparesis
- d) Frequent loss of consciousness

9. Inability to perform normal activities despite ?

- a) Anhedonia
- b) Apraxia
- c) Apathy
- d) Amnesia



10. What should the nurse do first when a male client is having tonic clonic seizure ?

- a) Restrain the client arms and legs
- b) Elevate the head to the bed
- c) Place a tongue blade in the client mouth
- d) Take measures to prevent injury

11. Impaired balance or coordination, can be due to damage to brain, nerves or muscles is called ?

- a) ataxia
- b) Apraxia
- c) Dystonia
- d) Dyskinesia

12. Which of the following activity is increased by sympathetic nervous system?

- a) Heart rate
- b) Secretion of digestive juice
- c) Secretion of saliva
- d) All of these

13. All of the following are neurotransmitter except:

- a) Dopamine
- b) Gaba
- c) Serotonin
- d) Troponin

14. Which among the following condition is most commonly caused ischemic stroke ?

- a) AV malformation
- b) Cocaine use
- c) Head trauma
- d) Rupture of Aneurysm

15. Common side effects of nitroglycerin includes ?

- a) High blood pressure
- b) Headache
- c) Shortness of Breath
- d) Constipation

16. The most common early symptom of laryngeal cancer is:

- a) Dysphagia
- b) Airway obstruction
- c) Hoarseness of voice
- d) Pneumothorax

17. The drug used for dilation of pupil in children is :

- a) Atropine
- b) Gentamicin
- c) Betamethasone
- d) Levofloxacin

18. The hormone secreted by anterior pituitary gland includes:

- a) ADH
- b) ACTH
- c) cortisol
- d) Oxytocin

19. Asthma is the chronic disorder that causes:

- a) Pneumonia
- b) Skin rashes
- c) Heart blockage
- d) Inflammation of airway

Note: Please check your answers with the answer keys given at page number 156.



COMMUNICATION

Ms. Nisha Prajapati & Ms. Nikita Yadav, BSc (N) II year



1. Which among the below is the most important factor in a therapeutic relationship?

- a) Trust
- b) Knowledge
- c) Respect
- d) Motivating

2. Response from receiver to sender is known as :

- a) Message
- b) Content
- c) Feedback
- d) Stimulus

3. Which is the example of one -way communication?

- a) Class lecture
- b) Group discussion
- c) Conference
- d) Workshop

4. Which among the following questioning techniques provide opportunity to discuss ?

- a) Restating
- b) Probing
- c) Closed -ended questions
- d) Open -ended questions

5. Cultural barrier of communication include:

- a) Knowledge
- b) Anxiety
- c) Language
- d) Fear

6. Communication means :

- a) Sharing ideas
- b) Sharing beliefs
- c) Sharing thought
- d) All of the above .

7. A strategy commonly used to improve therapeutic communication skills is called:

- a) Active listening
- b) Restating and clarifying
- c) Validating
- d) Process recording

8. Our dress code is an example of which communication ?

- a) Verbal
- b) Non verbal
- c) Oral
- d) Written

9. Means to impact understanding the message :

- a) Encoding
- b) Channel
- c) Decoding
- d) Feedback

10. Communication that flows from superior to subordinate :

- a) Upward
- b) Diagonal
- c) Horizontal
- d) Downward



11. When is the communication process complete ?

- a) When the sender transmits the message
- b) When the message enters of the channel
- c) When the message leaves the channel
- d) When the receiver understands the message .

12. Letters, emails and telephones etc. are related to the:

- a) Message
- b) Channel
- c) Feedback
- d) Encoding

13. A culture of intimation which can be intimidating or condescending behavior affects ?

- a) Nurses
- b) Patients
- c) Physician
- d) All of the above .

14 . It comes from the Greek word tekhnē which means an art or craft?

- a) Technique
- b) Technology
- c) Technician
- d) Telepathy

15. The use of technology to enhance learning process is called....in education?

- a) IT
- b) ICT
- c) Information technology
- d) Communication technology

16.was the first district wide e-literacy project in India?

- a) C-DIT
- b) IT @ school
- c) NIC
- d) Akshaya

17. is a spreadsheet device from the following?

- a) MS word
- b) MS excel
- c) MS doc
- d) MS power point

18. Choose the storage device from the following?

- a) UPS
- b) Printer
- c) Magnetic
- d) Scanner

19. Website is a collection of?

- a) Audio file
- b) Image file
- c) video file
- d) html file

20. Information technology (IT) act 2000 came into force on?

- a) 17 October 2000
- b) 9 June 2000
- c) 1 June 2000
- d) 1 October 2000

21. Which of the following is door darshans educational television channel?

- a) Gurukul
- b) Gyan Bharati
- c) Gyan darshan
- d) Vidya



22. Who is known as the father of modern media education?

- a) John Amos Comenius
- b) Flanders
- c) Erikson
- d) Charles Babbage

23. Method used to transfer information to far off places instantly is?

- a) Data
- b) Information technology
- c) Language
- d) telecommunication

24. Which of these is used to exchange message with other similar to a postal mail?

- a) E-mail
- b) Newsgroups
- c) Chatting
- d) M-commerce

25. Which of these is not a component of a computer network?

- a) Sender
- b) Protocol
- c) Speakers
- d) Data

26. Medium which sends information from source to receiver is called?

- a) Transmission channel
- b) Optic fiber
- c) Transmitter
- d) Receive.



Note: Please check your answers with the answer keys given at page number 156.



HEREDITY

Ms. Ramkanya Dangi, B.Sc (N) II Year



1. Genetically passed or capable of being passed from parent to offspring is known as ?
 - a) Variation
 - b) Resemblance
 - c) Heredity
 - d) Inheritance
2. Who is known as the father at genetics?
 - a) Mendel
 - b) Morgan
 - c) Bateson
 - d) Watson
3. One of two or more versions of a genetic sequence at a particular region on a chromosome ?
 - a) Recessive character
 - b) Alternate type
 - c) Allele
 - d) Dominant character
4. The genotypic ratio at a monohybrid cross is:
 - a) 3:1
 - b) 1:2:1
 - c) 9:3:3:1
 - d) 2:1:1
5. The crossing at FI to either at the parents s knows as:
 - a) Test cross
 - b) FI Cross
 - c) Back Cross
 - d) All at the above
6. Which of the following statement is true regarding the 'law at segregation ?
 - a) Segregation at factors is due to the segregation at chromosomes during meiosis
 - b) Low at segregation is the law at purity at genes
 - c) Allele separate from each other during gametogenesis
 - d) All of the above
7. Homozygosis and heterozygosis of an individual can be determined by:
 - a) Test cross
 - b) Back cross
 - c) Self fertilization
 - d) All of the above
8. An exculpations to Mendel's law is :
 - a) Linkage
 - b) Independent assortment
 - c) Purity of gametes
 - d) Dominance
9. Pea plants were used in modest experiments because :
 - a) They were cheap
 - b) They were available characters
 - c) They had contrasting characters
 - d) All of the above



10. The smallest unit of genetic material which produces a phenotypic effects an mutation is:

- a) Gene
- b) Muton
- c) Nucleic acid
- d) Recon

11. Medal's landings were rediscovered by:

- a) Correns
- b) Tschemark
- c) Deuries
- d) All

12. Alleles are:

- a) Linked genes
- b) Alternate forms of genes
- c) Homologous chromosomes
- d) Chromosomes that have crossed over

13. Cystic fibrosis is:

- a) Autosomal dominant disorder
- b) Sex- linked recessive disorder
- c) Sex-linked dominate disorder
- d) Autosomal recessive disorder

14. The unit of heredity referred to which of the following given options:

- a) Chromosome
- b) Chromatin
- c) Gene
- d) None of these

15. Which one is correctly matched ?

- a) Down syndrome -44 auto some + xo
- b) Kline litter's syndrome -44 auto some +XXY
- c) Erythroblastosis fetalis-X linked
- d) Color blindness -y linked

16. The gene referred to as which of the following given options ?

- a) Particular DNA segment which determines the heredity of a particular trait
- b) Half DNA segment of somatic cells
- c) Whole DNA
- d) Half DNA segment

17. Which technique can be used to establish the paternity of a child ?

- a) Protein analysis 3
- b) Quantitative
- c) Chromosome counting
- d) DNA finger printing

18. In the following given options hemophilia leads to which condition?

- a) Non – clotting of blood
- b) Decrease in WBC
- c) Rheumatic heart disease
- d) Decrease in hemoglobin level

Note: Please check your answers with the answer keys given at page number 156.



KNOWLEDGE ABOUT SOCIOLOGY

Mr. Alok, B.Sc.(N) II year



1. Sociology is a :

- a) Natural science
- b) Social science
- c) Applied science
- d) Physical science

2. The word Sociology derived from which language ?

- a) Greek
- b) Latin
- c) French

3. "Sociology is a science for scientific development" this definition of sociology was given by:

- a) G.D matcher
- b) MacIver and page
- c) Marc waver
- d) Carl marc's

4. In sociology the word ' society' is used for:

- a) Friendship
- b) The person of same religion
- c) The system of social relationship
- d) Group of people

5. Who is the father of sociology?

- a) Auguste comate
- b) Spencer
- c) Cooley
- d) Tonnie

6. Man is social animal because:

- a) Main nature and need make him so
- b) He has been living in society
- c) Cooley
- d) Tonnie

7. Language is important to society because:

- a) Without language men cannot exist society.
- b) It make social contact easy.
- c) It satisfy man's need of expiration.
- d) Man is social animal

8. The unity and stability of the Indian society depends upon:

- a) Clean system
- b) Caste and religion
- c) Religion and culture
- d) Culture

9. Man's behaviour in society is determined mainly by :

- a) Formal and informal forcer
- b) Natural and unnatural forcer
- c) Physical and social forcer
- d) Community

10. X group of people organized for a particular purpose is know as:

- a) Community
- b) Society
- c) Avocation
- d) Crowd

Note: Please check your answers with the answer keys given at page number 157.



KNOWLEDGE OF GASTRO INTESTINAL SYSTEM

Ms. Ravina Dangi, B.Sc.(N) II Year



- 1. A patient with acute pancreatitis has NG tube for low intermittent suction to prevent ?**
 - a) Chronic distortion
 - b) Gastric reflux
 - c) Pancreatic stimulation
 - d) Peristalsis
- 2. When assessing a patient with pancreatic trauma the nurse notes ecchymoses in the umbilical area ?**
 - a) Reversing sign
 - b) Turner's sign
 - c) Cullen's sign
 - d) Cooper nail's sign
- 3. Bruising or flints of abdomen is known as ?**
 - a) Cullen's Sign
 - b) Hagar's sign
 - c) Kehr sign
 - d) Grey turner sign
- 4. Lactulose prescribed for patient with hepatic encephalopathy to?**
 - a) Decrease the bilirubin level
 - b) Decrease the protein level
 - c) Increase the protein level
 - d) Increase the glucose level
- 5. What sign would you anticipate, when assessing a patient in the early stages of cirrhosis of liver?**
 - a) Jaundice
 - b) Anorexia
 - c) Peripheral oedema
 - d) Ascites
- 6. A client is to have gastric gavage in which position the nurses place the client when the nasogastric tube is being inserted ?**
 - a) Supine
 - b) Mid- fowler
 - c) High- fowler
 - d) Trendelenburg
- 7. During administration of an enema, a client reports having intestinal cramps what should the nurse do?**
 - a) Dis continue the procedure
 - b) Insert the fluid of a slower create
 - c) Lower the height of the continuer
 - d) Stop the fluid until the cramps subside
- 8. Which diet would be most appropriate to discuss with the patient diagnosed with Meniere's disease her ?**
 - a) Low –fiber
 - b) Low – potassium
 - c) Low- sodium
 - d) Low- protein
- 9. Professor Pandey is had undergone nasal surgery with posterior packing in place which assessment data would alert the nurse to the possibility of active bleeding ?**
 - a) Appearance of anxiety
 - b) Discoloration around the eyes
 - c) Frequent swallowing
 - d) Black tarry stool



10.. For a client diagnosed with epistaxis which intervention would be included in the care plan ?

- a) Performing several abdominal thrust maneuvers
- b) Compressing the naoses to the septum for 5 to 10 min
- c) Applying on ice collar to the neck area
- d) Encouraging warm saline throat gargles

11. Which intervention would the nurse perform in eyedrop instillation to prevent systemic adverse effect from drug absorption ?

- a) Applying pressure on the eyelid rim
- b) Having the client in the supine position for a few minutes
- c) Placing the client in the supine position for a few minutes

12. The term describe edema of the optic nerve is known as:

- a) Scotomas
- b) Papilledema
- c) Lymphedema
- d) Angioedema

13. Timolol eye drops should be used with caution if the patient has the history of :

- a) Gastric ulcers
- b) Pancreatitis
- c) Glaucoma
- d) Emphysema

14. The most common cause of epistaxis is associated with_____

- a) Rhinorrhea
- b) Infection
- c) Sinusitis
- d) Little's area

15. Cell with a horse shoe shaped nucleus and abundant cytoplasm in a peripheral blood smear is known as:

- a) Basophil
- b) Monocyte
- c) Lymphocyte
- d) Eosinophil

16. Which of the following is hereditary hemolytic anemia ?

- a) Aplastic anemia
- b) Pernicious anemia
- c) Megaloblastic anemia
- d) Thalassemia

17. Which of the following is a safe game for a child with hemophilia ?

- a) Soccer
- b) Basket ball
- c) Swimming
- d) Field hockey

18. The following symptoms are grave's disease except ?

- a) Exophthalmos
- b) Weight gain
- c) Diarrhea
- d) Fever

19. Which hormone is also known as thyroxin?

- a) Ts4
- b) T3
- c) T4
- d) Free T4

20. Decrease thyroxin hormone in adult is known as:

- a) Acromegaly
- b) Myxedema
- c) Cretinism
- d) Thyroid storm

Note: Please check your answers with the answer keys given at page number 157.



HORMONES

Ms. Tina Ahirwar, B.Sc (N) II year



1. Spinal anesthesia is given between:

- a) L3-L4
- b) L2-L4
- c) L6-L7
- d) L2-L3

2. Management of Hyperkalemia is:

- a) Potassium Chloride
- b) IV Fluid
- c) Infection frusemide
- d) Insulin With glucose

3. Which of the following the nurse should assess after assessing vital signs during epidural anesthesia?

- a) Orientation
- b) Abdominal assessment
- c) Ability to move limbs
- d) Bladder distension

4. Thick filament are composed of protein is known as:

- a) Myosin
- b) Actin
- c) Troponin
- d) Tropomyosin

5. In which operative procedure Logan bow device is used?

- a) In fistula
- b) Appendectomy
- c) Cleft lip and palate repair
- d) Esophageal

6. Which of the following hormone is secreted by anterior pituitary ?

- a) Cortisol
- b) Oxytocin
- c) ADH
- d) Corticoid phis releasing hormone

7. Which of following indicates pancreatitis ?

- a) Elevated lipase
- b) Elevated BUN
- c) Increases ESR
- d) Increased hematocrit

8. In which condition intraocular pressure in increased:

- a) Conjunctivitis
- b) Cataract
- c) Glaucoma
- d) Detachment of retina

9. Kaposi's sarcoma is associated with:

- a) HPV infection
- b) Corona virus
- c) HIV
- d) Cap rosy



10. Inflammation of tissue surrounding the nail is known as:

- a) Onycholysis
- b) Paronychia
- c) Clubbing
- d) Koli onychia

11. Which assessment should be made by nurse in first 24 hour of burn?

- a) Hourly BP
- b) Skin Color
- c) Pain assessment
- d) Hourly urine output

12. Silver nitrate dressing may cause:

- a) Increased creatinine leud:
- b) Depletion of sodium and potassium
- c) Increased BUN
- d) Increased potassium lead

13. Diabetes insipidus is due to deficiency of:

- a) Insulin
- b) Antidiuretic hormone
- c) Glucose
- d) Oxytocin

14. Which of the following helps prevent water loss through skin ?

- a) Kertin
- b) Carotene
- c) Melanin
- d) Collagen

15. Peak action of regular insulin is:

- a) 2 to 8 hours
- b) 6to 10 hours
- c) 2 to 4 hours
- d) Immediate offer administration

16. Complication of splenectomy:

- a) Pericarditis
- b) Value malformation
- c) Gastritis
- d) Pancreatitis

17. The meaning of Cacogeusia is:

- a) Bad taste
- b) Sweet taste
- c) Loss of taste
- d) Increased salivation

18. Drug of choice in histo plasmosis:

- a) Amphotericin –B
- b) Streptomycin
- c) Ceftriaxo0ne
- d) Penicillin

19. Which is the risk factor after CABG?

- a) Depression
- b) Dizziness
- c) Heart failure
- d) All the above

Note: Please check your answers with the answer keys given at page number 157.



REVIEW OF MICROBIOLOGY

Ms. Nikita Tamoliya, B.Sc.(N)II year



1. Which of the following hypersensitivity reaction has cell mediated immune response?

- a) Type I
- b) Type II
- c) Type III
- d) Type IV

2. Which class of immunoglobulin mediates type I hypersensitivity reactions:

- a) IgG
- b) IgD
- c) IgM
- d) IgE

3. Chemical mediators released during type I hypersensitivity reactions may be:

- a) Histamine
- b) Serotonin
- c) Eosinophil Chemotactic factors of anaphylaxis
- d) All of the above

4. Delayed hypersensitivity reaction is mediated by:

- a) T lymphocytes
- b) B lymphocytes
- c) Macrophages
- d) All of the above

5. Tube coagulase test detects:

- a) Free coagulase
- b) Bound coagulase
- c) Both of the above
- d) None of the above

6. Protein A is a cell component of :

- a) Staphylococcus aureus
- b) Coagulase negative staphylococci
- c) Hemolysin
- d) None of the above

7. Tube coagulase test detects:

- a) Free coagulase
- b) Bound coagulase
- c) Both of the above
- d) None of the above

8. Sensitivity to bacitracin can be used to identify:

- a) Streptococcus pyogenes
- b) Streptococcus agalactiae
- c) Streptococcus equines
- d) Streptococcus mitis

9. CAMP reaction can be used to identify :

- a) Streptococcus pyogenes
- b) Streptococcus agalactiae
- c) Streptococcus Equines
- d) Streptococcus mitis

10. Streptococcus pneumonia may cause:

- a) Lobar pneumonia
- b) Broncho pneumonia
- c) Meningitis
- d) All of the above

Note: Please check your answers with the answer keys given at page number 157.



IMMUNOGLOBULIN

Ms. Nisha Nagar, B.Sc.(N) II Year



1. Which immunoglobulin class is the most efficient to produce agglutination reaction ?
 - a) IgG
 - b) IgM
 - c) IgA
 - d) IgE
2. Which immunoglobulin class is the most efficient to produce precipitation reaction ?
 - a) IgG
 - b) IgM
 - c) IgAxxxx
 - d) IgE
3. VDRL test is an example of :
 - a) Agglutination test
 - b) Flocculation test
 - c) Immuno Fluorescence
 - d) All of the above
4. Counterimmunoelectrophoresis is used for detecting ?
 - a) Hepatitis B antigens
 - b) Cryptococcal antigens
 - c) Neisseria Meningitides
 - d) All of the above
5. Tube agglutination test is used for serological diagnosis at:
 - a) Enteric fever
 - b) Infectious mono nucleosyls
 - c) Typhus fever
 - d) All of the above
6. Which of the following is / are example of passive agglutination test ?
 - a) Latex agglutination test
 - b) Hemagglutination test
 - c) Conglutination
7. Which of the following is / are examples of neutralization test?
 - a) Schick test
 - b) Antistreptolysin o test
 - c) Nagler reaction
 - d) All of the above
8. In which condition Elisa test can used to detect antigens or antibodies in blood?
 - a) HIV
 - b) Rotavirus
 - c) Hepatitis B virus
 - d) All of the above
9. Classical pathway of the complement activation:
 - a) Antigen
 - b) Antibody
 - c) Antigen – Antibody Complex
 - d) None of the above



10. The alternative pathway of the complement is initiated by :

- a) Endotoxins
- b) Lipopolysaccharides
- c) Yeast cell Walls
- d) All of the above

11. First component of complement which binds to antigen – antibody complex in classical pathway is:

- a) Cla
- b) Clr
- c) Cls

12. Which component of complement is present in the highest concentration in the serum ?

- a) C1
- b) C2
- c) C3
- d) C5

13. Mature cyst of Entamoeba histolytica contains:

- a) Four nuclei
- b) Eight nuclei
- c) Two nuclei
- d) None of the above

14. The infective form of E histolytica is:

- a) Uninucleate cyst
- b) Binucleate cyst
- c) Quadri nucleate cyst
- d) None of the above

15. How many nuclei are there in cyst of G Lambila ?

- a) One
- b) Two
- c) Malaria
- d) Eight

16. Extra intestinal amebiasis may occur in:

- a) Liver
- b) Lung
- c) Brain
- d) All of the above

17. The common name for termia baginata is :

- a) The best take worm
- b) The park take worm
- c) The armrest take worm
- d) None of the above

18. The larval form of termia baginata is named as:

- a) Cysticercoses cellulose
- b) Bovis
- c) Hydatid cyst
- d) None of the above

19. The common name for tenia solium is:

- a) The park take worm
- b) The best take worm
- c) The unarmed take worm
- d) None of the above

20. The larval form of facnia solium is named as:

- a) Cysticercoses cellulose
- b) Cysticercoses bovis
- c) Hydatid cyst
- d) None of the above

Note: Please check your answers with the answer keys given at page number 157.



COMMUNICABLE DISEASE

Ms. Isha vedi, B.Sc.(N) II Year



1. Which is the oldest Communicable disease control measure?

- a) Quarantine
- b) Isolation
- c) Health education

2. Cornerstone for control communicable disease is:

- a) Health education
- b) Rapid identification
- c) Treatment

3. Which is the most common neurological complication associated with swine for influenzas vaccine?

- a) Increased ICP
- b) Guilin barrier syndrome
- c) Epilepsy

4. Method which is used to carry small quantities (16+20 vial) of vaccine:

- a) Vaccine carrier
- b) ILR
- c) Refrigerator

5. The most common method of storages of vaccine at PHC level:

- a) Refrigerator
- b) ILR (ICE Lined refrigerator)
- c) Cold Chain

6. Recommended temperature of storage of polio vaccine is:

- a) 36⁰ c
- b) 20⁰ c
- c) 4⁰ c

7. Passive immunization is achieved by:

- a) Vaccines
- b) Antisera or antitoxins
- c) By Birth itself

8. Immunoglobulin are administered through:

- a) Intravenous
- b) Intramuscular
- c) Hypo dermal

9. Half life of Ig E is:

- a) 120 days
- b) 2 to 3 days
- c) 6 to 8 days

10. Hajar immunoglobulin of serum:

- a) Ig A
- b) Ig G
- c) IgM

11. Humoral Immunity is associated with :

- a) T- cell
- b) B- cell
- c) Alpha cell



12. Hospital acquired infection is termed as:

- a) Contagious
- b) Nosocomial
- c) None of these

13. An infection transmitted through animal to man is:

- a) Mycosis
- b) Zoonoses
- c) Anthropology

14. An out break of disease is termed as:

- a) Incidence
- b) Epidemic
- c) Prevalence

15. Mortality means:

- a) Sickness rate
- b) Death rate
- c) Birth Rate

16. Social medicine was first introduced by:

- a) Joseph lister
- b) Jules Guerin
- c) Eduard Janner



Note: Please check your answers with the answer keys given at page number 157.

**GENERAL KNOWLEGDE**

Ms. Deepika Maheswari, GNM II Year

**1. Who was the first women prime minister of India?**

- a) Indira Gandhi
- b) Sonia Gandhi
- c) Pratibha Patil
- d) Sumitra Mahajan

2. Which is the largest state in India?

- a) Madhya Pradesh
- b) Rajasthan
- c) Uttar Pradesh
- d) Maharashtra

3. Total number of muscles in human body:

- a) 640
- b) 635
- c) 639
- d) 645

4. Largest organ of the cell ?

- a) Nucleus
- b) Mitochondria
- c) Golgi body
- d) Nucleus

5. Which bone is also known as a cheek bone?

- a) Palatine
- b) Maxilla
- c) Vomer
- d) Zygomatic

6. Commonest cause of neonatal motility in India is.....

- a) Diarrheal disease
- b) Birth injuries
- c) Low birth weight
- d) Congenital anomalies

7. Non – Pregnant female uterus weight:

- a) 60 kg
- b) 60 lb
- c) 60 gm
- d) 60 mg

8. Which type hallucination is most common in schizophrenia?

- a) Visual
- b) Gustatory
- c) Tactile
- d) Auditory

9. Who coined the term schizophrenia?

- a) Kraepelin
- b) Sander
- c) Bleuler
- d) Maver gross



10. Nitroglycerine is administered by which route?

- a) Sublingual route
- b) By inhalation
- c) By parenteral route
- d) Insertion

11. What does the word tiranga mean?

- a) Power
- b) dignity
- c) freedom
- d) tree colour

12. Which is the highest rank of the Indian army?

- a) Major
- b) General
- c) Brigadier
- d) Field marsal

13. Which city is known as the electronic city of India?

- a) Lucknow
- b) Pune
- c) Bengaluru
- d) Delhi

14. Name the hardest substance available on earth?

- a) Talc
- b) Gypsum
- c) Diamond
- d) Silver



Note: Please check your answers with the answer keys given at page number 157.



GENERAL BODY SYSTEM

Ms. Kuhelika Bepa, GNM II Year



1. The smallest functional unit of body is known as:

- a) Tissue
- b) Cell
- c) Organ
- d) Bone

2. Movement away from the midline of the body is known as:

- a) Extension
- b) Abduction
- c) Adduction
- d) Flexion

3. The pacemaker of the heart is known as:

- a) V.nod
- b) S.A node
- c) Aorta
- d) Bicuspid value

4. Brain is the part of:

- a) CNS
- b) PNS
- c) ANS
- d) None of the above

5. The sternum has a _____ bone.

- a) Long Bone
- b) Flat bone
- c) Irregular bone
- d) All of the above

6. Where apocrine sweat glands are distributed in the skin?

- a) Axila
- b) Anal region
- c) Genital region
- d) All of the above

7. Loss of appetite is called as:

- a) Anorexia
- b) Anoxemia
- c) Anemia
- d) Anuriya

8. Rabies is caused by:

- a) Rat bite
- b) Snake bite
- c) Dog bite
- d) Insect bite

9. Difficulty in swallowing is known as:

- a) Dysphagia
- b) Dyspepsia
- c) Regurgitation
- d) Anorexia

10. Inflammation of the tongue is known as:

- a) Glossitis
- b) Gastritis
- c) Stomatitis
- d) Gingivitis



11. Diaphragm is _____ shaped.

- a) Dome
- b) Pyramid
- c) Bean
- d) All of the above

12. Earwax is the secretion of _____

- a) Ceruminous glands
- b) Liver
- c) Sebaceous gland
- d) None of the above

13. Presence of blood in vomitus is known as:

- a) Haemoptysis
- b) Haematemesis
- c) Haematuria
- d) Melana

14. Nuclear part of the neurone is:

- a) The axon
- b) The dendrite
- c) The cell body
- d) All of the above

15. Which is the largest nerve in the body?

- a) Pudental nerve
- b) Sciatic nerve
- c) Radial Nerve
- d) Ulnar nerve

Note: Please check your answers with the answer keys given at page number 157.



FUNDAMENTALS OF NURSING

Ms. Koyel Pramanik, GNM II Year



1. What is the correct meaning for "angio"?

- a) Mouth
- b) Lung
- c) Vessel
- d) Water

2. A bluish discolouration of the skin is known as:

- a) Cilium
- b) Edema
- c) Effusion
- d) Cyanosis

3. Which instrument is help to the view the eye?

- a) Ophthalmoscope
- b) Otoscope
- c) Laproscopy
- d) Laryngoscopy

4. Pain in a joint is known as:

- a) Arthritis
- b) Arthralgia
- c) Ostealgia
- d) Anthroalgia

5. What is the other name of REM sleep?

- a) Short sleep
- b) Hypnosis sleep
- c) Paradoxical sleep
- d) Deep sleep

6. What does the 'p' in CPR stands for?

- a) Plasma
- b) Post
- c) Pulmonary
- d) Posterior

7. Which of the following has adipose tissue?

- a) Fat cells
- b) Lymph nodes
- c) Skin
- d) Muscles

8. Inflammation of sweat gland is known as:

- a) Colitis
- b) Rhinitis
- c) Fascitis
- d) Hidradenitis



9. Which is the term for an abnormally low white blood cell count?

- a) Anemia
- b) Leukocytosis
- c) Leukemia
- d) Neutropenia

10. Which term is used for abnormally large breast in men?

- a) Gynecomastia
- b) Gynecomania
- c) Gynoplasties
- d) Gynaden

11. Inflammation of the gall bladder is known as:

- a) Cholecystitis
- b) Gingivitis
- c) Glossitis
- d) Gastritis

12. Which acronym measures body fat based on height and weight?

- a) BMI
- b) ALS
- c) BLS
- d) ACLS

13. Inflammation of the sweat gland is known as:

- a) Colitis
- b) Rhinitis
- c) Hidradenitis
- d) Fascitis

14. Which type of blood group is known as universal receiver?

- a) A⁺
- b) AB⁺
- c) B⁻
- d) O⁻

Note: Please check your answers with the answer keys given at page number 157.



BASICS OF NURSING

Ms. Manisha Nagar, GNM II year



1. Which of the following actions should be avoided while providing first aid for burns?

- a) Pour running water over the area
- b) Remove clothing that is not stuck to the boood skin
- c) Apply ice over the burnt area
- d) Patient to roll on the ground

2. Risk factor after CABG:

- a) Depression
- b) Dizziness
- c) Heart failure
- d) Forgetness

3. Normal pulmonary artery pressure:

- a) 5 to 10 mmHg
- b) 10 to 15 mmHg
- c) 15 to 20 mmHg
- d) 25 to 30 mmHg

4. Drug of choice to control pain in patient with acute pancreatitis:

- a) NSAIDS
- b) Codeine sulphate
- c) Meperidine
- d) Morphine

5. Nurse responsibility in schilling test:

- a) Collect 24hr urine sample
- b) Blood sample
- c) Sputum specimen
- d) IV fluid admistration

6. The most common type of brain neoplasm is:

- a) Neuroma
- b) Giloma
- c) Meningioma
- d) Angiom

7. Inability to speak or understand spoken word is called:

- a) Agnosia
- b) Aphasia
- c) Asphyria
- d) Apraxia

8. Lack of which neurotransmitter causes Parkinson's:

- a) Dopamine
- b) Noradrenalin
- c) Acetylcholine
- d) Adrenaline

9. Early indictor of hypoxia in unconscious patient is:

- a) Cyanosis
- b) Restlessness
- c) Tachycardia
- d) Hypovotemia

10. Chemical burn of eye is treated with:

- a) Local anesthesia
- b) Sterile water irrigation
- c) Povidineindine
- d) Tincuter solution



11. In a patient with pheochromocytoma, the nurse should assess:

- a) Blood sugar
- b) Blood pressure
- c) Abdominal assessment
- d) Urine output

12. Which of following indicates pancreatitis?

- a) Elevated lipase
- b) Increase ESR
- c) Elevated BUN
- d) Increased haematocrit

13. Needle gauge preferred with blood transfusion is:

- a) 16G
- b) 18G
- c) 20G
- d) 22G

14. Which congenital cardiac defect does not cause heart failure?

- a) ASD
- b) VSD
- c) TGA
- d) PDA

15. Minimum 2 maximum score of GCS are:

- a) 8-9
- b) 8-12
- c) 12-13
- d) 3-15

16. Maximum duration of hand hygiene:

- a) 90 second
- b) 20-30 second
- c) 1 minute
- d) 2 minutes

17. The length of female urethra:

- a) 2cm
- b) 4cm
- c) 7cm
- d) 10cm

18. Oral anti diabetic drug is commonly used on:

- a) Type-I DM
- b) Both
- c) None
- d) Type II DM

19. Kidney is present in:

- a) Lumber region
- b) lower abdomen
- c) Epigastrie region
- d) Uiac Fossa

20. Full form of IUGR:

- a) Intrauterine growth restriction
- b) Intrauterine growth retardation
- c) Intrauterine growth retention
- d) Intraurethral growth retention

21. The sequence of nursing process:

- a) Diagnosis, Assessment, Implementation, evaluation
- b) Evaluation, diagnosis, Implementation, assessment
- c) Assessment, Planning diagnosis, Evaluation, Implementation
- d) Assessment Nursing diagnosis, Planning, Implementation Evaluation

Note: Please check your answers with the answer keys given at page number 157.



GENERAL AWARENESS

Ms. Priyanka Kushwaha, GNM II Year



1. The last product in the process of blood coagulation is:

- a) Fibrin
- b) Thrombin
- c) Prothrombin
- d) Thromboplastin

2. Ramsay scale is used for the assessment of?

- a) Sedation
- b) Pain
- c) Anxious patient
- d) Arousal

3. Clinical death is also known as?

- a) Accidental Death
- b) Brain Death
- c) Legal Death
- d) Biological death

4. Oxygen flow rate of nasal canula is:

- a) 5-8 liter
- b) 1-4 liter
- c) 1-3 liter
- d) 1-8 liter

5. Contact precautions are used in caring for a patient with :

- a) Degrue
- b) Etanus
- c) Pneumonia
- d) MRSA

6. Which is the largest bank in India ?

- a) ICICI Bank
- b) IDBI Bank
- c) HDFC Bank
- d) SBI Bank

7. Which is the largest temple in India ?

- a) Golden temple
- b) Sun temple
- c) Srirangam temple
- d) None of these

8. Which is the first India film ?

- a) Raja harishchandra
- b) Nayakan
- c) Anbe sivam
- d) None of these

9. Who discovered India?

- a) Mahatma Gandhi
- b) Pingali venkaya
- c) Vasco DA Gama
- d) None of these



10. Which part of the body is affected by malaria?

- a) Lungs
- b) Liver
- c) Heart
- d) Kidney

11. Olympics game are held after every:

- a) 7 Years
- b) 3 Years
- c) 4 Years
- d) 6 Years

12. Which plant is called “ Herbal Indian Doctor”?

- a) Tulsi
- b) Amla
- c) Neem
- d) Mango

13. The first Indian woman to receive the nobel prize:

- a) Indira Gandhi
- b) Mother Teresa
- c) Kiran bedi
- d) Sarojini Naidu

14. Who was the fist doctor in the world?

- a) Sushrutaa
- b) Patrick soon shiong
- c) Hipocrates
- d) None of these

15. Which country made laugh gas nitrous oxide?

- a) United kingdom
- b) Australia
- c) India
- d) Sri Lanka



Note: Please check your answers with the answer keys given at page number 157.



REVIEW OF SYSTEMS

Ms. Rikta Hazra, GNM II Year



1. What is the correct meaning for “angio”?

- a) Mouth
- b) Lung
- c) Water
- d) Vessel

2. The purpose of Electro Encephalogram is:

- a) Record of electricity in the brain
- b) Record of electricity in the heart
- c) X-ray of the brain
- d) X-ray of heart & brain

3. Pain in a joint is known as:

- a) Ostealgia
- b) Osteoarthritis
- c) Anthritis
- d) Arhnalgia

4. Which instrument is used to view the eye?

- a) Ophthalmoscopy
- b) Ophthalmoscope
- c) Ophthalmology
- d) Ophthalmoscope

5. Abnormal condition of the kidney:

- a) Newrologic
- b) Nevralgia
- c) Nephrosis
- d) Nephrotomy

6. Increased blood glucose level is known as:

- a) Hypoglycemia
- b) Hypodermic
- c) Hyperglycemia
- d) Hematoma

7. Where does the embryo implant in most ectopic pregnancies?

- a) In the uterus
- b) In the pelvic bone
- c) In the Vagina
- d) In the Fallopian tube

8. What is the primary hormone secreted by the thyroid?

- a) Oxytocin
- b) Adrenaline
- c) T3 and T4
- d) FSH

9. Where does gas exchange take place in the lungs?

- a) Alveoli
- b) Trachea
- c) Bronchioles
- d) Pleura



10. Which is not produced by pituitary gland?

- a) FSH
- b) TRH
- c) LH
- d) ADH

11. Muscle contractions that normally move food along the human digestive system are known as:

- a) Defecation
- b) Osmosis
- c) Peristalsis
- d) Circulation

12. What might you expect to see in whiplash injury?

- a) Cardiopulmonary problems
- b) Side – to – side spinal curvature
- c) Eventual Herniation of discs
- d) Traumatic injury to ligament

13. What is the most visible part of the ear?

- a) Pinna
- b) Cochlea
- c) Organ of cord
- d) Ear canal

14. The heart contains four chambers. Which of these four chambers is the largest & strongest?

- a) Left Ventricle
- b) Right Ventricle
- c) Left atrium
- d) Right atrium

15. The meaning of vasodilation is:

- a) Vessels under the skin expand
- b) Muscles expand
- c) Vessels under the skin shrink
- d) Muscles shrink

16. The hearts natural pacemaker is known as:

- a) Sinoatrial node
- b) Atrioventricular
- c) Purkinje fibres
- d) Left & right bundle of branches



Note: Please check your answers with the answer keys given at page number 157.



A WORLD OUT OF NURSING

Mr. Sachin Sahaniya, GNM II Year



1. Nobel peace prize 2020 was awarded to:

- a) World Health organization
- b) Donated Trump
- c) Vladimir putin
- d) World Food Programme

2. Who painted the famous painting of Monalisa?

- a) Picasso
- b) Gucci
- c) MF Husain
- d) Leonardo Da Vinci

3. WWW was invented by?

- a) Bill Gates
- b) Steve Jobs
- c) Elon Mask
- d) Tim Berners Lee.

4. Which is the third highest civilian awarded in India?

- a) Bharat Ratna
- b) Padma Bhushan
- c) Padma Shri
- d) Padma Vibhushan

5. Florence Nightingale is known for her major contribution during:

- a) Spanish war
- b) Indian Freedom Struggle
- c) Crimean War
- d) World War

6. The Indian nursing council (INC) Act was passed in the year:

- a) 1940
- b) 2012
- c) 1990
- d) 1947

7. International Red cross was initially established by:

- a) Florence Nightingle
- b) Henry Dunant
- c) Jonathan Swift
- d) Nupolean

8. The First education minister of India is:

- a) Sarda Patel
- b) JL Nehru
- c) Maulana Abdul Kalam Azad
- d) Mahatma Gandhi

9. When is national voter's day celebrated?

- a) Jan 25th
- b) 21 march
- c) 25 February
- d) 25 July



10. Which is the India's smallest state?

- a) Goa
- b) Assam
- c) Manipur
- d) Tripura

11. Which country produces maximum mangoes?

- a) India
- b) Canada
- c) Germany
- d) France

12. Which country is called the land of rising sun?

- a) India
- b) America
- c) Japan
- d) Pakistan

13. Which sweet is specially made as prasad during chhath pooja?

- a) Thekua
- b) Kalakand
- c) Rabri
- d) Thepla

14. Which animal cries like babies?

- a) Dog
- b) Kangaroo
- c) Cat
- d) Bear

15. Indian Red Cross society was established in the year:

- a) 1920
- b) 1940
- c) 1947
- d) 1980

16. When is the World soil day observed?

- a) December 5th
- b) September 5th
- c) March 21st
- d) December 10th



Note: Please check your answers with the answer keys given at page number 158.



EPIDEMIOLOGY

Ms. Shikha Chidar, GNM II Year



1. Which of the following is a water borne disease?

- a) Diarrhoea
- b) Dengue
- c) Malaria
- d) Chicken pox

2. The alimentary canal is associated with:

- a) Spinal cord
- b) digestive system
- c) Urinary tract
- d) Birth canal

3. Normal blood sugar mg per dl is:

- a) 80-120
- b) 70 – 110
- c) 80 – 130
- d) 60 – 100

4. AIDS is caused due to virus?

- a) HIV
- b) Hep B
- c) Rabies virus
- d) Rota virus

5. Oxygen cylinder has ____ colour body.

- a) Black
- b) Red
- c) Yellow
- d) Green

6. What is the PH of blood?

- a) 7.30
- b) 7.45
- c) 7.40
- d) 7.50

7. Which of the following food is a good source of protein?

- a) Nuts
- b) Cooked oatmeal
- c) Honey
- d) Raisins

8. Total number of bones in humans:

- a) 206
- b) 306
- c) 309
- d) 403

9. When is the International yoga day celebrated?

- a) June 21
- b) March 21
- c) April 22
- d) May 31

10. Number of bones in the sacrum:

- a) 5
- b) 3
- c) 4
- d) 1

11. What is known as the power house of cell?

- a) Mitochondria
- b) Plasma
- c) Cytoplasm
- d) Nucleus

Note: Please check your answers with the answer keys given at page number 158.



HUMAN ANATOMY

Mr. Shovan, GNM II Year



1. What is the normal oral temperature of an adult?

- a) 90.2 °f
- b) 98.6 °f
- c) 91.5 °f
- d) 90.6 °f

2. Which of the two organs in the body serve as a compensatory function to maintain acid base balance?

- a) Kidneys & Lungs
- b) Lungs & spleen
- c) Heart & Liver
- d) Gall bladder & appendix

3. Arthritis is the disease of:

- a) Skin
- b) Liver
- c) Kidney
- d) Joints

4. What collects the blood from the organ?

- a) Veins
- b) Arteries
- c) Nerves
- d) Lungs

5. Why disaster management planning is necessary?

- a) Prevention of danger
- b) Capacity building
- c) Rescue and brief
- d) All of the above

6. The most effective way to break the chain of infection is by:

- a) Performing hand hygiene
- b) wearing gloves
- c) placing patients in isolation
- d) performing hand hygiene

7. When is world first aid day observed every year?

- a) 11 September
- b) 13 September
- c) 14 September
- d) 12 September

8. Nursing means taking care of and looking after the:

- a) Sick
- b) Ill
- c) Un well
- d) Unhealthy

9. Florence founded an institution for training of _____ in London.

- a) Doctors
- b) Nurses
- c) Midwives
- d) Physicians



10. Which is the ideal position for mouth care for unconscious patient?

- a) Fowler's position
- b) Supine
- c) Side lying
- d) Trendelenburg

11. Which is the outer protective cover of the body?

- a) Skeleton
- b) Skin
- c) Hair
- d) None of these

12. The respiratory organ of the body is:

- a) Kidneys
- b) Intestine
- c) Lungs
- d) Brain

13. Disease caused by HIV Virus is

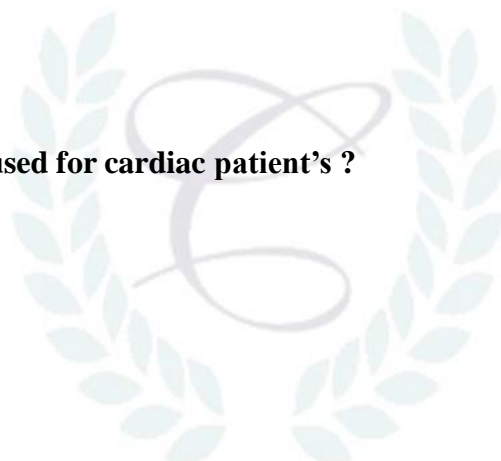
- a) Mumps
- b) Plague
- c) TB
- d) AIDS

14. Lack of sleep is known as

- a) Insomnia
- b) Homeostasis
- c) Dysphagia
- d) Asphasia

15. What among the below is the position used for cardiac patient's ?

- a) Supine position
- b) Fowler's position
- c) Lateral position
- d) SIMS position



Note: Please check your answers with the answer keys given at page number 158.



MULTI SYSTEM

Ms. Shanti, GNM II year



1. Study of tissues is called:

- a) Histology
- b) Cytology
- c) Embryology
- d) Pathological anatomy

2. What is called as knee cap?

- a) Fibula
- b) Tibia
- c) Patella
- d) None of these

3. Small intestine is divided into:

- a) 4
- b) 3
- c) 2
- d) 1

4. Bone is type of:

- a) Epithelium tissue
- b) Connective tissue
- c) Muscular tissue
- d) Nervous tissue

5. Which of the following is part of skull?

- a) Humorous
- b) Ulna
- c) Parietal bone
- d) Tibia

6. How many metacarpals are present in hand ?

- a) 14
- b) 5
- c) 8
- d) 3

7. The outer zone of kidney is called:

- a) Medulla
- b) Cortex
- c) Pyramid
- d) Alveoli

8. Fertilization occurs in:

- a) Vagina
- b) Fallopian tube
- c) Uterus
- d) Ovary

9. Which hormone is secreted from pancreas?

- a) Insulin
- b) Prolactin
- c) Oestrogen
- d) Progesterone





10. Weight of normal uterus is -----

- a) 30 grams
- b) 20 grams
- c) 150 grams
- d) 60 grams

11. Covering of brain is known as:

- a) Myocardium
- b) Meninges
- c) Cortex
- d) Diaphragm

12. Universal recipient blood group is:

- a) O +
- b) B -
- c) AB +
- d) O -

13. The inner layer of uterus is:

- a) Endometrium
- b) Perimetrium
- c) Myometrium
- d) None of the above

14. Smallest bone in human body is:

- a) Carpals
- b) Metacarpals
- c) Phalanges
- d) Stapes

15. Which blood cells contain nucleus?

- a) Erythrocytes
- b) Platelets
- c) Leukocytes
- d) All of the above



Note: Please check your answers with the answer keys given at page number 158.



REVIEW OF CHILD HEALTH

Ms. Urvashi Maheshwari, GNM II Year



1. What is the use of hands for the evaluation of various body system of Child?

- a) Auscultation
- b) Palpation
- c) Intugementory
- d) Inspection

2. Which of the following is a first line drug used for pain management?

- a) Morphine
- b) Clonidin
- c) Ketamine
- d) Acetaminophen

3. The length of cervix is?

- a) 2.5 cm
- b) 3.5 cm
- c) 4.5 cm
- d) None of above

4. Which of the following is an example of Passive immunity?

- a) Providing BCG to an infect.
- b) Providing toxoid to an individual.
- c) Transfer of antibodies from mother to body.
- d) Exposure of indent to tb.

5. The following are the functions of nose EXPECT?

- a) As a passageway of air movement
- b) As the initiator of the cough refer
- c) Warming and humidifying the air.
- d) Cleansing the air.

6. The lungs function tests are determined by?

- a) Tonometer
- b) Spirometer
- c) Sphygmomanometer
- d) Barometer

7. The child has a complete set of deciduous teeth at the age of years?

- a) 11/2 yrs
- b) 2 yrs
- c) 1 yrs
- d) 2.5 yrs

8. At what age does a child normally develop social smiller milestone?

- a) 12 Week
- b) 4 Week
- c) 16 Week
- d) 8 Week

9. UNICEF was established in year?

- a) 1946
- b) 1948
- c) 1952
- d) 1955

**10. Primary function of the skin is?**

- a) Vit D synthesis
- b) Protection
- c) Sensation
- d) Temperature regulation

11. Full form of MMSE?

- a) Multi Memory states examination
- b) Multiple mental sonata evaluation
- c) Mini mental status examination
- d) Meta mental structural evaluation

12. DPT vaccine should be stored?

- a) -2°0
- b) 0° C
- c) 4.8°C
- d) 20°C

13. All are the feature of the GDM Expect?

- a) Macrosomia
- b) Hypoglycemia
- c) Hypernatremia
- d) Hyperlipidemia

14. Monday fever is the other name for:

- a) Byssinosis
- b) Asbertosis
- c) Anthracosis
- d) Silicosis

15. Founder of red cross society?

- a) Henry Ford
- b) Henry Dunant
- c) Henry Brown
- d) Henry Died



Note: Please check your answers with the answer keys given at page number 158.



CURRENT ASPECTS OF NURSING

Ms. Vaishnavi Bhagehli, GNM II Year



1. Stethoscope was discovered by:

- a) Von Basch
- b) Signumd freed
- c) Rene lachnec
- d) Aristotle

2. The first Case of Covid positive case in India was reported in?

- a) Kerala
- b) Tamilnadu
- c) Gujarat
- d) Maharashtra

3. The Epithelial tissue which is found in uterine tube is?

- a) Squamous
- b) Ciliated
- c) Columnard
- d) Simple

4. When do we celebrate the nurse day ?

- a) 12th May
- b) 15th May
- c) 05th May
- d) 23rd May

5. The most common preventable complication of abdominal surgery is:

- a) Atelectasis
- b) Fluid & electrolyte imbalance
- c) Thrombophebitis
- d) Urinary retention

6. Which among the following is an example of isotonic intravenous solution?

- a) Normal saline
- b) 10% Dextrose
- c) 0.45% NAGL
- d) Ringer Lactate

7. Which of the following cell of the body are in almost constant mitosis?

- a) Nawe Cell
- b) Stomach Cell
- c) Mascle Cell
- d) Renal Cell

8. In Meiosis, how many daughter cell are produced?

- a) 8
- b) 6
- c) 4
- d) 2

9. Which hormone is produced by the ovaries inhibit the secretion of FSH & LH?

- a) Progesterone
- b) Estrogen
- c) Inhibin
- d) GnRH

10. The Acrosome of sperm Contains?

- a) Mithochondria
- b) Gysosomal Enzymes
- c) Nuclear Material
- d) All of the above

11. Creatinine is a metabolic waste product excreted in urine & derived from?

- a) Liver
- b) Muscle
- c) Bone
- d) Skin



12. The pharynx is divided into how many sub divisions?

- a) 2
- b) 3
- c) 4
- d) 5

13. Melatonin is secreted by?

- a) The pancreas
- b) The pineal Gland
- c) The ovaries
- d) Thyroid Gland

14. Which of the following substance is not present in sweat?

- a) Urea
- b) Calcium
- c) Lactic acid
- d) Water

15. Which of the following is a mental health nursing model?

- a) King
- b) Neuman
- c) Casey
- d) Peplau

16. Medulla oblongata is also called as:

- a) Prosencephalon
- b) Myelencephalon
- c) Mesencephalon
- d) Metencephalon

17. ADHH is usually treated with:

- a) Lorazepam
- b) Methylphenidate
- c) Haloperidol
- d) Methocarbamol

18. Alcoholic client experiencing burning & tingling sensation of the feet it is suggestive of:

- a) Peripheral Neuropathy
- b) Wernicke's encephalopathy
- c) Krakoff's Psychosis
- d) Seizures

19. Collapsing pulse is also known as:

- a) Bigeminal pulse
- b) Pulsus alternans
- c) Water hammer pulse
- d) Bounding pulse

20. Cause of peripheral Cyanosis is:

- a) Arterial obstruction
- b) Venous Obstruction
- c) Cold exposure
- d) All of these

Note: Please check your answers with the answer keys given at page number 158.



AMALGAMATION OF HEALTH AWARENESS

Ms. Yashaswi, GNM II year



1. A true pathogen will cause disease or infection?

- a) In a healthy person
- b) Only in an immune compromised person
- c) In person with allergy to the pathogen
- d) Supine with arms extended and hands behind head.

2. William crookers was a physical chemist who discovered and named the elements:

- a) Plutonium
- b) Garmanium
- c) Beryllium
- d) Thallium

3. Peripheral Sinonasal T-cell lymphoma is known as:

- a) Stewart's Granuloma
- b) Wegner's Granuloma
- c) Ringert's
- d) None of the above

4. Specimens of urine that are not taken directly to the laboratory as usually _____

- a) Refrigerated
- b) Discarded
- c) Sealed in a sterile container
- d) Shaken up

5. Electron was discovered in the year 1897 by _____

- a) Nicla Tesla
- b) Isac Newton
- c) T.A Edison
- d) JJ Thomson

6. Which does not cause hydrops fetalis?

- a) Syphilis
- b) ABO compatibility
- c) RH iso immunization
- d) none of the above

7. Life span of RBC is:

- a) 60- 80 days
- b) 90-100
- c) about 120 days
- d) 10-20 days

8. Leprosy is also known as:

- a) Crown's disease
- b) Sim's disease
- c) Hanson's disease
- d) Grave's disease

9. Which neurotransmitter deficiency causes myasthenia Gravis?

- a) Dopamine
- b) Acetylcholine
- c) Serotonin
- d) GABA

10. The lens of the eye is:

- a) Biconcave
- b) Biconvex
- c) Circular
- d) Longitudinal

Note: Please check your answers with the answer keys given at page number 158.



KNOW ABOUT MADHYA PRADESH

Ms. Yogesh Das, GNM II year



1. Which of the following river of Madhya pradesh is not the tributary of Yamuna River?

- a) Ken
- b) Betwa
- c) Chambal
- d) Tawa

2. What is the total geographical area Madhya Pradesh?

- a) 308 Lakh Hectares
- b) 328 Lakh Hectares
- c) 358 Lakh Hectares
- d) 300 Lakh Hectares

3. Which of the following is the state flower of Madhya Pradesh?

- a) White lily
- b) Palash Flower
- c) Phododendrom
- d) Brahma Kamal

4. Which of the following is the state dance of Madhya Pradesh?

- a) Maanch
- b) Phulpati
- c) Jawana
- d) Matki

5. Currency note press (CNP), of SPMCI is located at which place in Madhya Pradesh?

- a) Hoshangabad
- b) Dewas
- c) Napanagar
- d) Indore

6. Which is the largest district of Madhya Pradesh in terms of Area?

- a) Chhindwara
- b) Jabalpur
- c) Sagar
- d) Indore

7. Alha Tolk Song is sung in which region of Madhya Pradesh?

- a) Bundelkhand
- b) Baghelkhand
- c) Malwa
- d) Niman Bundelkhand

8. The Bharthari folk song is mainly sung in which region of Madhya Pradesh?

- a) Malwa
- b) Baghelkhand
- c) Bundel Khand
- d) Nimar

9. How many central universities are present in Madhya Pradesh?

- a) 1
- b) 2
- c) 3
- d) 4

10. Which state share longest border with Madhya Pradesh?

- a) Chhatishgarh
- b) Uttar Pradesh
- c) Maharashtra
- d) Rajasthan

Note: Please check your answers with the answer keys given at page number 158.



ANATOMY AND PHYSIOLOGY

Ms. Chaitali Das, GNM II year



1. Word Anatomy is derived from:

- a) Latin Word
- b) Italian Word
- c) Greek Word
- d) Hindi Word

2. Study of tissues is called:

- a) Histology
- b) Etiology
- c) Embryology
- d) Pathological anatomy

3. Bending movement in which angle between two bones decreases:

- a) Flexion
- b) Extension
- c) Abduction
- d) Adduction

4. The parts of body which are present away from the medial line:

- a) Lateral
- b) Medial
- c) Central
- d) Deep

5. Movement of bones towards the lower side is called:

- a) Planter flexion
- b) Depression
- c) Dorsiflexion
- d) Elevation

6. _____ is longest bone in upper limb.

- a) Radius
- b) Ulna
- c) Humerus
- d) Fibula

7. Length of pharynx ranges from:

- a) 2-3 inches
- b) 7-8 inches
- c) 5-6 inches
- d) 1-2 inches

8. Length of esophagus is:

- a) 20 cm
- b) 15 cm
- c) 14 cm
- d) 12 cm

9. Weight of heart is about _____ in females.

- a) 250 g
- b) 300 g
- c) 600 g
- d) 400 g



10. _____ are located mainly in the lumber region.

- a) Heart
- b) Lungs
- c) Kidney
- d) Esophagus

11. Which vitamin is necessary for hemoglobin synthesis?

- a) Vitamin B12
- b) Vitamin E
- c) Vitamin D
- d) Vitamin A

12. Erythrocytes are:

- a) Nucleated
- b) Non nucleated
- c) Both a and b
- d) None of these

13. Average volume of blood in an adult is:

- a) 6 L
- b) 5 L
- c) 10 L
- d) 11 L

14.. Which one of the following is not an accessory organ of digestive system?

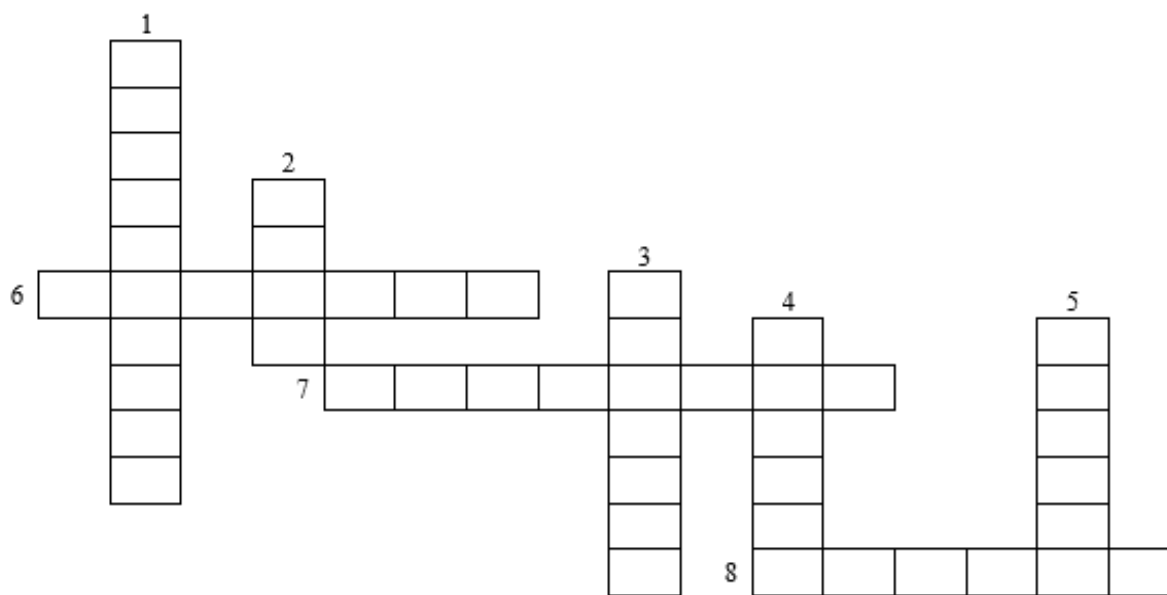
- a) Pancreas
- b) Liver
- c) Gall bladder
- d) Stomach

Note: Please check your answers with the answer keys given at page number 158.



SKELETAL SYSTEM

Ms. Khusbu Mewada, BSc (N) I Year



Across:

6. Also known as knee cap.
7. It is called as body's central framework.
8. A joint in which rounded end of one part fits into the cavity of another.

Down:

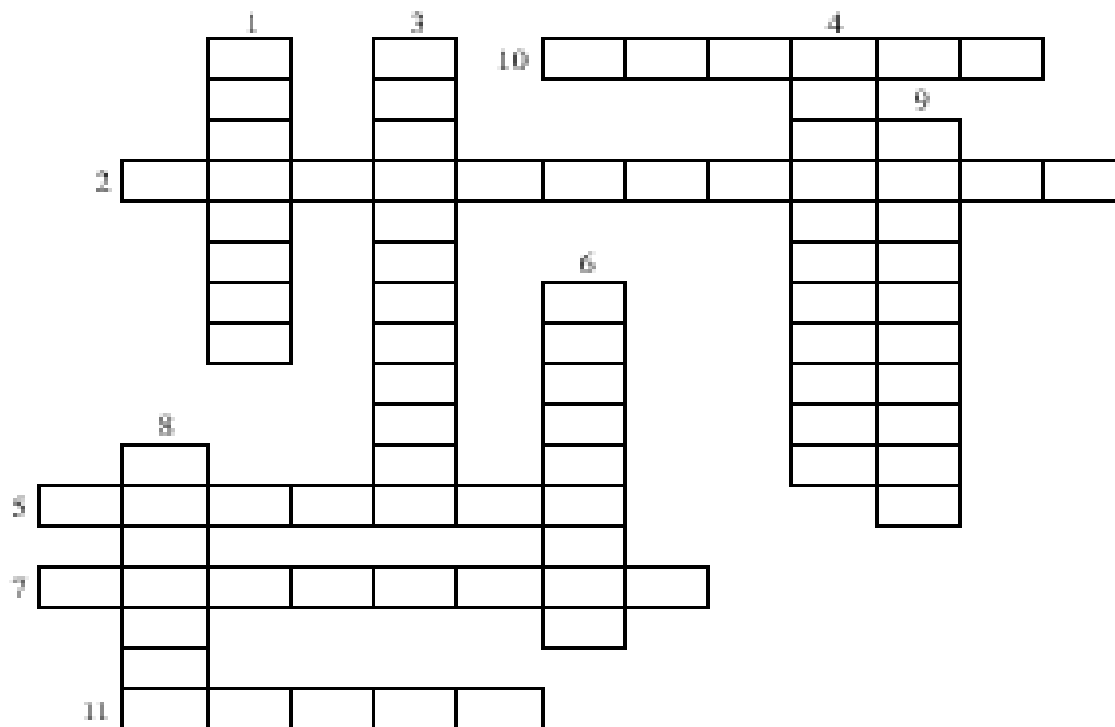
1. The soft spongy tissue that has many blood vessels and is found in center of most bones.
2. It joints the thigh bone to shin bone.
3. A long flat bone located in the central part of the chest.
4. One of two bones in your forearm.
5. It allows movement of two plains- flexion or extension and abduction or adduction.

Note: Please check your answers with the answer keys given at page number 159.



MEDICAL TERMS

Ms. Muskan Khuswaha, BSc (N) 1 Year



Down:

1. Thick dark yellow or green drainage with foul odor.
3. The act of listening with stethoscope to the sounds produced within the body.
4. Data that is directly observed.
6. Difficulty swallowing or inability to swallow.
8. Inadequate tissue oxygenation at the cellular level.
9. Study that deals with chemicals that affect the body's functioning.

Across:

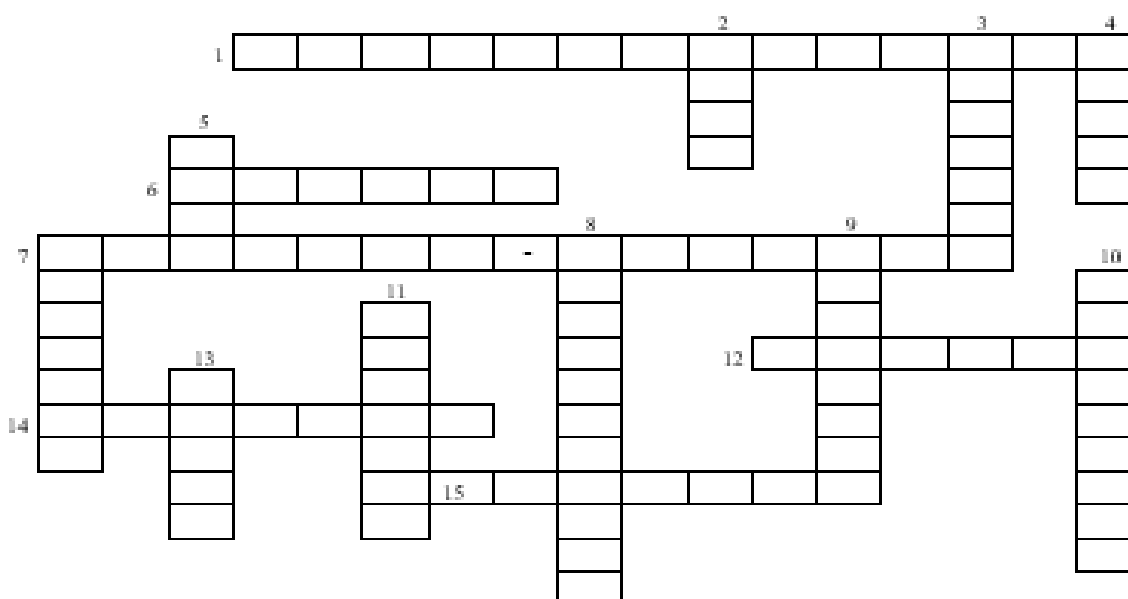
1. Injection administered into the adipose tissue layer.
5. Difficult or labored breathing.
7. Urination at night.
10. Artificial opening for waste excretion located on the body surface.
11. Illness with rapid onset of symptoms which lasts for relatively short times

Note: Please check your answers with the answer keys given at page number 159.



MALE AND FEMALE REPRODUCTIVE ORGAN

Ms. Vinita Verma, BSc (N) I Year



Across:

1. Tubes that connects each ovary to the uterus through which the ovum travels.
6. The passage/way leading from the uterus to the outside way to the outside way of the female body.
7. Where semen is stored
12. Where a developing body grows
14. In a female urine passes and in a male urine and semen pass through this tube to the outside to the body.
15. A passage between the uterus and the vagina.

Down:

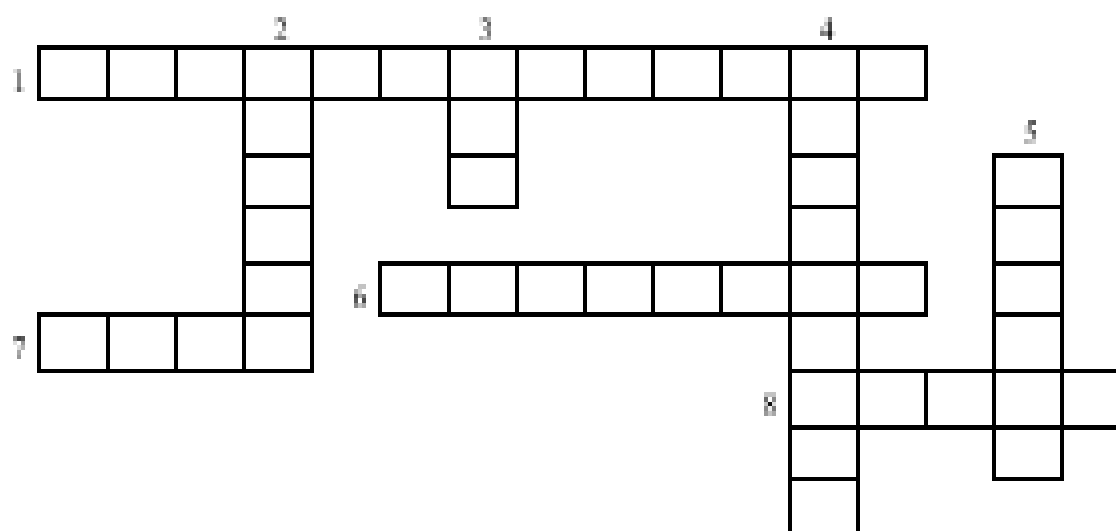
1. The opening at the end of the digestive tract where faeces leave the body
2. An organ that holds urine produced in the kidney.
3. The male reproductive cell
4. The egg produced by the female
8. The tube that carry sperm from testis
9. Present at top of labia surrounding the vagina
10. The sperm producing glands /organs
11. One of a pair of female glands in which the eggs form
- 13 The male external sex organ from which semen and urine are discharged it can become erect when sexually aroused

Note: Please check your answers with the answer keys given at page number 159.



NERVOUS SYSTEM

Ms. Uma Dangi, BSc (N) I Year



Across:

1. The process of the fusion of the gametes.
6. The type of fertilization in hen.
7. The term used for bulges observed on the sides of the body of hydra eggs are produced here.

Down:

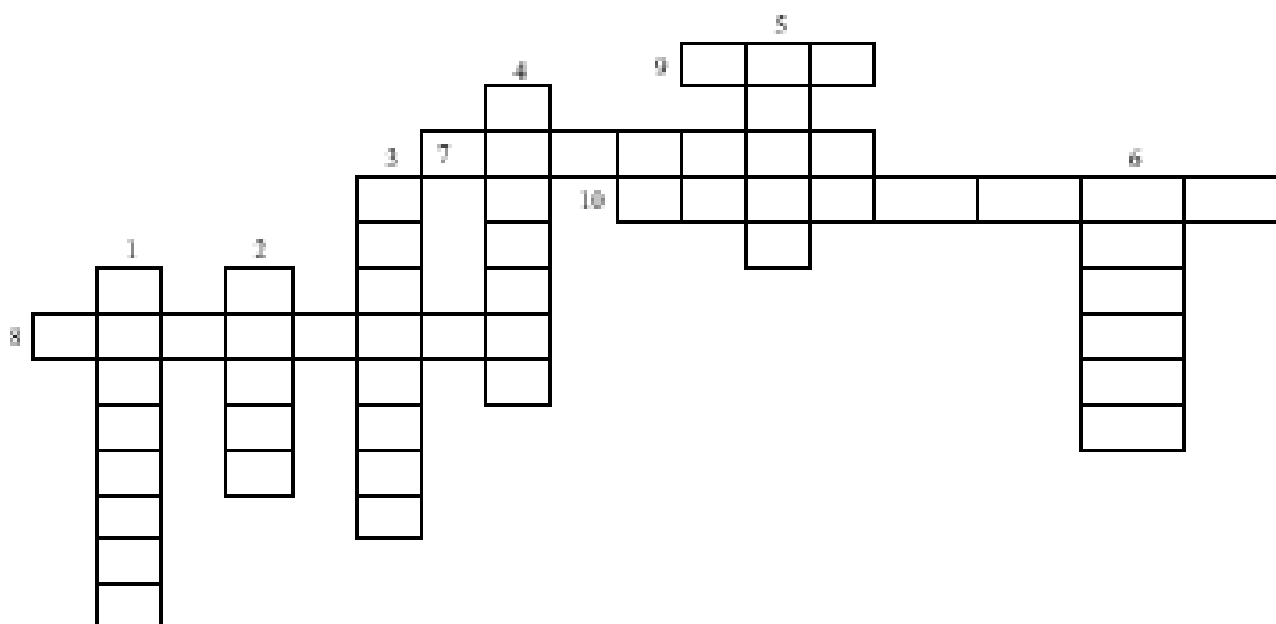
2. Sperms are produced in these male reproductive organ.
3. Another term for in intro fertilization.
4. These animals lay eggs.
5. A type of fission in amoeba.

Note: Please check your answers with the answer keys given at page number 159.



FUNCTIONS OF KIDNEY

Ms. Gori Sharma, BSc (N) I Year



Across:

7. The most abundant circulating protein found in plasma.
8. A process of removing excess water, solutes and toxins from blood.
9. Which test helps to measure the amount of urea and nitrogen in blood?
10. A naturally occurring inorganic substance which are found in solid state.

Down:

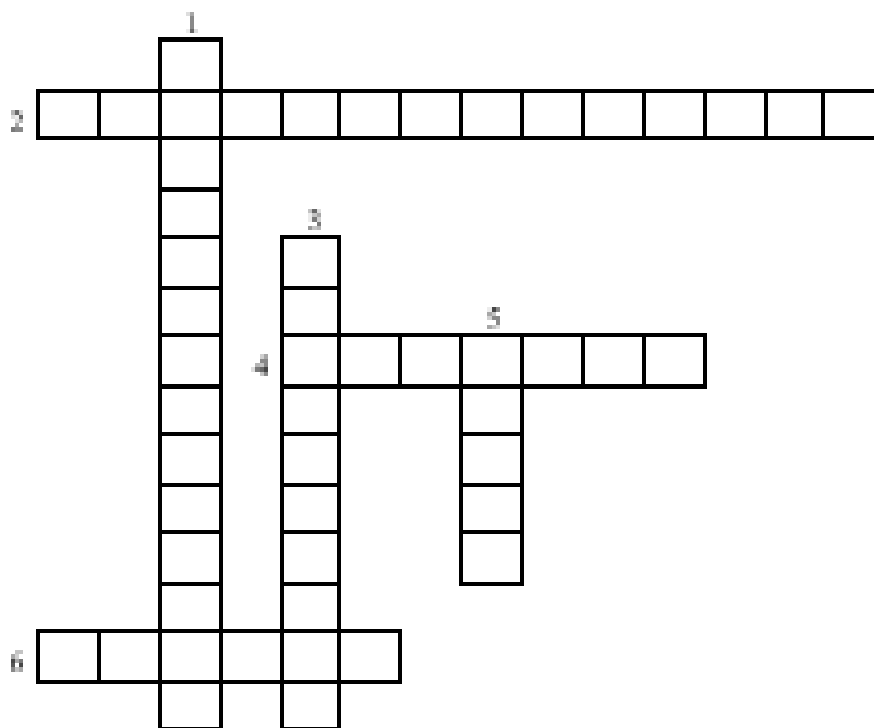
1. A micronutrient which is required by the body to carry out arrange of normal function.
2. Excess _____ causes kidney interstitial edema and venous congestion.
3. A thin plastic stick with strips of chemicals which helps to detect any renal dysfunction.
4. A monosaccharide made up of single unit of sugar.
5. Urine analysis is a test of _____
6. Fatty compound that perform a variety of function in human body.

Note: Please check your answers with the answer keys given at page number 160.



DIGESTIVE SYSTEM

Ms. Tanisha Silawat, BSc (N) I Year



Across:

1. Where the nutrients from food are absorbed into the blood?
4. Where food is stored up to help break it down?
6. This help as chew food and swallow it.

Down:

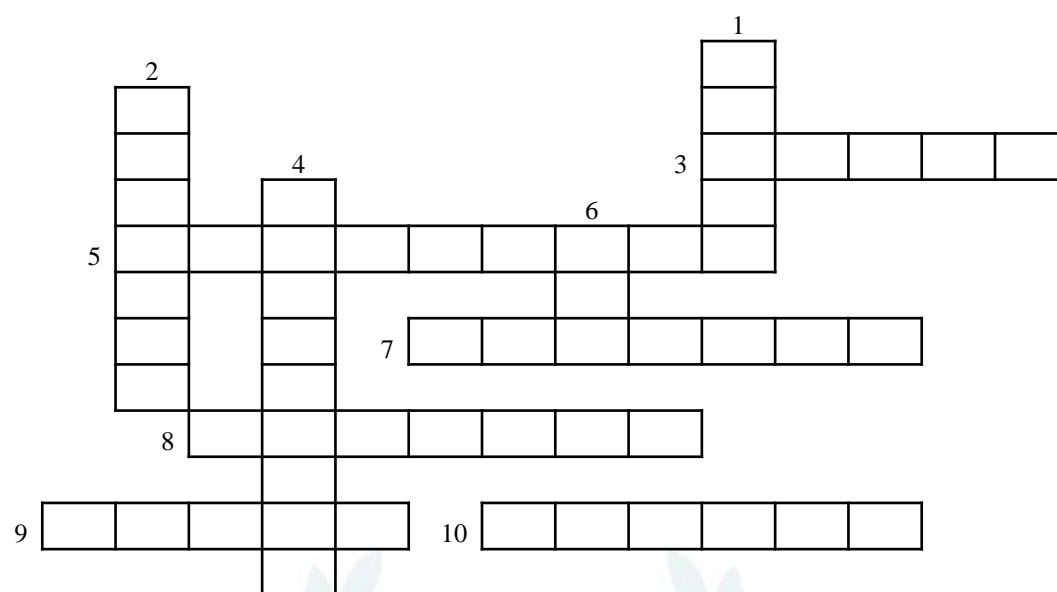
1. Where water is abororbed into the body?
3. The pipe that transports food to the stomach.
5. Where we chew food?

Note: Please check your answers with the answer keys given at page number 160.



RESPIRATORY SYSTEM

Ms. Saloni Yadav, BSc (N) I Year



Across:

3. Structures projecting from a cell that move fluids over the cell surface.
5. The flap over the trachea that keeps food from entering the windpipe.
7. Allows air to move from the nose and mouth to the Larynx.
8. The two main branches of the trachea that are the main passageways into the lungs.
9. A pair of organs that allows the exchange of gases between the air and body.
10. A hollow muscular organ that houses the vocal cords.

Down:

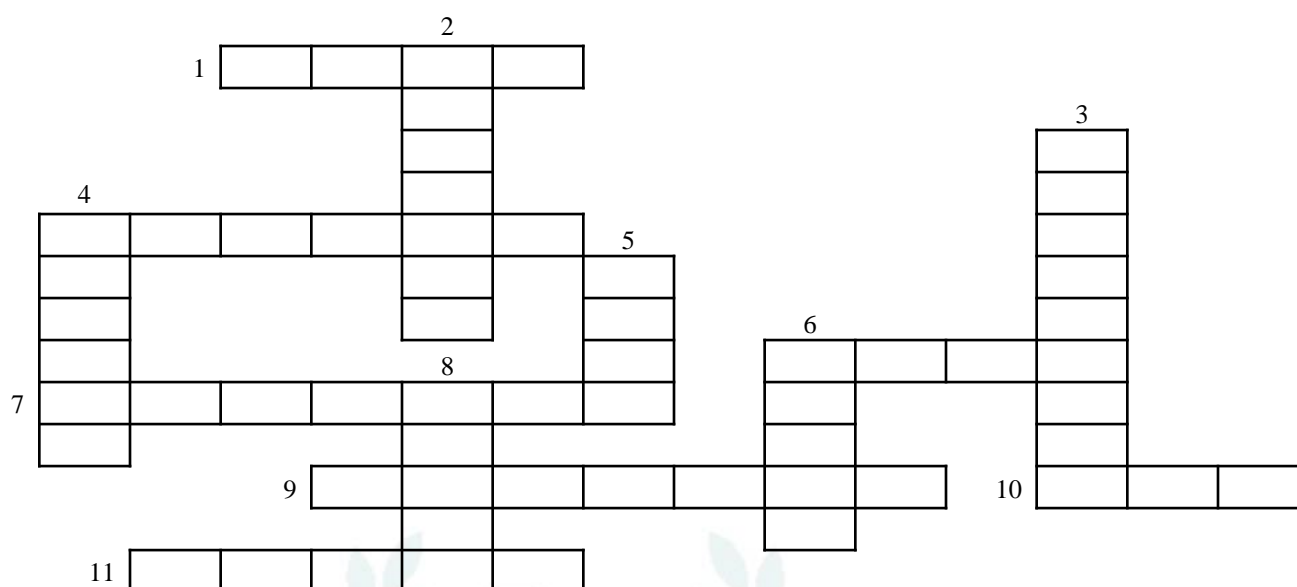
1. A slimy substance secreted to warm and moisten air in the respiratory system.
2. Air sacs where oxygen and carbon dioxide move between the lungs and blood stream.
4. Large muscle that expands and contracts to allow breathing to occur.
6. A long tube in the neck and chest that carries air in and out of the lungs.

Note: Please check your answers with the answer keys given at page number 160.



GENERAL KNOWLEDGE

Ms. Sakshi Pancholi, BSc (N) I Year



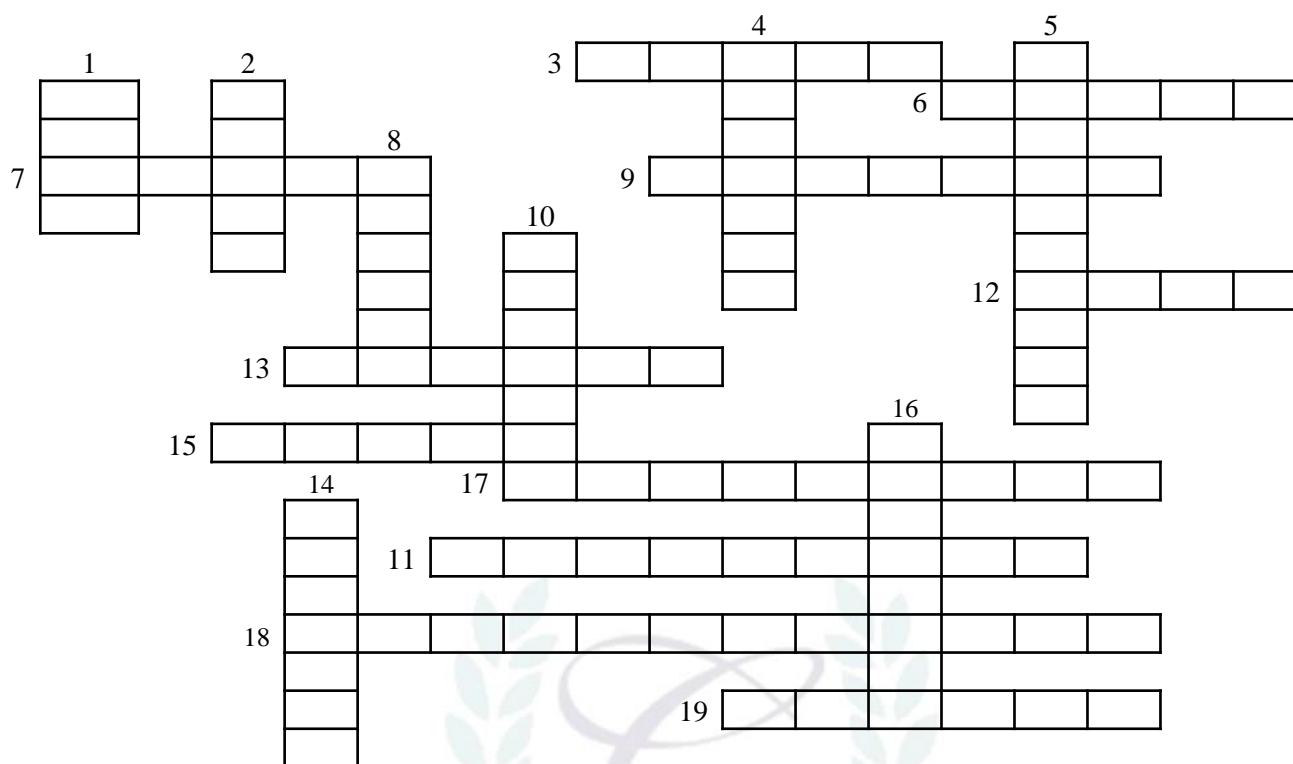
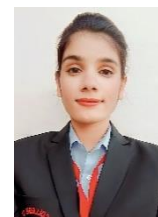
1. Eyes is to see as leg is to:
2. Collection of books
3. Ninth month of the year
4. Holiday of the week
5. How many balls are required in cricket?
6. National animal of India.
7. A person who teaches in school.
8. A place where we live.
9. $58+42$
10. Traffic color light which means stop.

Note: Please check your answers with the answer keys given at page number 160.



DIGESTION AND HEALTH

Ms. Ritika Nagar, BSc (N) I Year



Across:

3. Scientific name for fat and oil.
6. Those are used for chewing food.
7. Intestine that absorbs water into blood stream.
9. Nutrient group containing meat, eggs and beans.
11. Type of acid that makes up proteins.
12. Hole through which faeces pass out of the body.
13. Storage organ for faeces.
15. Fingerlike projections of small intestine
17. Scientific name for fibre.
18. Nutrient group containing sugar, starch and cellulose.
19. Fluid in mouth

Down:

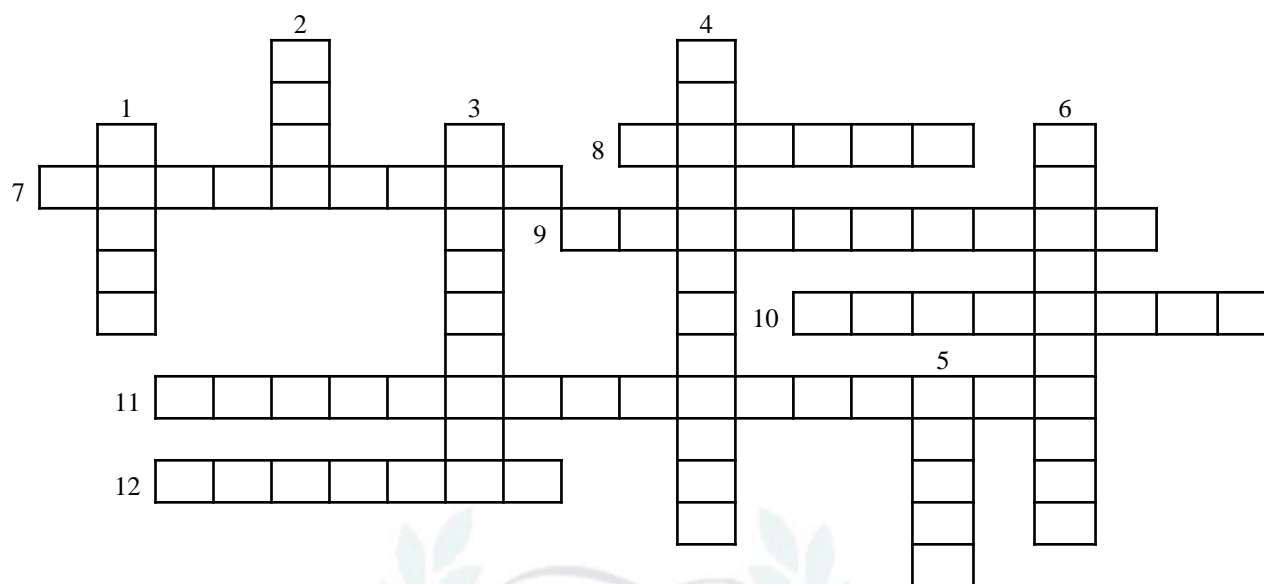
- 1.. Green chemical that breaks fats into smaller globules.
2. The duodenum is the – part of the small intestine
3. Organ at back of mouth where air may pass
4. Muscular contraction of digestive tract
8. Chemical that breaks food into smaller particles
10. Juice is found in the stomach
16. A sweetening agent that is also a medicine
14. Example of simple sugar

Note: Please check your answers with the answer keys given at page number 160.



NEUROLOGY

Ms. Rishika Malviya, BSc (N) I Year



Across:

7. Central trunk of brain consists of medulla, pons and mid brain.
8. Responsible for sending and receiving neuro transmitters.
9. It connects brain to lower back.
10. Large upper part of brain.
11. Place where electrical signal is converted into chemical signal.
12. Place where neuron connect and communicate with each other.

Down:

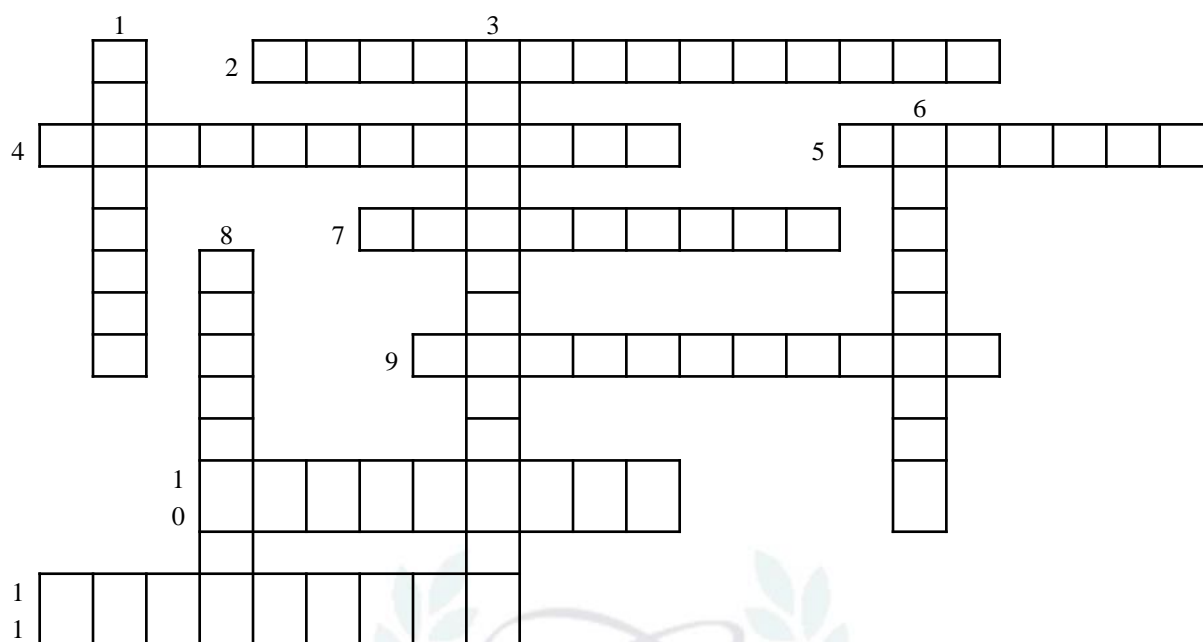
1. Organ inside the head that controls all body functions.
2. A long single thread like structure arising from the cytone.
3. Finger like cells present on the end of neuron.
4. It is an insulating layer, or sheath that form around nerves.
5. Cable that carry electrical impulses between brain and rest of the body.
6. Portion of the brain in the back of head between the cerebrum and the brain stem.

Note: Please check your answers with the answer keys given at page number 160.



HUMAN BODY

Ms. Rani Yadav, BSc (N) I Year



Across:

2. Carries blood around the body delivering oxygen & nutrients.
4. System of organs involved in producing off spring
5. Controls the body through the use of electrical signals
7. Breaks down food and fruits it into energy.
9. Carries air into the body allowing oxygen to enter the blood
10. Keep body fluids in balance and fights against infection
11. Disposes of the body's waste

Down:

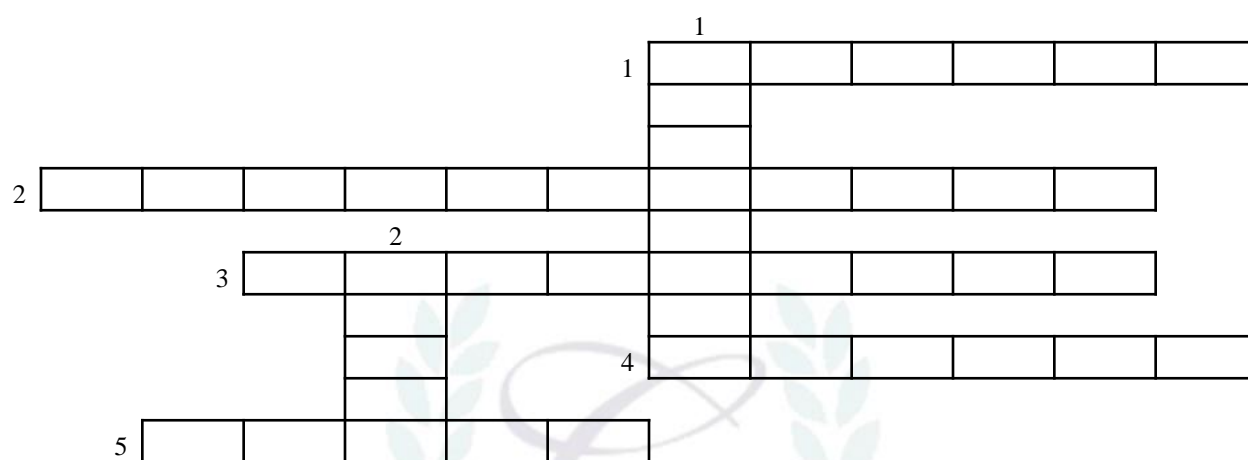
1. Supports the body and enables movement with the help of the muscular system
3. The skin and its appendages
6. Communications with the body using chemicals called hormones
8. Enables all the movement of the body.

Note: Please check your answers with the answer keys given at page number 161.



ANATOMY PUZZLE

Ms. Pushpa Shah, BSc (N) I Year

**Across:**

1. Another name for these is "voice box".
2. The process where blood moves throughout the body.
3. They layer of skin on the outside of the body.
4. The tissue that connects bones with muscle.
5. The throbbing arteries in the body as blood is pumped through them.

Down:

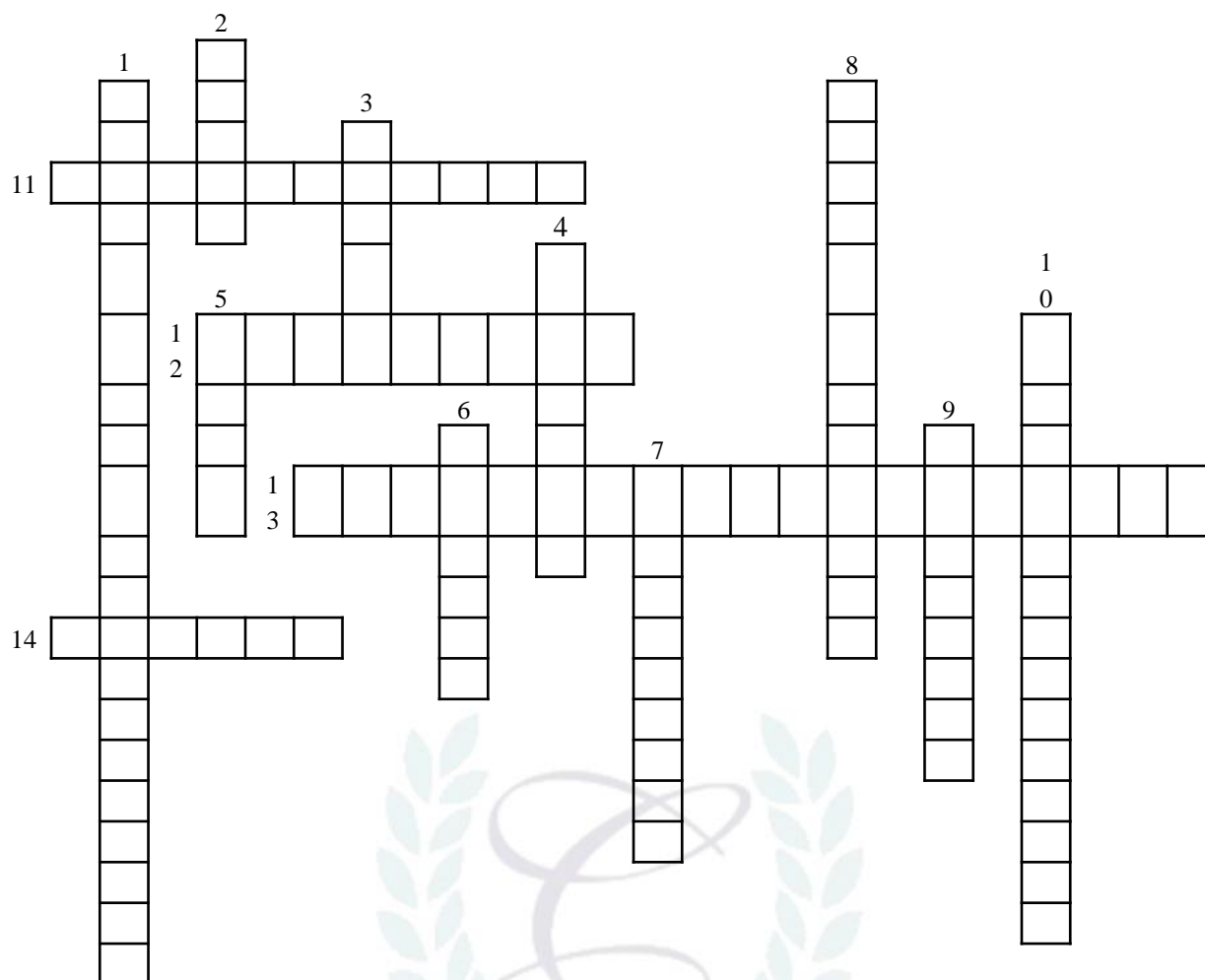
1. Tissue that holds joints together.
2. The opening in the eye that light passes through.

Note: Please check your answers with the answer keys given at page number 161.



CIRCULATORY SYSTEM

Ms. Purva Jaiwar, B.Sc I Year



Across:

11. A tabular structure carrying blood through the tissues and organs.
12. Muscular chamber that pumps blood out of the heart.
13. Circulation that provides the oxygenated blood supply to all body tissue.
14. Tubes that carry oxygenated blood to other body parts.

Down:

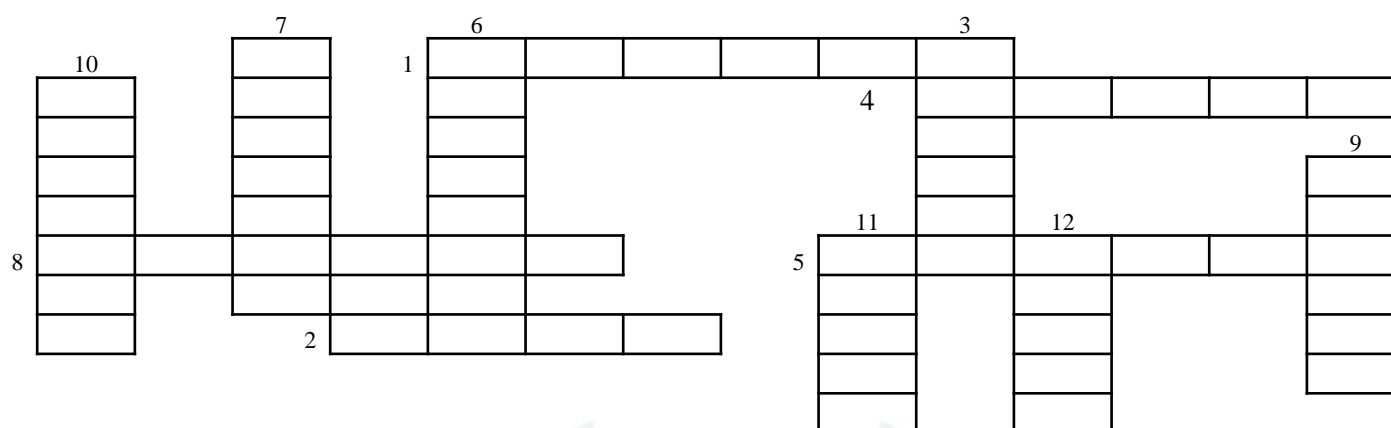
6. Control centre of the cell which stores DNA.
7. The membrane enclosed organelle within a cell that contains chromosomes.
8. It helps to maintain water balance in plant cells.

Note: Please check your answers with the answer keys given at page number 161.



PLAY WITH SCIENCE

Ms. Nikita Sharma, B.Sc I Year



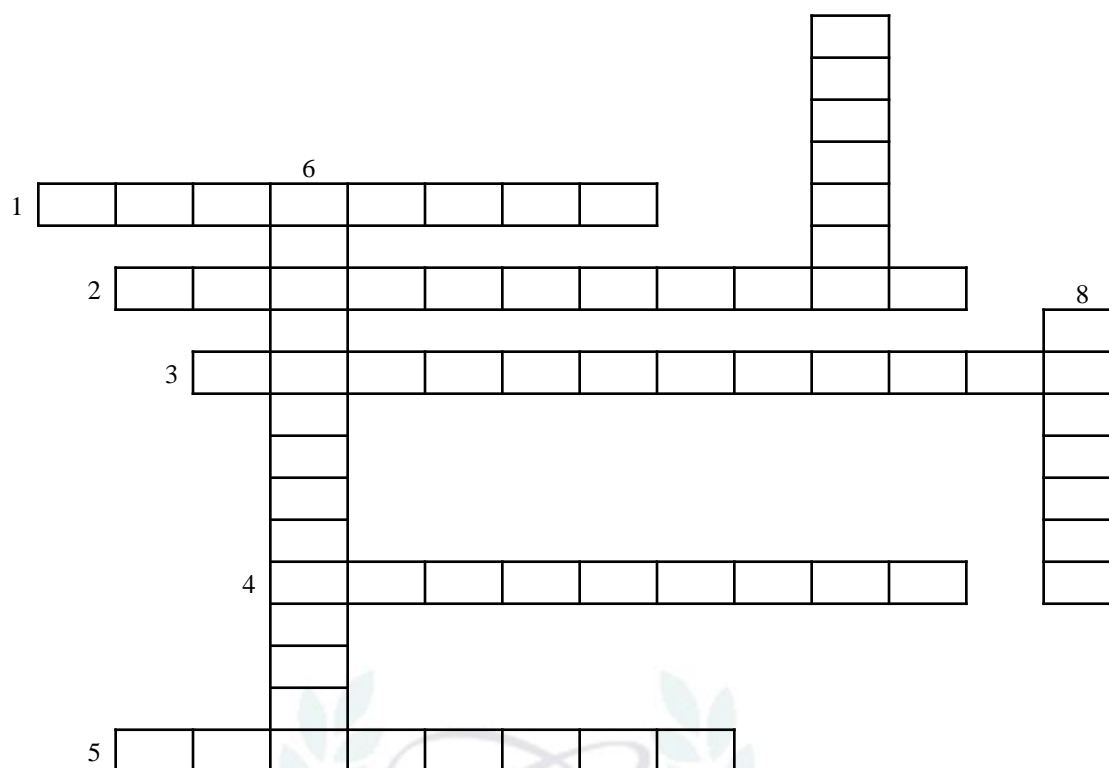
1. Oriental gas are breathe in?
2. Plant part that does photosynthesis?
3. Bees collect this to make honey?
4. Suez Canal belongs to this country?
5. Alloy made of copper and tin?
6. Meat and plant eater?
7. Hardest know natural material?
8. Issues that connects muscle to bone?
9. E in Einstein's $E = mc^2$
10. What are your nail and hair mode of?
11. Common name for Botulinum toxin?
12. Substance produced by lighting?

Note: Please check your answers with the answer keys given at page number 161.



CELL BIOLOGY

Ms. Jyoti Chandervanshi, B.Sc. (N) I Year



Across:

1. Enable for cell movements example – Sperm
2. Site of photosynthesis in plants.
3. Energy production by ATP synthesis.
4. Responsible for protein synthesis.
5. Stores enzymes responsible for intracellular digestion.

Down:

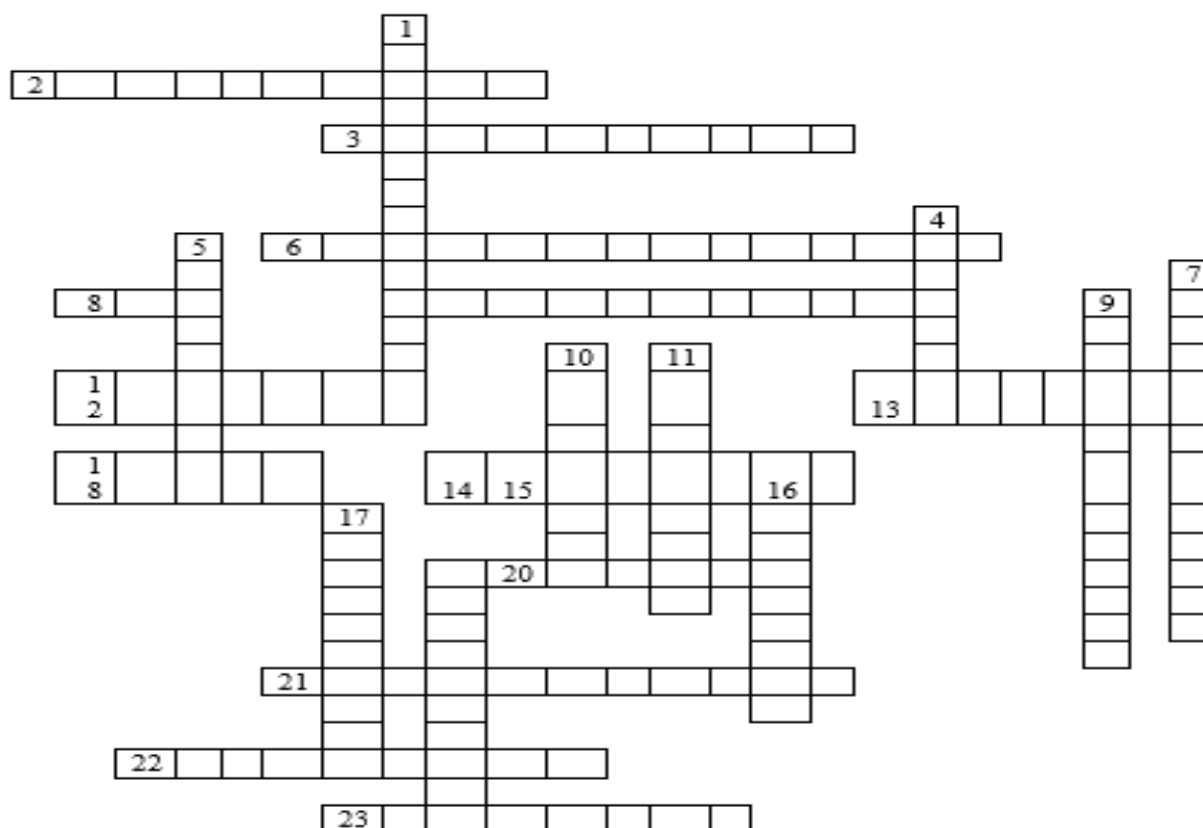
6. Control centre of the cell which stores DNA.
7. The membrane enclosed organelle within a cell that contains chromosomes.
8. It helps to maintain water balance in plant cells.

Note: Please check your answers with the answer keys given at page number 161.



FUNCTIONS OF CELL

Mr. Hemant Prajapati, B.Sc (N) I Year



Across:

2. Plays a major role in mitosis.
3. Which piece of technology was instrumental in the development of the cell theory?
6. The cell membrane is also called:
8. Universally acknowledged as 'Father of Microbiology'.
12. Storage centre of the DNA.
13. A membrane bound cell organelle which help sequester waste products.
14. Contains salt minerals and organic molecules.
17. Smallest cell
18. Living things are made of up of one or more ____
20. Degrade hydrogen peroxide and toxic compound that can be produced during metabolism.
21. Breaks down food particles.
22. Proteins made by the rough ER travel to the Golgi in sacks.

Down:

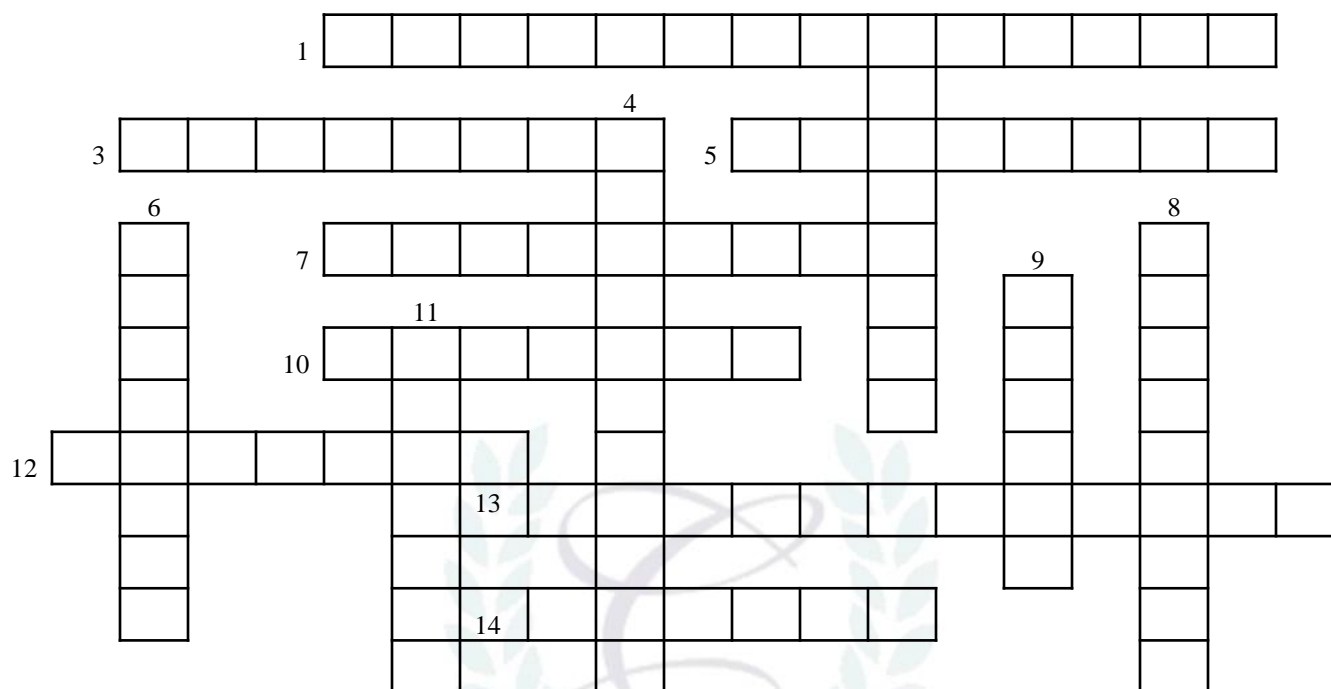
1. Receive proteins from the rER and that distributes them to other organelles.
4. Intracellular highway.
5. Biggest cell
7. A support system for organelles maintains cell shapes.
9. Permeable boundary between the cell and the external.
10. It involved in the synthesis of lipids and is not covered with ribosomes.
11. Boundary that surrounds the plant cell.
15. Which scientist found that all plants are made of cells?
16. A eukaryotic cell that contain true nucleus.
19. The location of protein synthesis.

Note: Please check your answers with the answer keys given at page number 162.



SYSTEMS OF BODY

Ms. Diksha Vishwakarma, B.Sc (N) I Year



Across:

1. This system moves blood throughout your body.
3. Provide movement inside and outside the body.
5. Supports and protects the body.
7. Breaks down your food.
10. Contains glands that release hormones.
12. Kidney, uterus and bladder are important organs to this system
13. This system is your skin.
14. Muscles found in the heart.

Down:

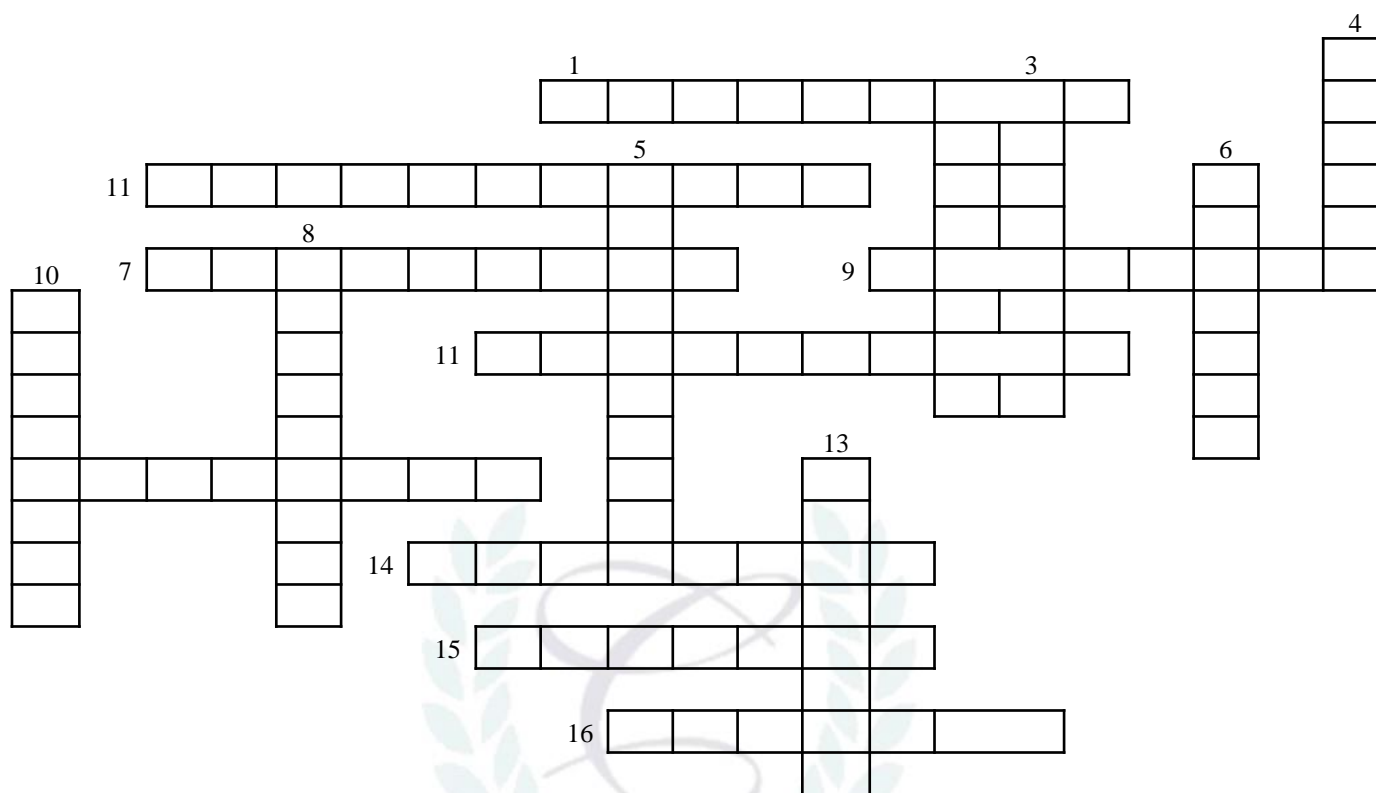
2. Contains joints, tendons and ligaments
4. This system contains trillions of alveoli
6. Controls the body with electrical signals.
8. Carries lymph throughout your body.
9. Main job is to fight disease
11. Controls the body with electrical signals

Note: Please check your answers with the answer keys given at page number 162.



ANATOMICAL TERMINOLOGIES

Ms. Deeksha Nagar, B.Sc (N) I Year

**Across:**

2. Divides the body into left and right
4. Divides the body into equal left and right halves
7. The cavity inferior to the diaphragm
9. Divides the body into front and back portions
11. Toward the back
12. Lower or below
14. Upper or above
15. The cavity in which the train sits
16. Near the midline

Down:

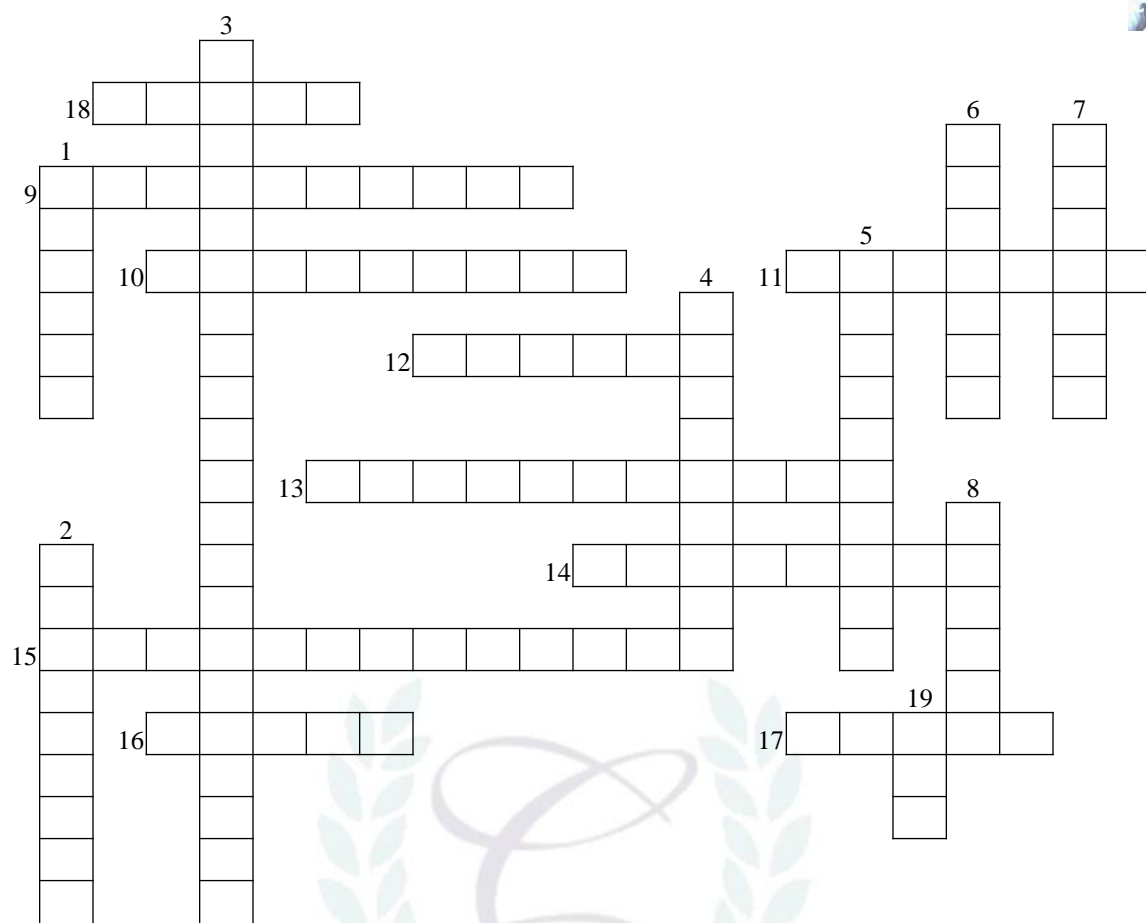
1. Away from the attachment
3. Toward the front
5. Divides the body into upper and lower portions
6. To the side
8. Muscle repeating the thoracic and abdominal cavities
10. Nearest the attachment
13. The cavity where you find the heart

Note: Please check your answers with the answer keys given at page number 162.



MUSCULAR SYSTEM

Mr. Harshita Marked, B.Sc (N) I year



Across:

9. Plasma membrane of muscle cells.
10. Dense connective tissue that surrounds the entire muscle fiber.
11. It means in presence of oxygen.
12. Bulging of an organ or tissue through an abdominal opening.
13. Enlargement of an organ or tissue.
14. Amino acid located in body muscles as well as brain.
15. Neurotransmitters at neuro muscular junction.
16. Protein that produces thin contractile filaments within muscle cell.
17. Also known as illiotibial tract.
18. Dark band of muscle sarcomere that corresponds to the thick myosin.

Down:

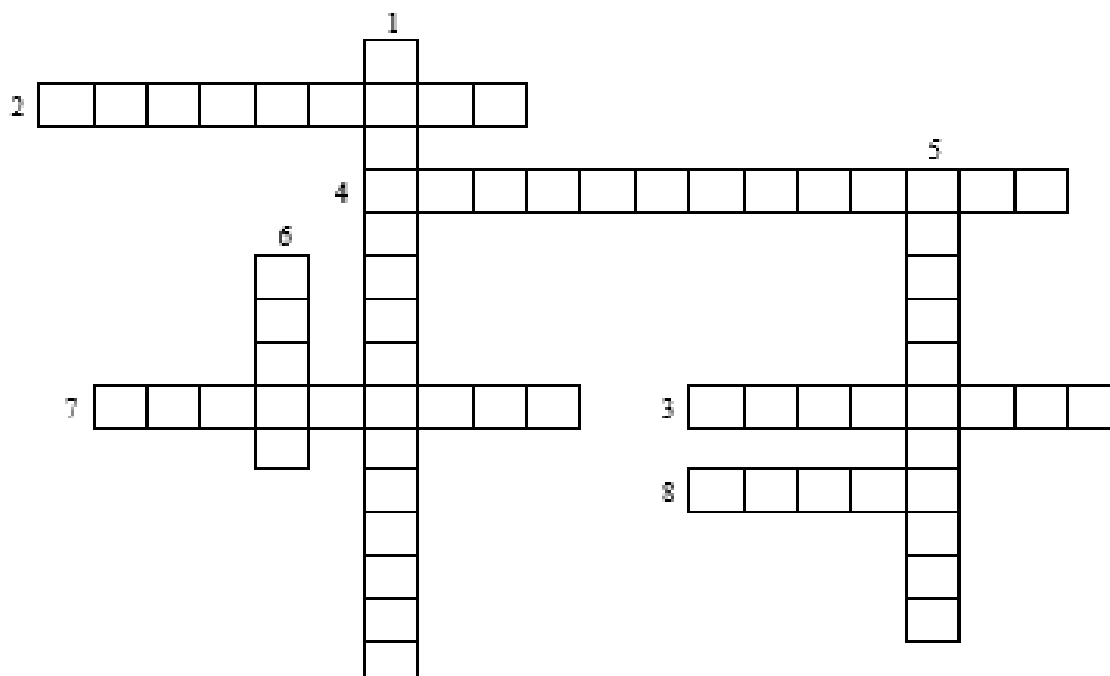
1. Involuntary non striated muscles
2. It means without presence of air.
3. Specialized form of endoplasmic reticulum of muscle cell, necessary for muscle contraction and relaxation.
4. Basic contractile unit of a myocyte.
5. Connective tissue that covers each single muscle fiber.
6. Decrease in size of body part, cell and organ.
7. Each bundle of muscle fiber is called
8. It connects muscle to bone.
19. Compound which provides energy.

Note: Please check your answers with the answer keys given at page number 162.



VITAL SIGNS

Ms. Sneha Sharma, B.Sc (N) I Year

**Across:**

2. This is another name of pulse.
3. This is the top number of blood pressure reading.
4. This instrument measures oxygen within the bloodstream.
7. This is bottom number in a blood pressure reading.
8. This is measure of heart rate.

Down:

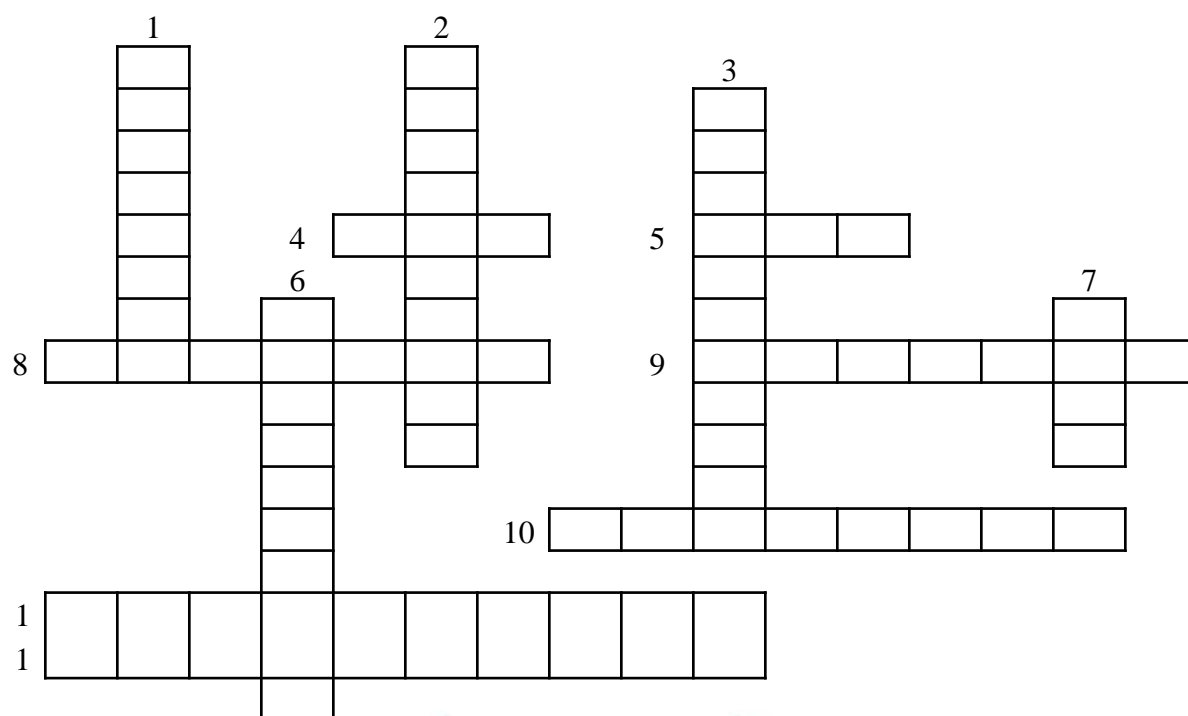
1. This is counted to see how many times a patient breaths per minute.
5. Instrument that measures body temperature.
6. A caregiver who checks the vital signs in the hospital.

Note: Please check your answers with the answer keys given at page number 163.



DEPRESSION AND ANXIETY

Ms. Kumkum Parihar, B.Sc (N) I Year



Across:

1. Can a Person have both depression and anxiety together
2. A type of depressive disorder
8. A possible cause of depression
9. Cause distress in your daily life
10. Life style changes such as exercise can assist in recovery
11. A treatment that a doctor might recommend.

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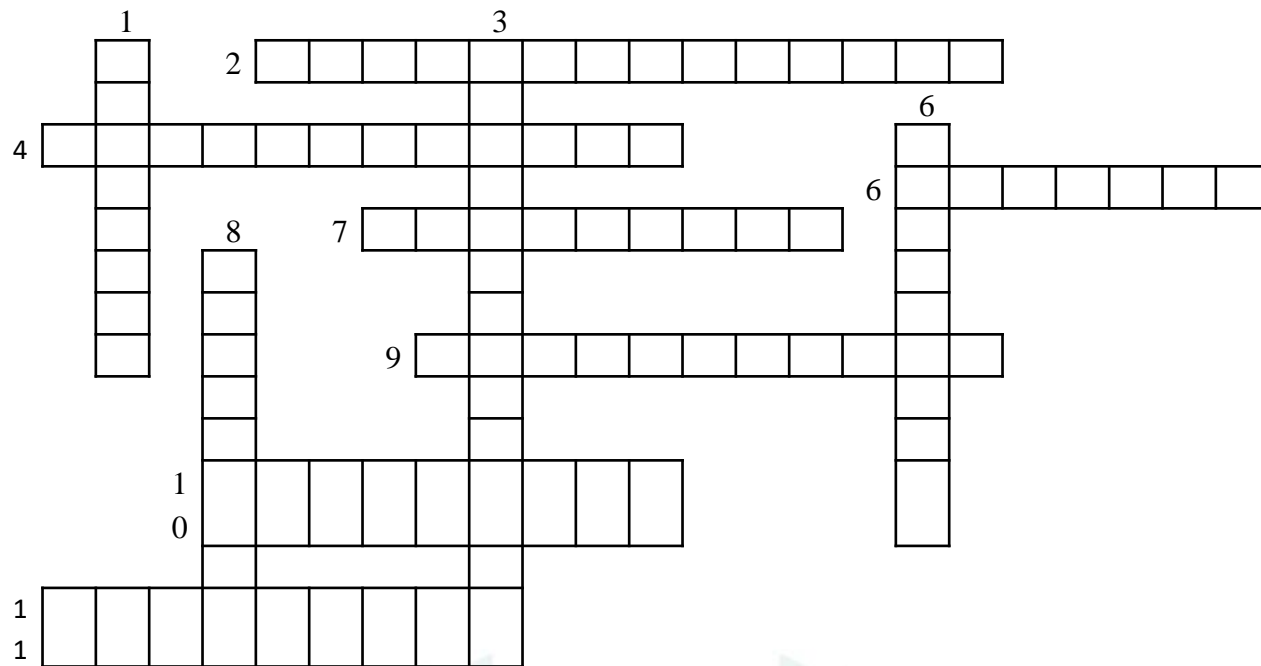
1. Possible new medication that is also known as special k
2. Need 5 or more symptoms to be diagnosed
3. Possible cause of anxiety.
6. A brain chemical if low could be responsible for mood disorders .
7. A type of anxiety disorder

Note: Please check your answers with the answer keys given at page number 163.



HUMAN BODY SYSTEM

Ms. Manisha Yadav, BSc (N) I Year



Across:

2. Carries blood , around the body delivering oxygen and nutrients.
4. System of organs involved in producing offspring
6. System that controls the body through the use of electrical signals
7. Breaks down food and turns it into energy
9. Carries air into the body allowing oxygen to enter the blood.
10. Keeps body fluids in balance and fights against infections
- 11.Helps in disposes of body's waste

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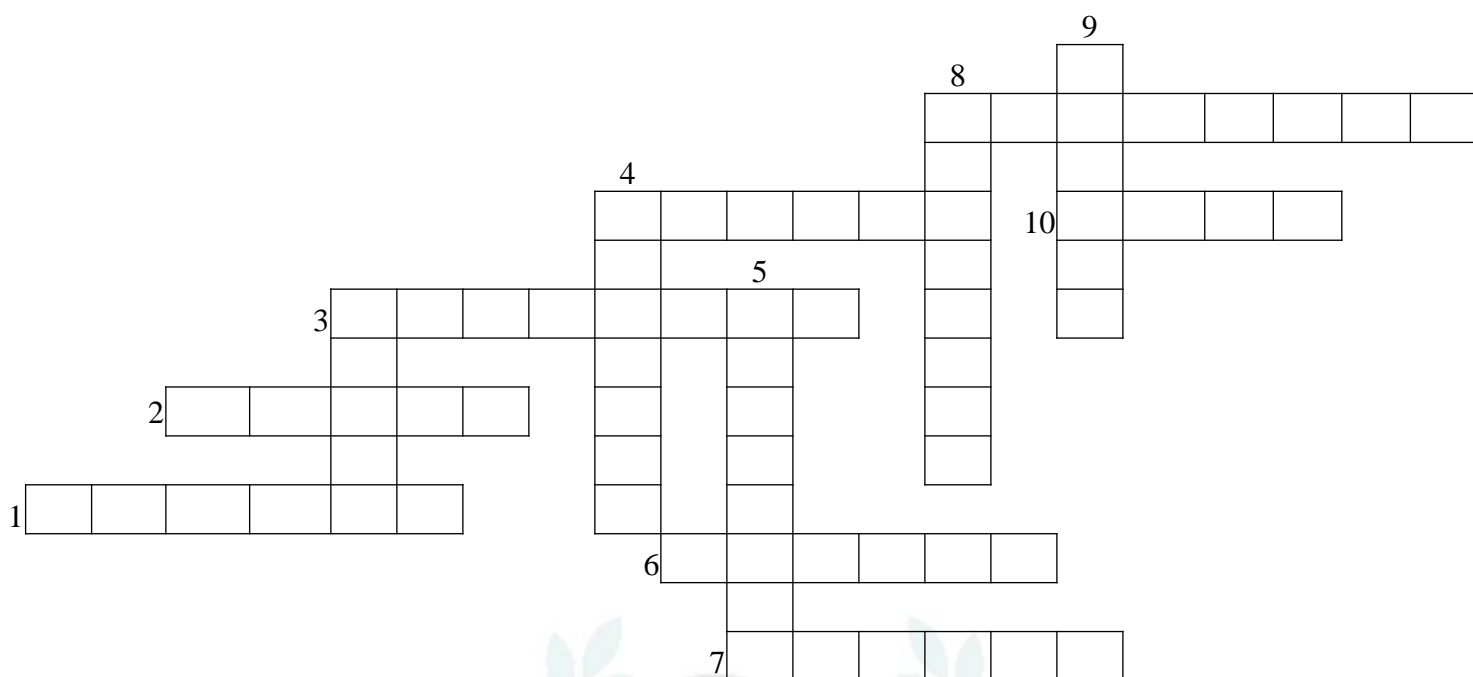
1. A structural frame that supports the body and enables movement with the help at the muscular syst.
3. The skin and its appendages
6. Communicates with the body chemicals called hormones
8. Enables all the movement of the body

Note: Please check your answers with the answer keys given at page number 163.



CONCEPT OF HEALTHY DIET

Ms. Aditi Gohel, GNM I Year



Across:

1. I have curative and medicinal properties. My relatives include onion, Chinese etc.
2. I have many layers. I am a bulb but I don't shine. I can make you cry.
3. I am long and green, you can cut me into slices and add me in your salad.
4. I am starch rich vegetable and highly edible.
6. I can be red or orange. I am long. If you eat me you will be strong.
7. You know me as a vegetable but I am a fruit. I am red in colour.
8. I am upstairs green and below red rooted in the ground.
10. I am spherical in shape and green in colour.

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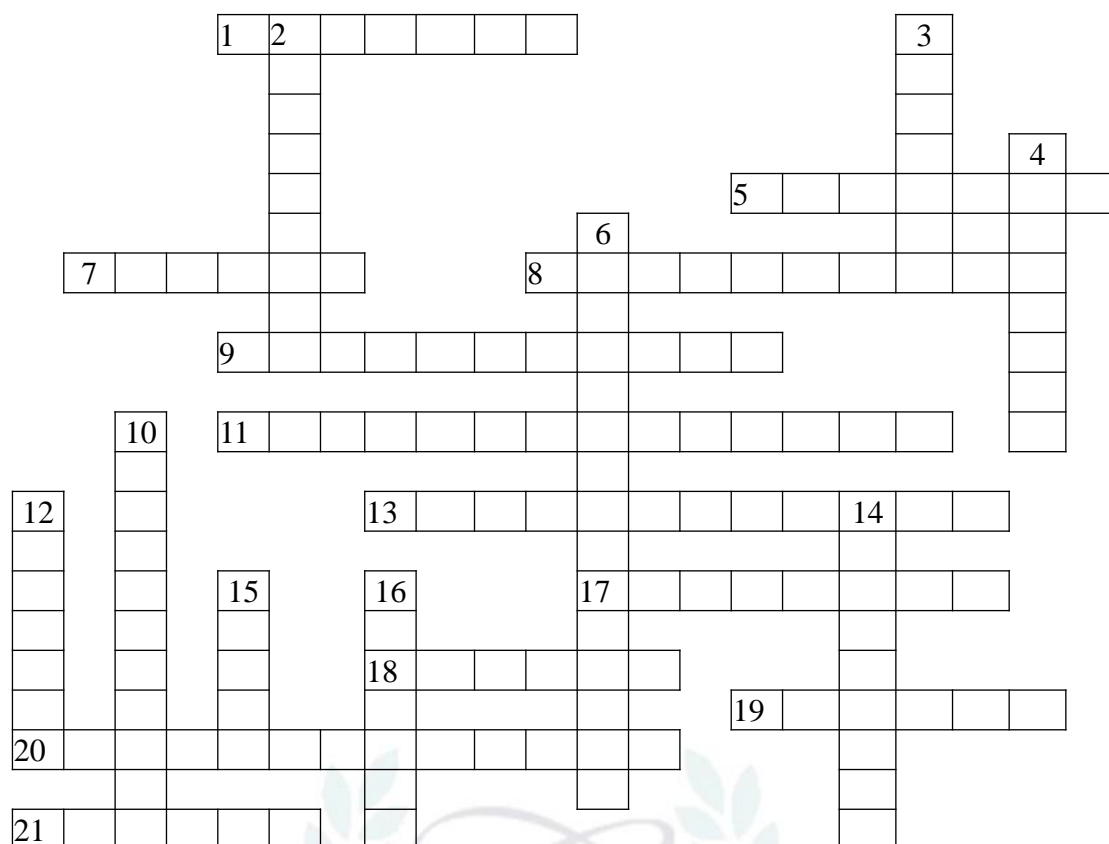
3. I am a spice which brings water in your eyes.
4. I am a fruit of certain varieties of squash looks like a big tomato but orange in colour.
5. I am a vegetable, my colour is purple. I have a crown on my head.
8. I am a type of cauliflower but fully green in colour.
9. I am a small and round spice look like a black pearl.

Note: Please check your answers with the answer keys given at page number 163.



REPRODUCTIVE SYSTEM

Ms. Dabolina Manna, GNM I Year



Across:

1. Female stem cells.
5. Tube carries sperm and urine.
7. Opening of uterus.
8. Used to store and maturation of sperm
9. Lining of uterus
11. Fertilization occur here
13. Produces secondary sex characteristics in males
17. Hormones causes secondary sex characteristics in females.
18. Monthly shedding of lining in uterus.
19. Implantation occurs here
20. Male stem cells
21. Sperm develops here

Down:

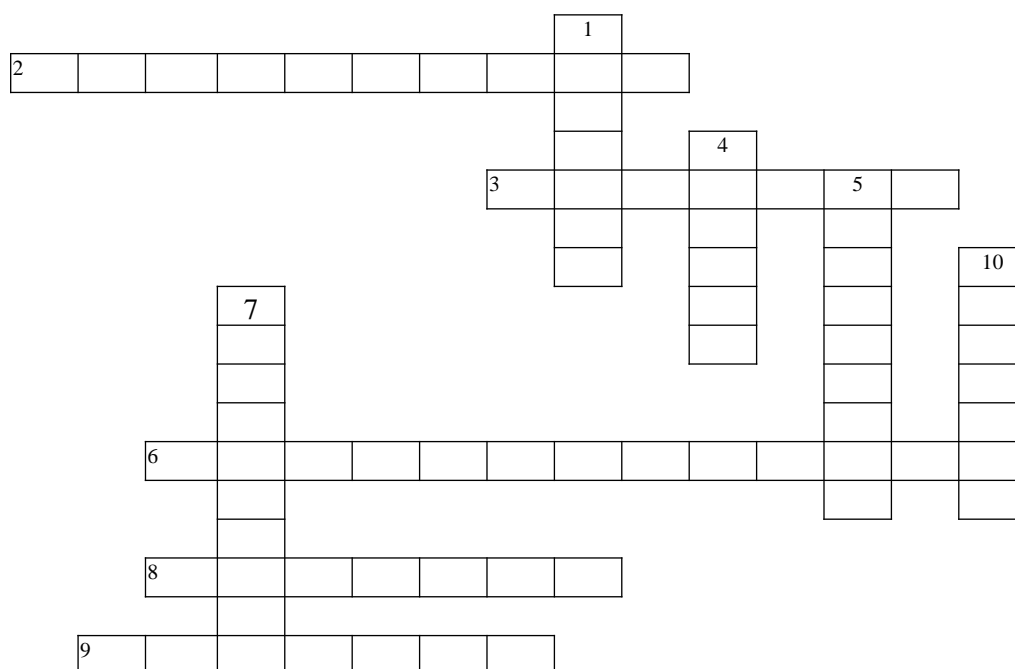
2. Once an egg leaves the ovary
3. A male reproductive structure
4. Gland helps to make semen
6. Sperm from the primordial germ cells
10. Carries the sperm out of the testes
12. Primary reproductive organ of female
14. Helps so form the gametes
15. Male sex cell
16. Gland which produce milk

Note: Please check your answers with the answer keys given at page number 164.



SOURCES OF ENERGY

Ms. Diksha Pawar, GNM I Year



Across:

2. Energy harnessed from the heat of the earth's crust is _____ energy.
3. _____ power is an excellent source of non-conventional energy.
6. Biogas is produced by _____ of cowdung.
8. _____ is used to make a solar cell.
9. A wind mill converts _____ energy in mechanical energy.

Down:

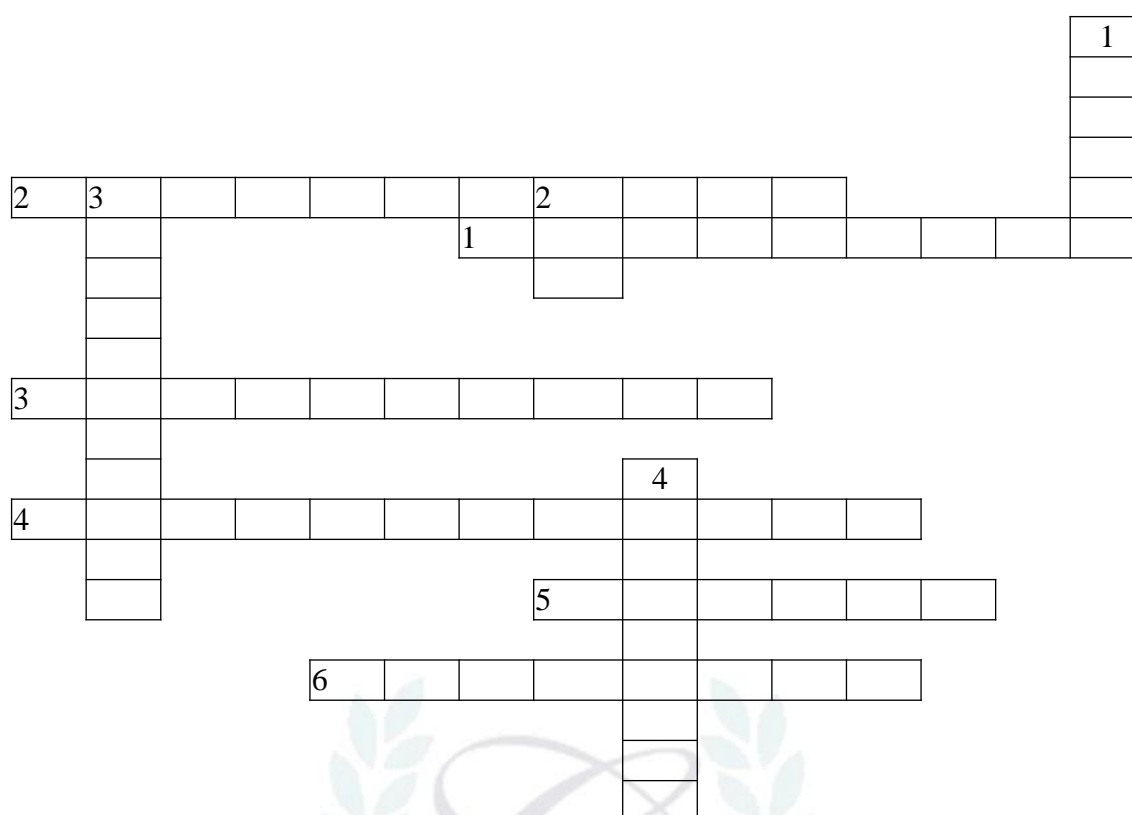
1. _____ of volatile liquid ammonia are used to run the turbines of OTEC plant.
4. After the production of biogas the leftover material is called _____
5. _____ microorganisms are used in a biogas plant.
7. A solar cooker works on a phenomenon called thermal _____
10. The main constituent of biogas is _____

Note: Please check your answers with the answer keys given at page number 164.



SOCIAL SCIENCE

Ms. Mausomi Das, GNM I Year



Across:

1. The science of social life.
2. It refers to deeply ingrained patterns of behavior.
3. It is study of mind or soul.
4. It is aggregate or global capacity of individual to think rationally.
5. Anything what we do without conscious thought.
6. Body growth that includes height and weight changes.

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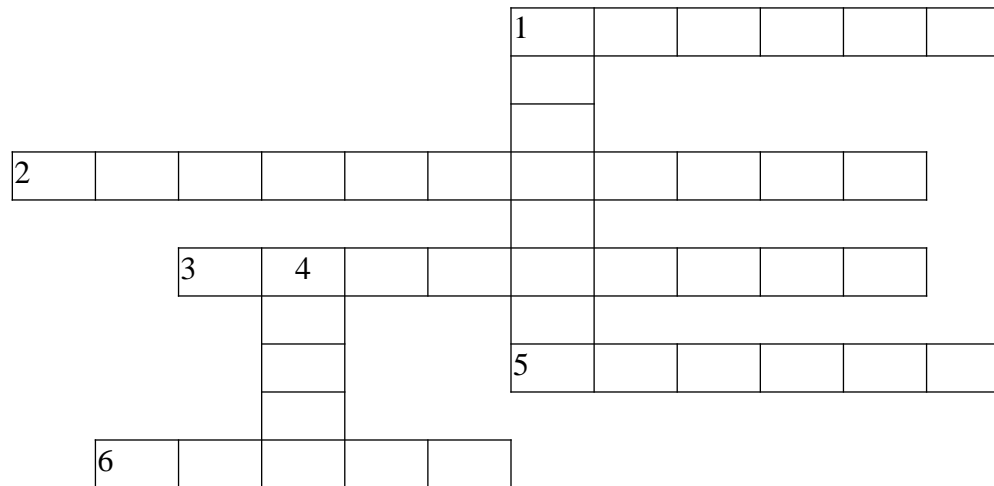
1. It is the simplest and most elementary form of society.
2. An agency of social control.
3. 12-18 years old children as called as
4. It refers to anything we do, think and feel.

Note: Please check your answers with the answer keys given at page number 164.



BODY SYSTEMS

Ms. Neha Lodhi, GNM I Year



Across:

1. Another name for 'voice box'.
2. The flow or movement of blood throughout the body.
3. The tissue that connects bones with muscles.
5. A fibrous connective tissue that attaches muscle to bone.
6. The throbbing of arteries in the body as blood is pumped through them.

Down:

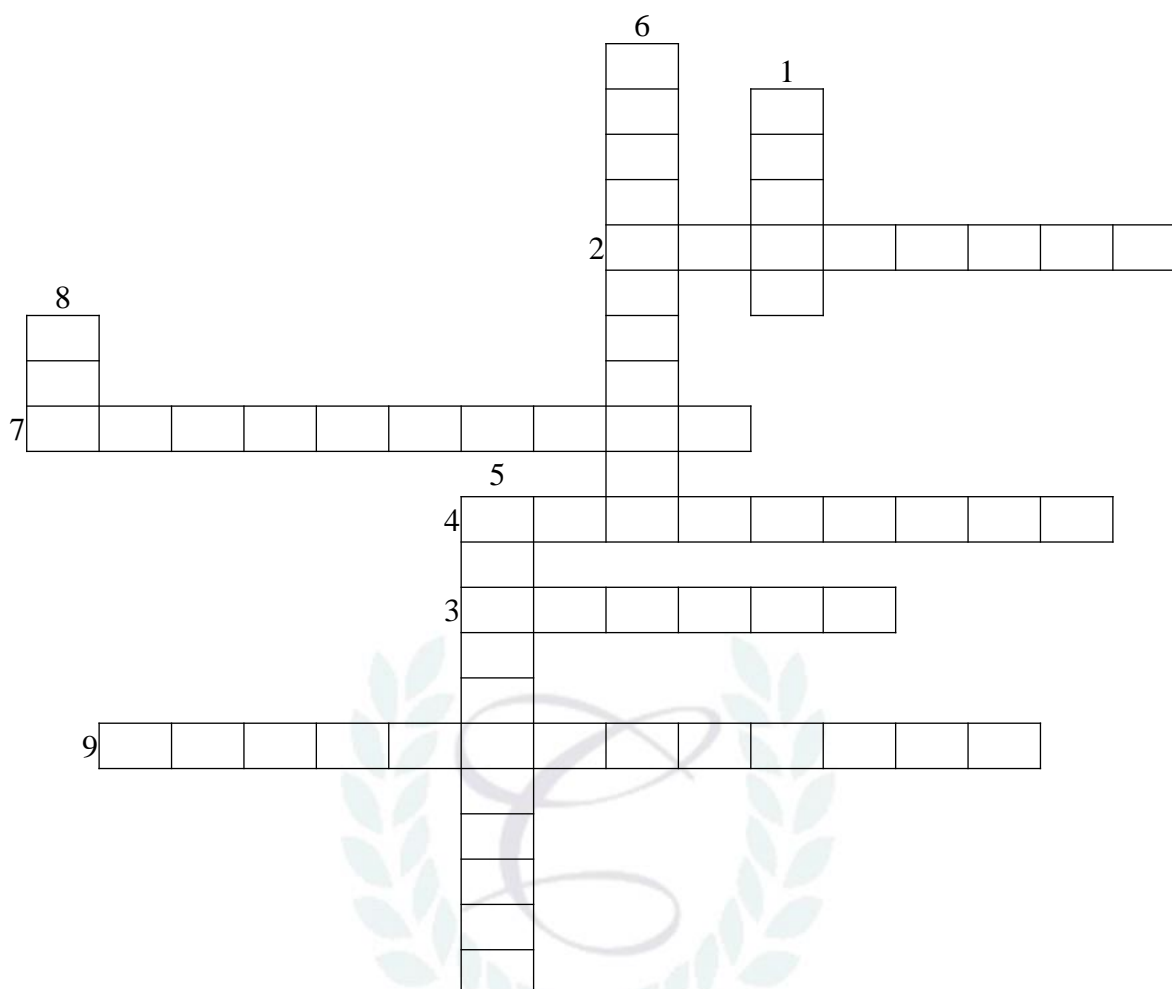
1. Tissue that holds joints together.
4. The round opening in the center of the iris.

Note: Please check your answers with the answer keys given at page number 164.



NURSING FOUNDATION

Ms. Nidhi Kushwaha, GNM I Year



Across:

2. It is an integral part of a social and medical organization.
3. It is an inflammatory disorder of the airway.
4. Clients are admitted in acute conditions requiring immediate treatment.
7. It is a technique to observe a body surface.
9. To way process of sharing ideas.

Down:

1. A person who is trained to look after sick or injured.
5. It is the systematic assessment of human body.
6. It helps the examiner to listen to the sounds of the heart, lungs, intestine etc.
8. A measurement of body fat based on height and weight.
10. Practice of maintaining the security and confidentiality of patient.

Note: Please check your answers with the answer keys given at page number 165.

WOMEN EMPOWERMENT

Mrs. Sushma



‘Women’s empowerment can be conceptualized as increasing women’s self – esteem, abilities to create rational decision, and right to effect revolutionary change for themselves and others’

INTRODUCTION

Women empowerment; making the world a better place. We are living in an age of women empowerment. Women over the world are working shoulder to shoulder with men. by and large, they are now empowered to make decision about different of their life and profession. Women empowerment refers to increasing the spiritual, political, social, educational, gender, or economic strength of individuals and communities of women. The empowerment of women has also brought a lot of economic and social gains to India. Women empowerment is important for solving societal issues like poverty, unemployment and birth control in India. Empowered women can contribute to nation building by joining any sector like an army, social service, politics, education, corporate sector etc. it is a process in which women make their own independent decision. When women are entitled to decide, it gives them a sense of empowerment and more worth. India is the fastest-growing economy in the world with almost half of the population as women. If the nation wants to gets into the league of the developed nation then empowerment of women is need for the hour. Women’s empowerment removes gender inequality and leads to a balanced economy¹.

TYPES OF WOMEN EMPOWERMENT

There are 5 types of women empowerment

- SOCIAL
- EDUCATIONAL
- ECONOMICAL
- POLITICAL
- PSYCHOLOGICAL

SOCIAL

Social empowerment may be one of the most noticeable types of strengthening displayed in the established press. it fortifies ladies’ social relations and their situation in friendly designs, providing them all the more motivation outside of the home. their commitments to society are perceives and esteemed rather than peered downward on basically in light of the fact that it was a lady’s creation .social strengthening additionally retaliates against segregation, done letting individuals of various inabilities, races, nationalities, religions, or sexual orientations be strolled over by what’s considered ‘typical’.

EDUCATION

Education is the vital part of development and growth, however, there are still places on the planet that deny instruction to young ladies. Training places everybody on an equivalent balance and allows little kids to approach what their freedoms and obligations are. not just that, acquiring information can support fearlessness, and confidence, and make young ladies independent. It additionally gives them admittance to the advancement of social, political, scholarly, and strict awareness, and can deter the development of fanaticism, bias, notion, bigotry, etc.

ECONOMIC

Individuals say money can’t purchase joy, however, being in a difficult situation can remove admittance to become enabled. Being poor, landless, denied, or persecuted doesn’t permit admittance to assets that’s those in great monetary standings do. shutting this hole would permit everybody to have equivalent balance ,and ladies, specifically, would acquire a more critical portion of command over the material, human, scholarly, and monetary assets.

POLITICAL

Having a voice in legislative issues can be significant in allowing a gathering’s perspective to be driven into the illumination of the established press, and that is the same for pushing ladies’ freedoms. Having a political impact would not just give a voice to the individuals who haven’t had a voice in how things are administered, yet it would likewise permit the chance of arrangements and projects being instituted that would work with these separated gatherings.

PSYCHOLOGICAL

Psychological empowerment lines up with social strengthening it violates the ‘conventional and man-centric restrictions and social commitments’ and releases ladies past what’s generally anticipated of them in the public arena.

This can be assemble self-assurance, assist ladies with perceiving their self-esteem, and allow them the opportunity to assume responsibility for their pay and body. Each of the five of these classes interweaves with each other, yet it’s similarly critical to consider them independently too. Each gathering has different primary objectives they’s focusing on, so attempting to zero in on them , in general, would be unbeneficial at last. Realizing what work must be placed into these five classes can give a lift in the correct heading, and oermit strengthening for ladies, however in the long run for all².

**WOMEN'S EMPOWERMENT PRINCIPLES**

1. Leadership promotes gender equality
2. Equal opportunity, inclusion, and nondiscrimination
3. Health, safety, and freedom from violence
4. Education and training enterprise development
5. Supply chain and marketing practices
6. Community leadership and engagement
7. Transparency, measuring, and reporting

WOMEN EMPOWERMENT IN INDIA

The term women empowerment is all about authority, or the power embarked on women sharing indistinguishable rights. The term refers to the liberation of women from socio-economic restraints of reliance. Women comprise around 50% of the country's population, and a bulk of them stays economically dependent on each other. Feminism, a small portion of women in India are freed and can employ their free will and are permitted to carve out their lives the way that want. But there is a considerable division of the women in this nation who require optimistic support.

In most Indian village and semi-urban cities, women are still denied fundamental education and are never authorized to continue higher education despite amassing the understanding required. Living in male-dominating societies, women play a wide range of roles, such as caring mother, loving daughter, and capable colleagues. The best part is that they fit the bill perfectly in every role. Nonetheless, they've also stood as a neglected bunch of society in different parts of the world. Women have been residing under the shackles of enslavement for centuries now that impedes them from attaining professional as well as personal highs³.

FACTORS AFFECTING WOMEN'S EMPOWERMENT IN INDIA

GENDER DISCRIMINATION MUST BE CHECKED : The problem of gender discrimination has affected the pace of women empowerment in India. Gender discrimination in all realms of action must be checked. Women must be furnished with a resort to take an active part in decision procedures to attain the motive of empowering women. They need to get due admiration and prominence, which they rightfully earn on merit basis in society to accomplish their fate.

EDUCATIONAL FACTOR: Education is the most vibrant factor of advancement and growth. It is the only significant tool for anticipating women empowerment in India and human resource development. It gives light to the possibilities for access to employment and making a livelihood, which in turn revivify economic empowerment to women. In order to join the community of developed countries, people should understand the value and importance of women's education and, thereby, put combined efforts to make India on the progressive track. With a meaningful education, the women's status strides beyond the restrictions of motherliness. Education will go extended way in making women familiar with their legal and personal rights and make them battle for their privileges, which will direct to protecting their rights mentioned in the constitution.

MASS MEDIA IS BRINGING THE TRANSFORMATION: The mass media is responsible for playing a significant function to project and propagate associated issues, most specifically about women empowerment in India. The numerous programmes pertaining to women's prestige revealed the mass media enable her husband to behave toward her wife with loads of honor and respect. The mass media performs a crucial role in repairing the attitude and way of conversation of husband and other family members towards.

STEPS REGARDING IMPLEMENTATION OF WOMEN DEVELOPMENT PROGRAMME ALONG WITH NUMEROUS ACTS : training programme based on action at the village or in rural parts of India along must be organized to make women self-reliant after becoming self-employed by enhancing their efficiency and capacities in making prompt decisions. It's extremely important to check cases related to female feticide and infanticide by prohibiting the sex determination of child that is yet to take birth via the **Regulation & Prevention of Misuse Act 1994** as well as **PNT ACT** (Pre-natal Diagnostic Techniques Act) other ruling correlating to marriage, succession, divorce, adoption, dowry and moral safety or protection against sexual harassment needs to be implemented for serving the goal of women empowerment in India.



CHANGES IN WOMEN'S ATTITUDE : Women should empower themselves by becoming to be aware of their oppression ,indicating initiative, and confiscating chances to bring a shift in their status. Women must know that opportunities will not reach their laps. They would have to determine ways to create them. They must flourish hard to carry out their rights and maintain justice & equality in society. Women's empowerment is valuable for the development and advancement of the family, community as well as the nation. Hence , it must be a leading concern of the Indian Government to bring women into the fore of the development strategy by empowering them via numerous development- oriented schemes.

ORGANIZATION FOR AWARENESS PROGRAMMES: State and National level commission for women, Non-Governmental Organizations, ICDS Programmers, must undertake eawareness, the Taskforce for women & children development, a campaign about legal rights, education about saving schemes, population education, environmental education, rehabilitation programmes with all integrity and solemnity.

IMPORTANCE OF WOMEN EMPOWERMENT

In recent times, everyone is pointing on the empowerment of women. It's right to say that women's empowerment has become the necessity of the time .Women should possess liberty, faith, and self-worth to opt for their needs and demands. Women are paid less and are treated as a cook and slave in families, and their real potential fails to get highlighted. Women empowerment in India is required to overcome situations of such types and to provide them with their independent role in Indian society. Empowering women is a necessary right of women. They should have proportional rights to contribute to society, economics, education, and politics.

Women empowerment adds to confidence of women in their ability to lead meaningful and purposeful lives. It removes their dependence on others and make them individuals in their own right⁴.

CONCLUSION: Contemporary societies across the world have been exposed to the major processes of transformation on social and economic development front. However, these process have not been implemented in a balanced way and have augmented gender imbalances throughout the world in which women remained the ultimate sufferer. The situation has adversely affected the pace of women empowerment. Therefore, we require a completely transformed society in which equal opportunities of growth can be suitably provided to women so that they can co-exist with their male counterparts contributing equally in all the factors responsible for the growth.

REFERENCE:

1. <https://www.empowerwomen..org>
2. <https://www.teachingbanyan.com>
3. <https://edukeder.com/women-empowermen/.in>
4. <https://www.worldvision.com.au>

TIME AND TIDE WAIT FOR NONE

Mr Ravi Sen



Time and tide wait for none this idiom is apt in today's world. As the world is moving at a fast pace nobody has got time to waist. Moreover, time never stops, the clock is always ticking. Therefore to use our time we should work hard every second. Because if time once has gone, we cannot regain it. It is the most precious thing a person can have.

With time everything is possible, it's just that you should have a dedication towards utilizing it. Also, various successful people know how to manage their time. And that is the reason they are successful. You can earn money by using time but you can never earn time by using money.

Story on Time and Tide Wait for None

Since we all know the story of the rabbit and the tortoise, this story is perfect for the idiom. But if you don't know anything about the story let me narrate it. Once there was a tortoise who was slow in running he was always criticized by others for his slow pace.

But instead, there was a rabbit in their community who used to run fast. Moreover, everyone praised him for his speed. So to show his skills and to humiliate tortoise the rabbit challenged him for a race. The tortoise accepted the challenge because he never wanted any more humiliation.

The race was scheduled after two days. To win the race, the rabbit practiced hard. Moreover, he started celebrating his victory beforehand. The tortoise was humble he had never thought of winning the race. Yet he was eager to give his best.

So the race started on the third the day of the challenge. Everyone knew that the rabbit would win. Therefore the rabbit was overconfident of himself. The rabbit ate a lot before the race thinking if he would even walk then also he will win the race. But the tortoise had a determination to give his best.

After some time the race started the tortoise was very slow but he kept on moving. On the other hand, the rabbit was running at a very fast pace.

Therefore he was able to reach half the distance of the race track within a few minutes. After reaching that distance he thought that he should take rest. So he lied down under a tree to take a little rest. But soon he went to sleep without realizing because he had eaten so much food before the race. While he was sleeping the tortoise constantly moved with time. Neither did he stop nor did he take any rest.

Thus he was able to cross the rabbit while he was sleeping. When he was about to reach the finish line the rabbit woke up. He rushed towards the finish line. But it was too late till then the tortoise was much ahead than him. So he crossed the finished line in the first place. The Rabbit cried after losing the race. While the tortoise was celebrating the victory.

After reading the story you must be sure that 'time and tide wait for none'. Because the tortoise worked hard and utilized the time so he was able to succeed in the race. Also, our life is like that only, to achieve success we must work hard with time. Moreover, we should always utilize our time in the best manner. Only then we will be able to achieve success in life.

FAQs on Time and Tide Wait for None

Q1. Why was the rabbit not able to win the race?

A1. The rabbit was not able to win the race because he wasted his time in sleeping.

Q2. What is the meaning of the idiom 'Time and Tide waits for none'

A2. The meaning is that time moves. In other words, it never stops for anybody.

साइबर क्राइम

Mr. Vikas Sharma



परिचय:- साइबर अपराध एक आपराधिक कृत्य है जो इंटरनेट के माध्यम से कंप्यूटर के उपकरण या किसी अन्य स्मार्ट उपकरणों के रूप में इस्तेमाल करते हुए इस काम का अंजाम दिया जाता है। साइबर अपराध की बात आती है, तो इसे इंटरनेट द्वारा किए गए अपराध के रूप में परिभाषित किया जा सकता है, जिससे किसी व्यक्ति, संगठन या सरकार को एक अस्थिर नुकसान हो सकता है। साइबर अपराध, साइबर अपराधियों द्वारा किया जाने वाला दंडनीय अपराध है। साइबर अपराध को इंटरनेट और कंप्यूटर के अवैध उपयोग के रूप में उल्लेखित किया जा सकता है। कंप्यूटर अपराधों का माध्यम है या फिर अपराध के लिए एक हथियार के रूप में उपयोग किया जाता है। ये अपराध हमारे दैनिक जीवन का एक आम हिस्सा बन गए हैं। हर दिन कोई न कोई व्यक्ति साइबर अपराध का शिकार हो रहा है। विभिन्न प्रयोजनों के लिए एक ही समय में कई लोगों द्वारा इंटरनेट का उपयोग किया जाता है, ये हैकर्स इन अवसरों को अपना रास्ता बनाते हैं।

प्रारंभिक अवस्था से ही मनुष्य, स्वभाव से एक अभिनव और आविष्कारशील रहा है। विभिन्न आवश्यकताओं ने नए उपकरणों और प्रौद्योगिकियों को जन्म दिया। प्रौद्योगिकी भी काम को आसान बनाने के लिए मनुष्य की ही खोज है। प्रौद्योगिकी में उन्नति एक तरफ उपयोगी है और दूसरी तरफ कुछ हद तक इसके विनाशकारी प्रभाव भी हैं। साइबर अपराध भी इन तकनीकी विकासों का एक नकारात्मक पहलू है। व्यक्ति, संगठन और समूह ऐसी आपराधिक गतिविधियों को करने में शामिल हैं।

विभिन्न प्रकार के साइबर अपराध

- **फ़िशिंग** — इसमें स्पैम ईमेल भेजकर या फेक वेबसाइट के माध्यम से उपयोगकर्ता की व्यक्तिगत जानकारी प्राप्त करना शामिल है।
- **पहचान की चोरी** — इसमें क्रेडिट या डेबिट कार्ड या फिर बैंक विवरण के बारे में जानकारी प्राप्त करना शामिल है, जानकारी चुरा लेने के बाद आगे अवांछित धन आसानी से निकाला जा सकता है।
- **मैलवेयर अटैक** — मालवेयर एक अवैध सॉफ्टवेयर है जिसे कंप्यूटर या सिस्टम को नुकसान पहुंचाने के लिए बनाया गया है। यह मतलब की जानकारी तक पहुंचने के लिए या उस सिस्टम का उपयोग करके कुछ अपराध करने के लिए किया जाता है।
- **एटीएम धोखा** — इस अपराध में एटीएम मशीन को पूरी तरह से हैक कर लिया जाता है। अपराधियों द्वारा कार्ड पर अंकित डेटा तथा पिन दोनों तक पहुंचने का तरीका विकसित कर लिया है, इससे वह कार्ड का डुप्लिकेट बनाने में सफल होते हैं और पैसे निकालने के लिए वो उसी का उपयोग करते हैं।
- **साइबर हैरेसमेंट** — अपराधी ऑनलाइन उपायों के माध्यम से व्यक्ति का पीछा करने या परेशान करने में भी काफी सक्रिय है। वे मैलवेयर भेज कर, सिस्टम को नुकसान पहुंचाते हैं और सटीक जानकारी प्राप्त करने में सामर्थ्य होते हैं।
- **धोखा देना** — इस तरह के अपराध में, आपको एक ईमेल मिलता है जो ऐसा लगता है कि किसी प्रामाणिक स्रोत से ही भेजा गया है, लेकिन यह ऐसा होता नहीं है, यह भ्रामक होता है।
- **पायरेसी** — यह गोपनीय जानकारी तक पहुंचने का एक अनधिकृत तरीका होता है। कई बार सरकारी वेबसाइटों को हैक कर लिया जाता है और फाइलों के महत्वपूर्ण डेटा की पायरेटेड कॉपी बना दी जाती है, जिससे काफी समस्या उत्पन्न होती है या फिर महत्वपूर्ण डाटा नष्ट हो जाता है।

साइबर अपराध के प्रभाव

साइबर अपराध ने कई लोगों का जीवन बर्बाद कर दिया है। साइबर अपराध में शामिल लोगों को 'हैकर' के नाम से जाना जाता है।

- यदि हम व्यक्तिगत स्तर पर चर्चा करते हैं, तो इससे प्रभावित लोग अभी भी नुकसान की भरपाई करने की कोशिश कर रहे हैं। कुछ ने तो आत्महत्या करने तक का विकल्प चुन लिया। पैसे की हानि और कोई भी डेटा जो गोपनीय है, व्यक्ति को असहाय बना देता है और उसे जीवन के दर्दनाक स्थिति में छोड़ देता है।
- संगठन के स्तर पर, कंपनी के डेटा को चोरी करने या मैलवेयर द्वारा सिस्टम को नष्ट करने से भारी नुकसान होता है और अपराधियों द्वारा यह कुछ इस तरह से सेट किया जाता है कि यह तब तक काम न करे जब तक कि अपराधी के नियम और शर्तें पूरी न हो जाएं। इसकी वजह से कंपनियों को अधिक नुकसान होता है क्योंकि उनकी रणनीतियों और महत्वपूर्ण डेटा चोरी और लीक हो गए होते हैं।
- यहाँ तक कि सरकार भी इस अपराध की शिकार है। राष्ट्र की संप्रभुता को खतरे में डालते हुए, सरकारी स्तर पर साइबर अपराध के परिणाम के रूप में कई गोपनीय डेटा लीक हो चुके हैं। यह एक गंभीर मुद्दा है क्योंकि ऐसा हो सकता है कि राष्ट्र के लोगों के जीवन को खतरा और भय है। नुकसान आर्थिक स्तर पर भी हो सकता है। इन साइबर अपराधों के कारण राष्ट्र से कई लाख और करोड़ का नुकसान हुआ है।



साइबर अपराध जागरूकता

- साइबर अपराध के भयावह कार्यों से सुरक्षित रहने के लिए विभिन्न सुरक्षा उपायों का पालन किया जाना चाहिए।
- मजबूत पासवर्ड का उपयोग किया जाना चाहिए। पासवर्ड जटिल होना चाहिए, जिसका अनुमान लगाना संभव नहीं हो।
- सिस्टम को मैलवेयर से मुक्त रखने के लिए एंटीवायरस प्रोग्राम (सॉफ्टवेयर) का उपयोग करना चाहिए।
- सिस्टम को लगातार अपडेट करें।
- सतर्क रहें और अपने पहचान तथा महत्वपूर्ण जानकारी की चोरी से बचने के लिए खुद को स्मार्ट और एक्टिव बनायें।
- अपने बच्चों को इंटरनेट के बारे में अवगत कराएं, ताकि वे किसी भी दुरुपयोग या उत्पीड़न के बारे में तुरंत अवगत करा सकें, अगर वे ऐसी किसी परिस्थिति से गुजर रहे हैं तो।
- सोशल मीडिया पर गोपनीयता सेटिंग्स को बनाए रखें।

निष्कर्ष:- साइबर अपराध वर्तमान परिदृश्य में, इंटरनेट के माध्यम से किया जाने वाला सबसे प्रचलित अपराध बन चुका है। इसलिए इस तरह के अपराधों से बचने के लिए हमें कुछ उपाय करने चाहिए। सतर्कतापूर्ण व्यवहार और सुरक्षा प्रोटोकॉल का पालन केवल एक सहायक उपकरण की तरह है जो साइबर अपराध की घटनाओं पर कुछ हद तक काबू पा सकते हैं। साइबर अपराध इंटरनेट के उपयोग से संबंधित अपराध है। इसे कुछ महत्वपूर्ण जानकारियों के साथ सार्वजनिक रूप से या पैसे कमाने के तरीके से लीक किया जाता है। इसलिए हमें इस अपराध को रोकने के लिए कुछ महत्वपूर्ण सुरक्षा उपायों और सुरक्षा अनुप्रयोगों का अभ्यास करना चाहिए।

Reference:

<https://www.hindikiduniya.com/essay/essay-on-cyber-crime/>





ANSWER KEYS

IDENTIFY THE INSTRUMENTS

Obstetric and Gynaecology Instruments

1. To support the uterus
2. To measure the length of uterine cavity
3. Dilating Cervix
4. Puncture the membranes containing amniotic fluid
5. To pull out the baby out

Who am I ?

1. Long straight kielland's obstetric forcep
2. Umbilical cord cutting
3. Umbilical Cord Clamp
4. Ovum forceps
5. Hegar Double ended cervical dilator
6. Decapitation hook
7. Fetoscope
8. Pelvimeter
9. Female metal Catheter
10. Breech hook and crochet

Gynaec OT instruments

1. Fetoscope
2. Umbilical cord scissor
3. Scalpel
4. Cusco's Speculum (Duck's Speculum).
5. Hysterometer
6. Mastoid retractor
7. Gallipot
8. Snare introducer

Functions of OT instruments

1. Sims Viaginal Speculum
2. Lucy's speculum
3. They are used during surgery to compress an artery, clamp and seal small blood vessels or to hold the artery out of the way
4. Hemostat
5. Artery Forceps Crile, Artery Forceps DeBakey-Mosquito, Artery Forceps Halstead-Mosquito, Artery Forceps HARTMANN, Artery Forceps Rochester-Ochsner (Kocher), Artery Forceps Pean, Artery Forceps Rochester-Pean, Spencer-Wells Artery Forceps.
6. To retract the vaginal wall during gynaecological examinations or procedures
7. Bivalve speculum, Pediatric speculum, Huffman speculum, Pederson speculum, Graves speculum.
8. Hegar's Dilator
9. 3mm - 17mm for single-ended dilators or 3mm/4mm - 17mm/18mm for double-ended dilators
10. Cone shape
11. Episiotomy scissors
12. To make the episiotomy incision
13. 6 inches long
14. 8" (200 mm) 10" (250 mm)
15. To hold sponges and swabs.

**ANSWER KEYS****QUIZ****Knowledge about pregnancy**

1. Folic acid deficiency
2. Colostrum
3. Third stage
4. Cervical cancer
5. Dr R H philpoter
6. Pelvic
7. Quickening
8. It improve blood circulation and decrease edema.
9. Labour and delivery
10. Rupture of uterus
11. Gynaecoid
12. FSH
13. RH incompatibility
14. 300k calories
15. Anterior posterior

Antidotes

1. Naloxone.
2. Protamine Sulphate.
3. Vitamin K.
4. Digibind.
5. Flumazenil.
6. Sodium Nitrate
7. Epinephrine
8. Glucagon
9. Glucose
10. Chelation agent Succimer

Knowledge regarding inflammation

1. Blood and body fluid precaution
2. Gutter splint
3. Joints
4. Eye
5. Thyroid and testis
6. Multiple Endocrine Neoplasia type 1
7. IgM
8. Hypokalaemia
9. Cardiogenic
10. Clostridia Maoists
11. IgM
12. Infection
13. Insulin with Glucose
14. Myosin
15. Paronychia
16. Antidiuretic hormone
17. 2 to 4 hours
18. Lobectomy
19. sterile water irrigation

Key points of nursing

1. Lysozyme
2. Nasopharynx
3. Heart attack
4. 0 to 15 mm/hr
5. N- acetylcysteine
6. hypovolemic shock
7. Head end elevated to 30degree
8. S- creatinine
9. Vagus
10. Pulse pressure
11. Cholecystitis
12. Fungus
13. Haemoptysis
14. First lumbar
15. 2.5 kg to 4.5 kg
16. Movement of air through narrowed air way
17. Epstein burr virus
18. Tonometer
19. Bleeding
20. Sialolithiasis

**ANSWER KEYS****QUIZ****Basic Knowledge about nursing**

1. Antonie Van Leeuwenhock
2. Louis Pasteur
3. Nine
4. Gram Positive Bacteria
5. 18 – 24 Hours
6. Mesophiles
7. 170 C for 30 minutes
8. Bharat Biotech's
9. Tyndallisation
10. Aristotle
11. Auguste Comte
12. Auguste Comte
13. Synthetic School
14. Auguste Comte
15. MacIver
16. 1977
17. 18 May 1955
18. 09 October 1954
19. Egyptians
20. Endogamy
21. 1929

Review of genetics

1. Robert Hooke
2. A collection of genetic material
3. ZyCov-D
4. New Delhi
5. Bacteriophage
6. Ribosome
7. Prokaryotic
8. Nucleolus
9. Anton Van Leeuwenhoek
10. Hugo de virus
11. Schleiden and Schwann (1839)
12. Watson and crick (1953)
13. Beadle and Tatum
14. Pigeon pea
15. Heterozygous
16. Mutation
17. Lift 23A



**ANSWER KEYS****MULTIPLE CHOICE QUESTIONS****Blood and its components**

1. (d), 2. (c), 3. (a), 4. (a), 5. (b), 6. (c), 7. (a), 8. (b), 9. (b), 10. (a), 11. (d), 12. (b), 13. (c), 14. (a), 15. (c), 16. (a), 17(a), 18. (a), 19. (d), 20. (c), 21. (a), 22. (a).

All about genes

1. (c), 2. (a), 3. (c), 4. (a), 5. (d), 6. (a), 7. (d), 8. (b), 9. (c), 10. (b), 11. (d), 12. (b), 13. (c), 14. (c), 15. (d), 16. (d), 17. (a), 18. (a), 19. (d), 20. (a).

Genes and its mutation

1. (a), 2. (a), 3. (a), 4. (d), 5. (b), 6. (a), 7. (a), 8. (c), 9. (c), 10. (b), 11. (a), 12. (b), 13. (d), 14. (c), 15. (b), 16. (b), 17. (a), 18. (c), 19. (a), 20. (c).

Specimen reagents and values

1. (c), 2. (d), 3. (d), 4. (c), 5. (b), 6. (b), 7. (d), 8. (d), 9. (a), 10. (c).

Overview of community health nursing

1. (d), 2. (b), 3. (b), 4. (a), 5. (b), 6. (a), 7. (a), 8. (d), 9. (d), 10. (c), 11. (b), 12. (a), 13. (b), 14. (a), 15. (a), 16. (b), 17. (a).

A glance into pharmacology

1. (d), 2. (a), 3. (d), 4. (d), 5. (c), 6. (a), 7. (a), 8. (a), 9. (d), 10. (a), 11. (a).

Review of pathology

1. (a), 2. (d), 3. (c), 4. (a), 5. (a), 6. (d), 7. (b), 8. (b), 9. (a), 10. (d), 11. (b), 12. (b), 13. (b), 14. (c), 15. (c), 16. (b).

Clinical practice

1. (d), 2. (d), 3. (d), 4. (a), 5. (b), 6. (b), 7. (d), 8. (d), 9. (a), 10. (b), 11. (b), 12. (c), 13. (c), 14. (c), 15. (c).

Knowledge about cardiovascular system

- 1.(b), 2. (d), 3. (d), 4. (a), 5. (a), 6. (c), 7. (b), 8. (a), 9. (c), 10. (a)

Review of medical surgical nursing

1. (a), 2. (a), 3. (b), 4. (c), 5. (d), 6. (c), 7. (d), 8(c), 9. (a), 10. (b), 11. (d), 12. (a), 13. (a), 14. (d), 15. (b), 16. (b), 17(c), 18. (a), 19. (b).

Communication

1. (a), 2. (c), 3. (d), 4. (d), 5. (c), 6. (d), 7. (d), 8. (b), 9. (c), 10. (d), 11. (d), 12. (b), 13. (d), 14. (b), 15. (b), 16. (d), 17. (b), 18. (b), 19. (d), 20. (a), 21.(c), 22. (a), 23. (d), 24. (d), 25.(b), 26.(a).

Heredity

- 1.(c), 2. (a), 3. (c), 4. (b), 5. (c), 6. (d), 7. (d), 8. (a), 9. (c), 10. (b), 11. (d), 12. (b), 13. (d), 14. (c), 15. (b), 16. (a), 17. (d), 18. (a).

**ANSWER KEYS****MULTIPLE CHOICE QUESTIONS****Knowledge about sociology**

1. (a), 2. (b), 3. (a), 4. (d), 5. (a), 6. (a) 7. (b), 8. (b) 9. (c), 10. (c)

Knowledge about gastrointestinal system

1. (c), 2. (c), 3. (d), 4. (b), 5. (b), 6. (c), 7. (d), 8. (c), 9. (c), 10. (b), 11. (a), 12. (b), 13. (d), 14. (d), 15. (b), 16. (d), 17. (c), 18. (b), 19. (c), 20. (b)

Hormones

1. (a), 2. (d), 3. (d), 4. (a), 5. (c), 6. (d) 7. (a), 8. (c) 9. (c), 10. (b), 11. (d), 12. (b), 13. (b), 14. (a), 15. (c), 16. (a), 17. (a), 18. (a), 19. (a).

Review of microbiology

1. (d), 2. (c), 3. (c), 4. (a), 5. (b), 6. (b) 7. (a), 8. (d) 9. (d), 10. (d).

Immunoglobulin

1. (b), 2. (a), 3. (b), 4. (d), 5. (d), 6. (d), 7. (d), 8. (d), 9. (c), 10. (d), 11. (a), 12. (c), 13. (a), 14. (c), 15. (c), 16. (d), 17. (a), 18. (a), 19. (a), 20. (b)

Communicable disease

1. (b), 2. (b), 3. (b), 4. (a), 5. (b), 6. (b), 7. (b), 8. (b), 9. (b), 10. (b), 11. (b), 12. (b), 13. (b), 14. (b), 15. (b), 16. (b).

General Knowledge

1. (a), 2. (b), 3. (c), 4. (b), 5. (d), 6. (c), 7. (c), 8. (d), 9. (c), 10. (a), 11. (d), 12. (d), 13. (c), 14. (c).

General Body System

1. (b), 2. (b), 3. (b), 4. (a), 5. (b), 6. (a), 7. (a), 8. (c), 9. (a), 10. (a), 11. (a), 12. (a), 13. (b), 14. (c), 15. (b).

Fundamentals of Nursing

1. (c), 2. (d), 3. (a), 4. (a), 5. (c), 6. (c), 7. (a), 8. (d), 9. (c), 10. (a), 11. (a), 12. (a), 13. (c), 14. (b).

Basics of Nursing

2. (c), 2. (a), 3. (c), 4. (c), 5. (a), 6. (b), 7. (d), 8. (a), 9. (b), 10. (b), 11. (a), 12. (c), 13. (b), 14. (c), 15. (d), 16. (c), 17. (b), 18. (a), 19. (b), 20. (a), 21. (c).
1.

General Awareness

1. (a), 2. (a), 3. (b), 4. (b), 5. (d), 6. (d), 7. (c), 8. (a), 9. (c), 10. (b), 11. (c), 12. (b), 13. (b), 14. (c), 15. (d)

Review of System

1. (d), 2. (b), 3. (d), 4. (d), 5. (c), 6. (c), 7. (d), 8. (c), 9. (a), 10. (b), 11. (c), 12. (b), 13. (a), 14. (a), 15. (c), 16. (a).

**ANSWER KEYS****MULTIPLE CHOICE QUESTIONS****World out of Nursing**

1. (d), 2. (d), 3. (d), 4. (b), 5. (c), 6. (d), 7. (b), 8. (c), 9. (a), 10. (a), 11. (a), 12. (c),
13. (a), 14. (d), 15. (a), 16. (a).

Epidemiology

1. (a), 2. (b), 3. (a), 4. (a), 5. (a), 6. (b), 7. (d), 8. (a), 9. (a), 10. (a), 11. (a).

Human Anatomy

1. (b), 2. (a), 3. (d), 4. (a), 5. (d), 6. (a), 7. (d), 8. (a), 9. (b), 10. (a), 11. (b), 12. (c), 13.
(d), 14. (a), 15. (b).

Multisystem

1. (a), 2. (c), 3. (b), 4. (b), 5. (c), 6. (b), 7. (b), 8. (b), 9. (a), 10. (d), 11. (b), 12. (c), 13.
(a), 14. (d), 15. (c).

Review of Child Health

1. (b), 2. (d), 3. (a), 4. (c), 5. (b), 6. (b), 7. (b), 8. (d), 9. (a), 10. (b), 11. (c), 12. (c), 13.
(c), 14. (a), 15. (b).

Current aspects of nursing

1. (c), 2. (a), 3. (b), 4. (a), 5. (a), 6. (d), 7. (b), 8. (d), 9. (c), 10. (d), 11. (b), 12. (b), 13.
(b), 14. (b), 15. (d), 16. (b), 17. (b), 18. (a), 19. (c), 20. (a).

Amalgamation of health awareness

1. (a), 2. (d), 3. (a), 4. (a), 5. (d), 6. (b), 7. (c), 8. (c), 9. (b), 10. (d).

Know about Madhya Pradesh

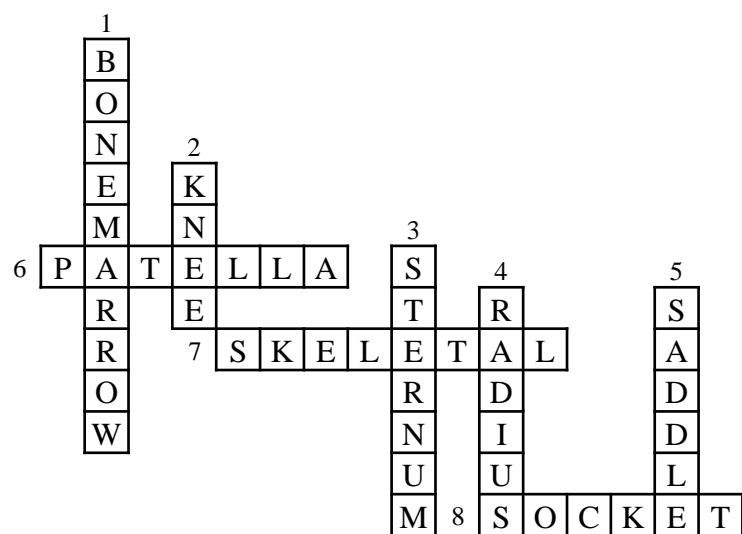
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Anatomy and Physiology

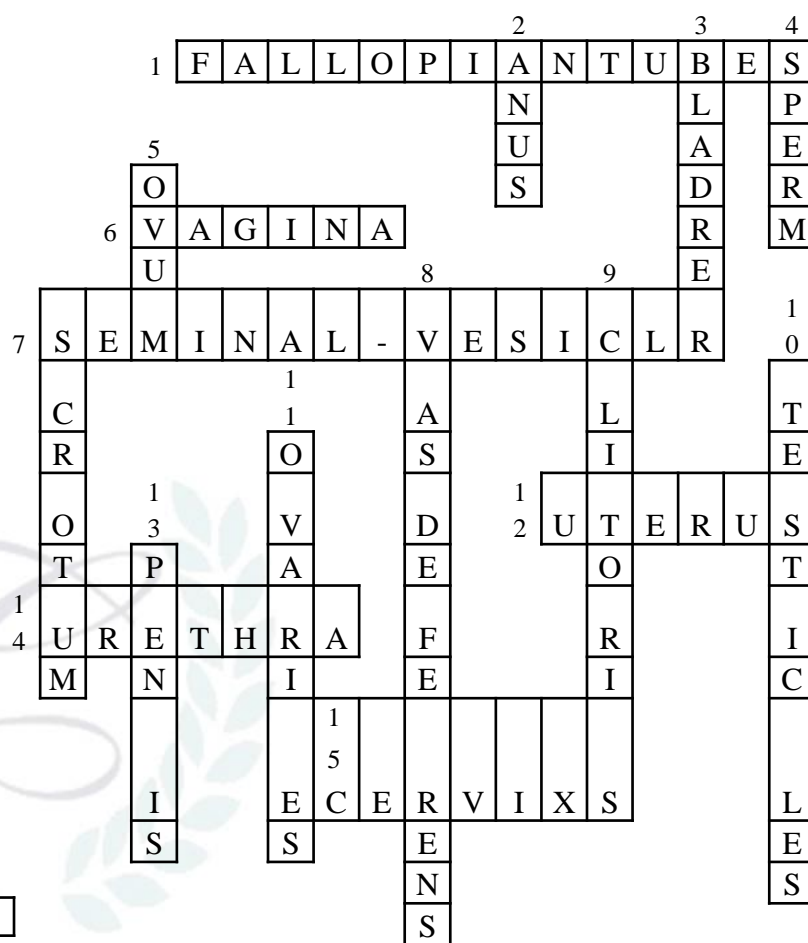
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(b), 14. (a).

CROSSWORD PUZZLE

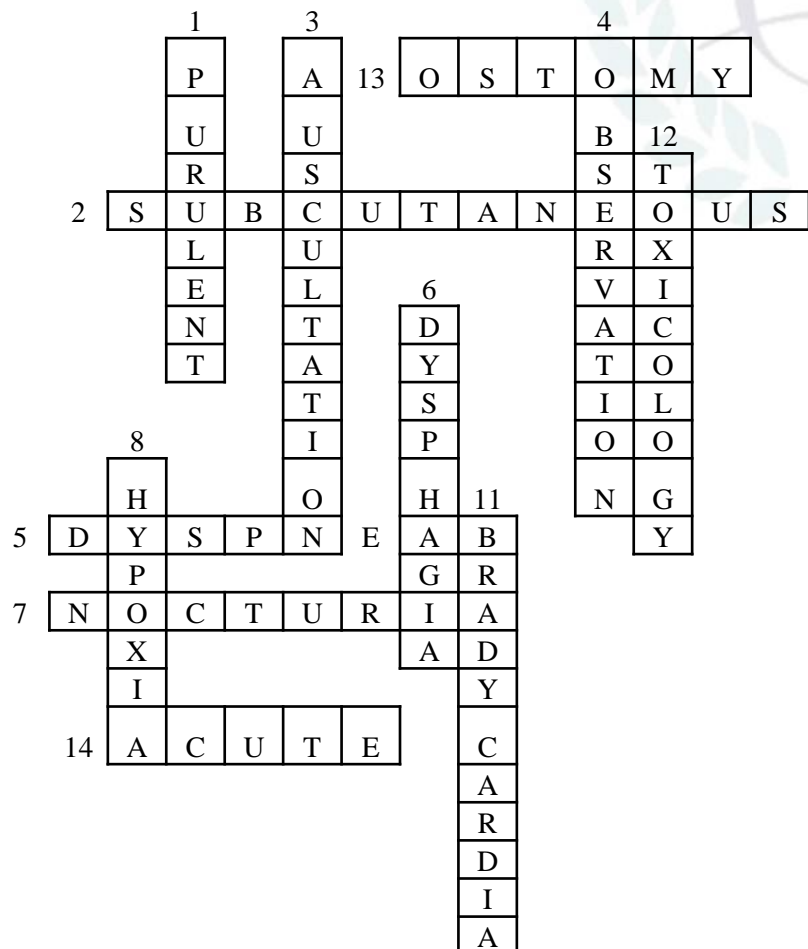
Skeletal System



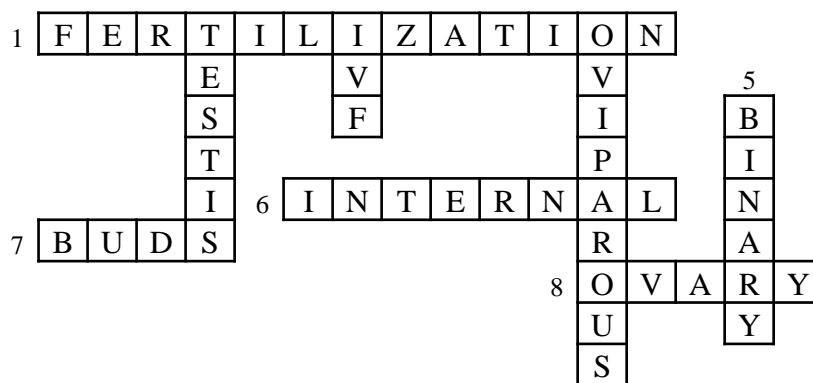
Male and female reproductive system



Medical Terms



Nervous system

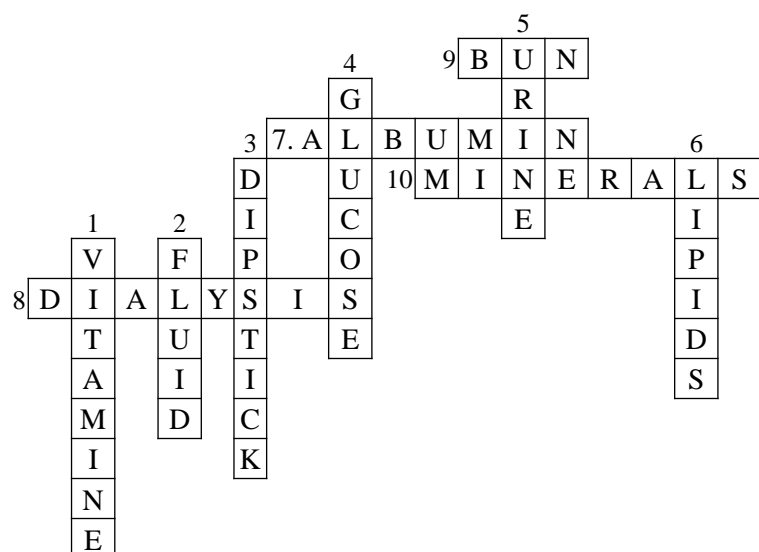




ANSWER KEYS

CROSSWORD PUZZLE

Functions of kidney

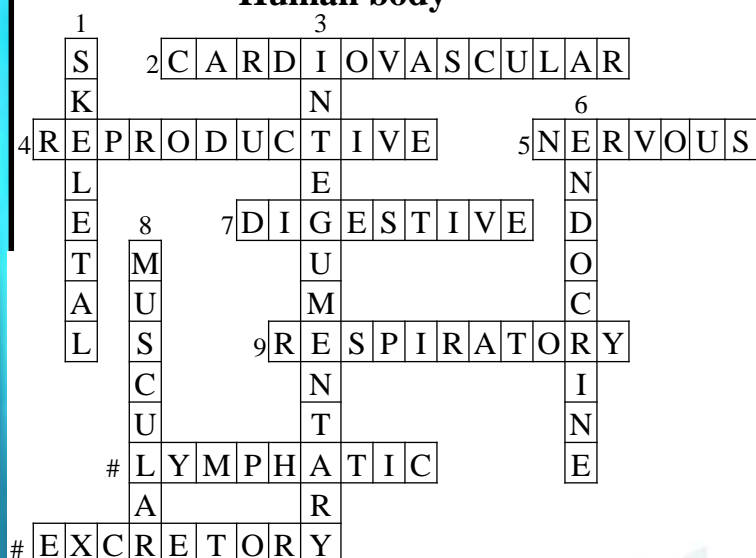




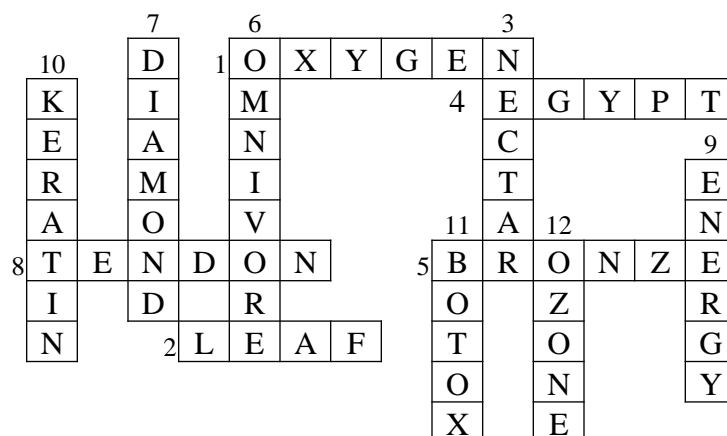
ANSWER KEYS

CROSSWORD PUZZLE

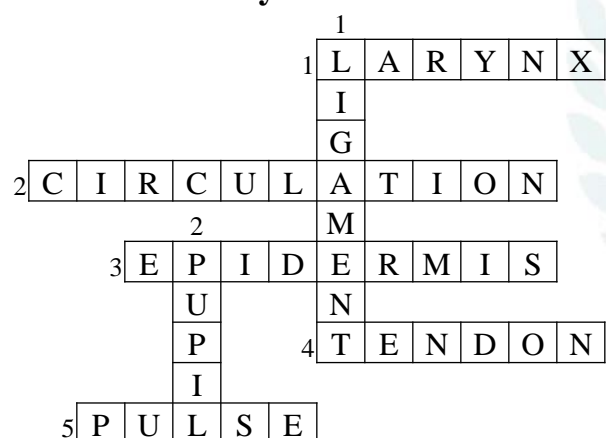
Human body



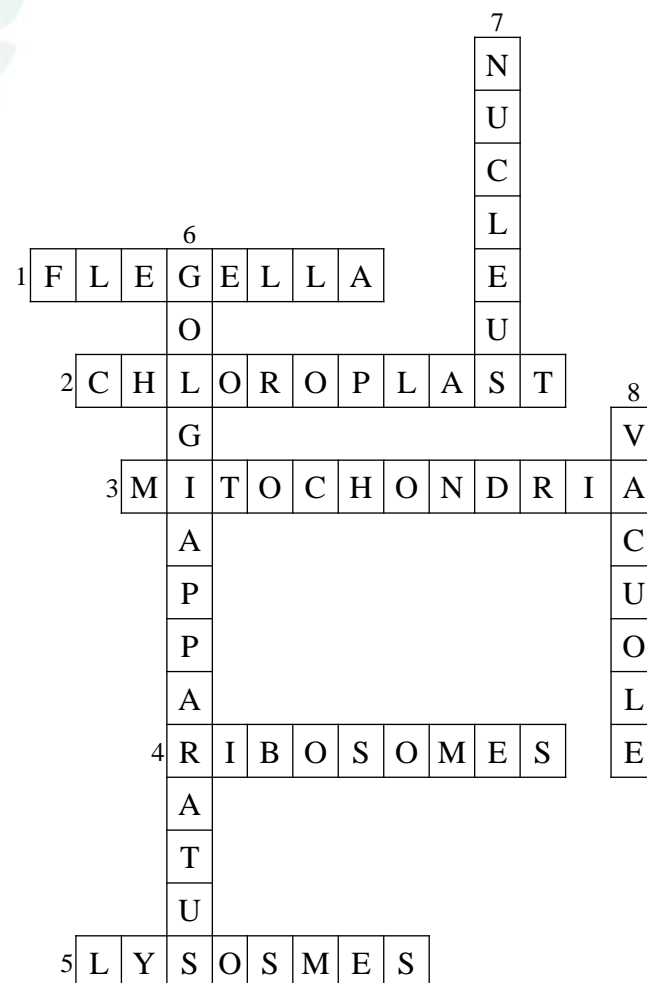
Play with science



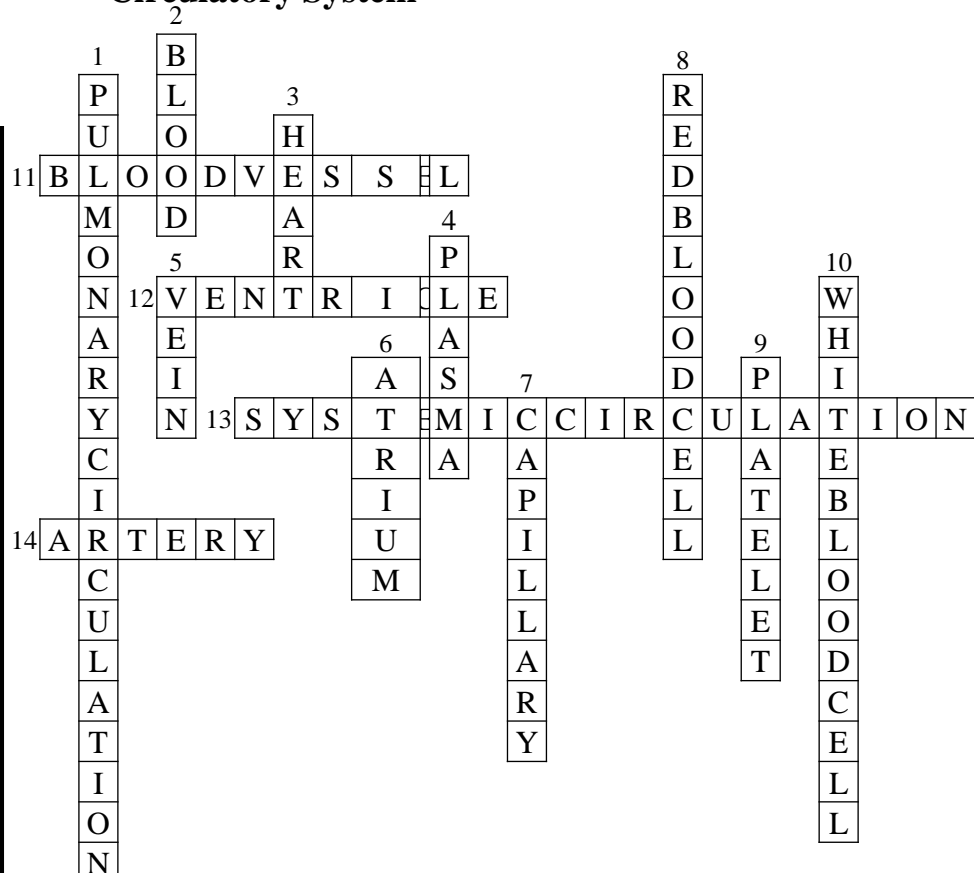
Anatomy Puzzle



Cell biology



Circulatory System

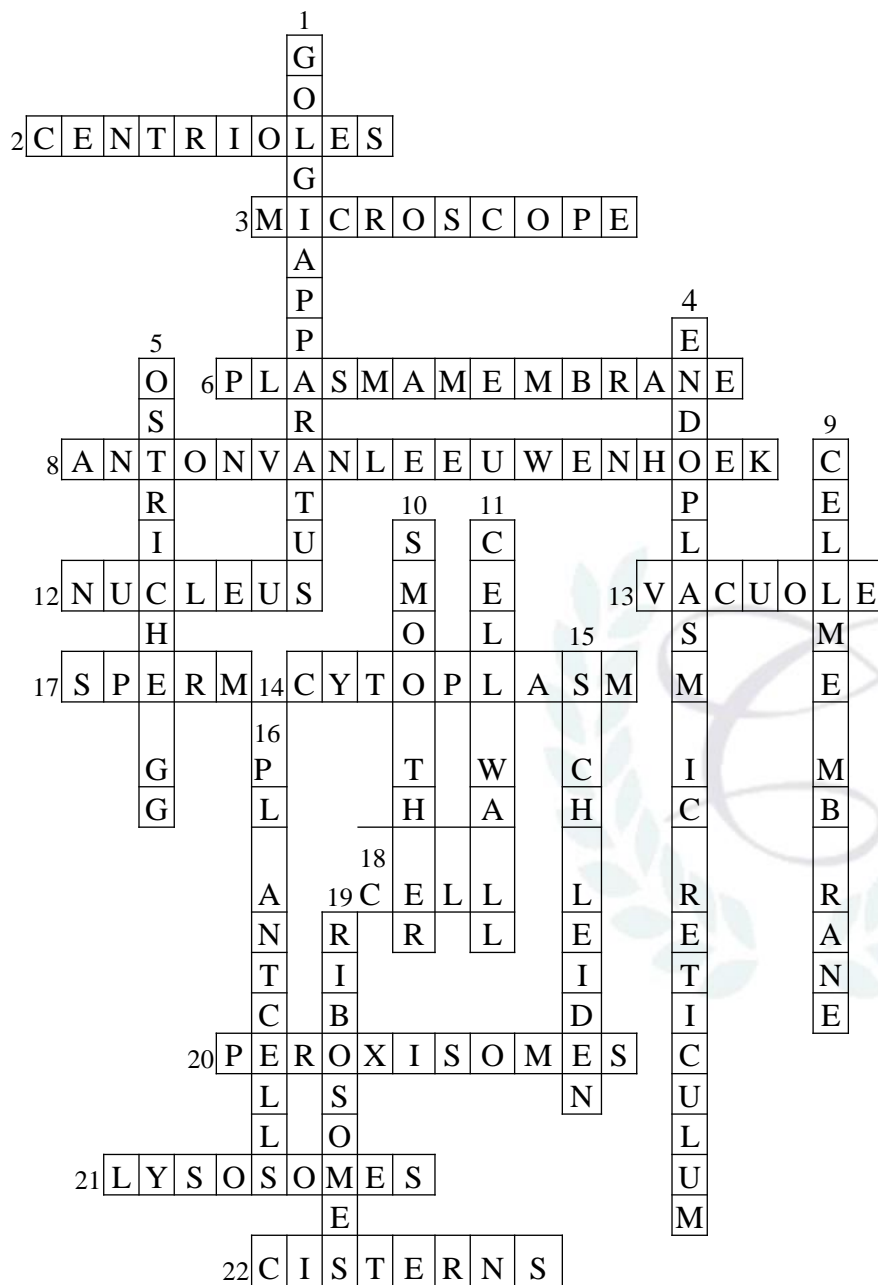




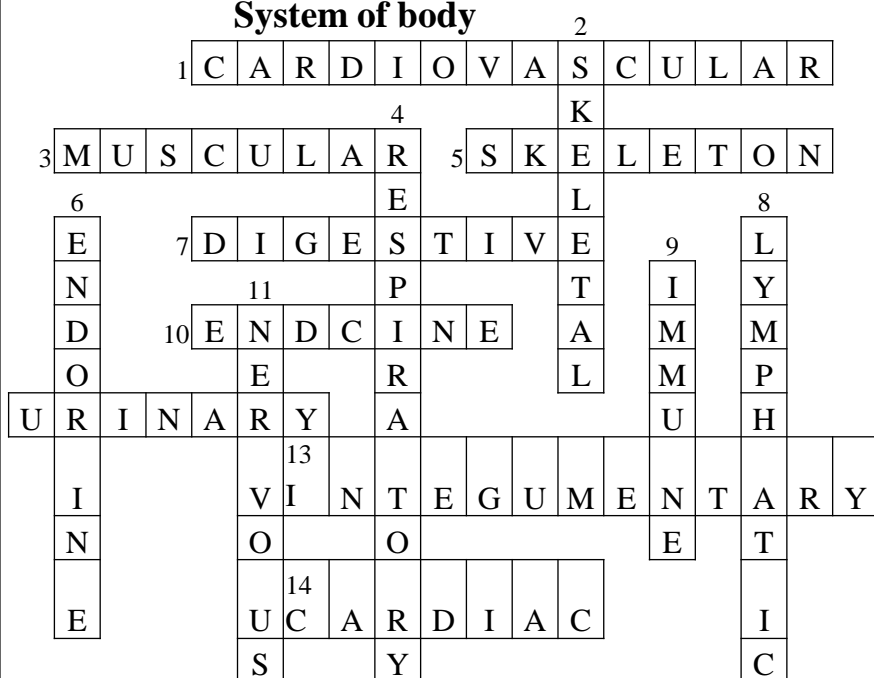
ANSWER KEYS

CROSSWORD PUZZLE

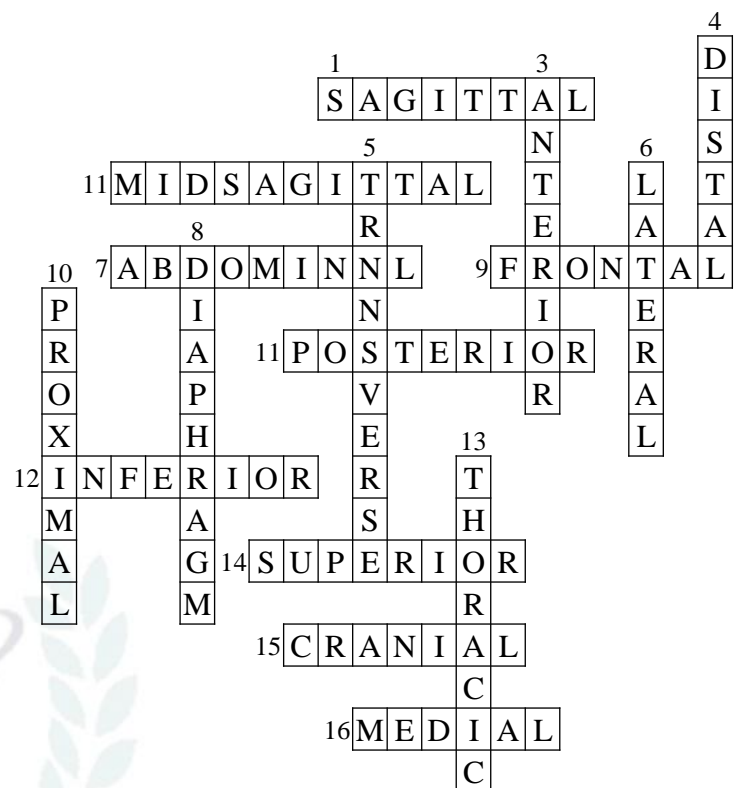
Functions of cell



System of body



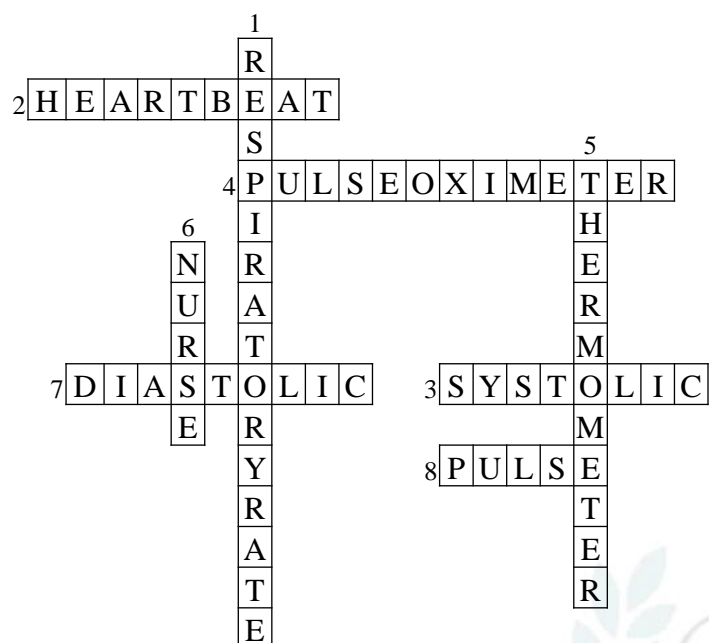
Anatomical terminologies



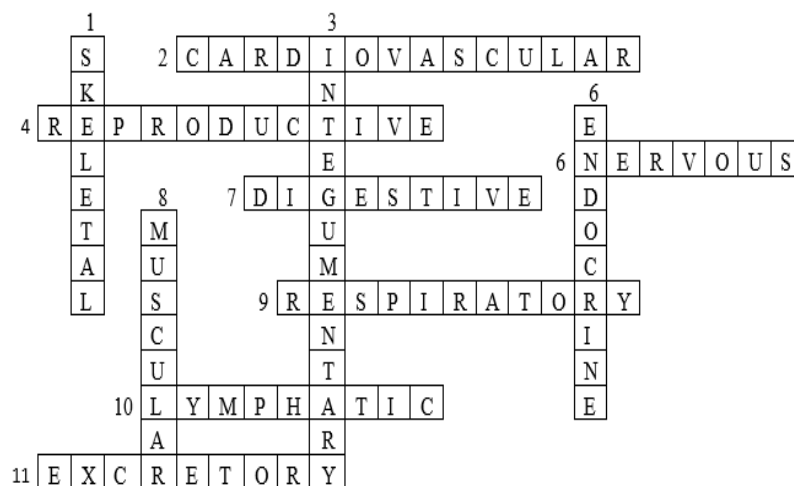


ANSWER KEYS CROSSWORD PUZZLE

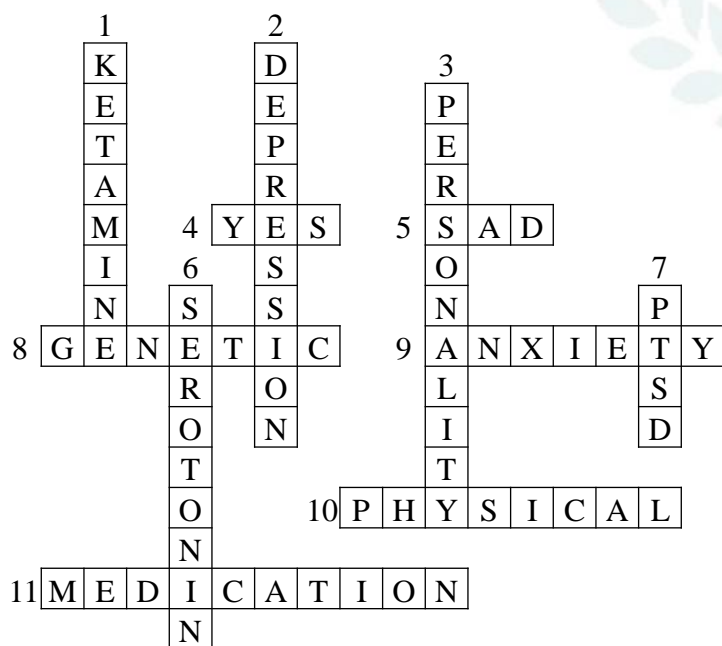
Vital Signs



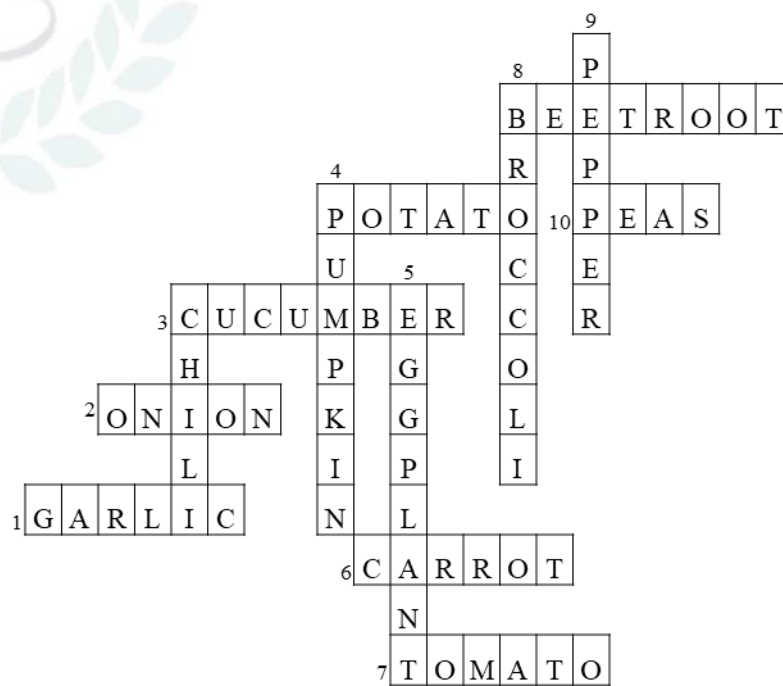
Human body System



Depression and anxiety



Concept of healthy diet

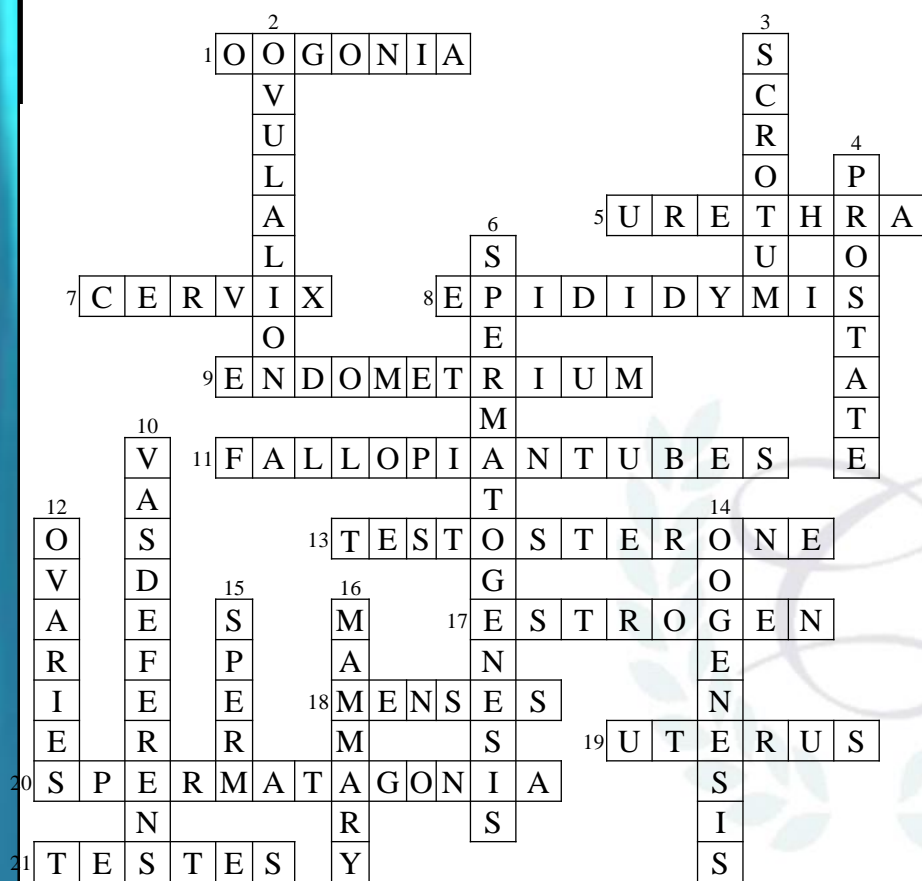




ANSWER KEYS

CROSSWORD PUZZLE

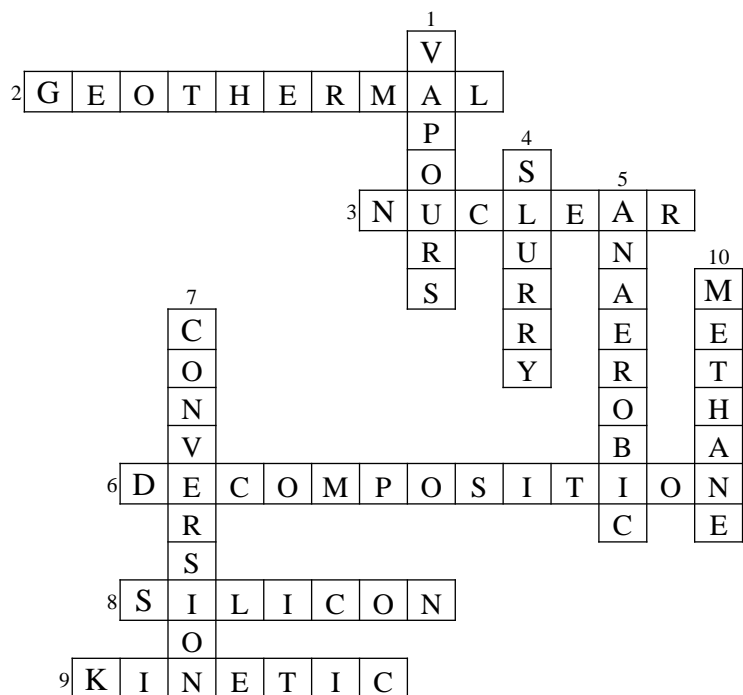
Reproductive system



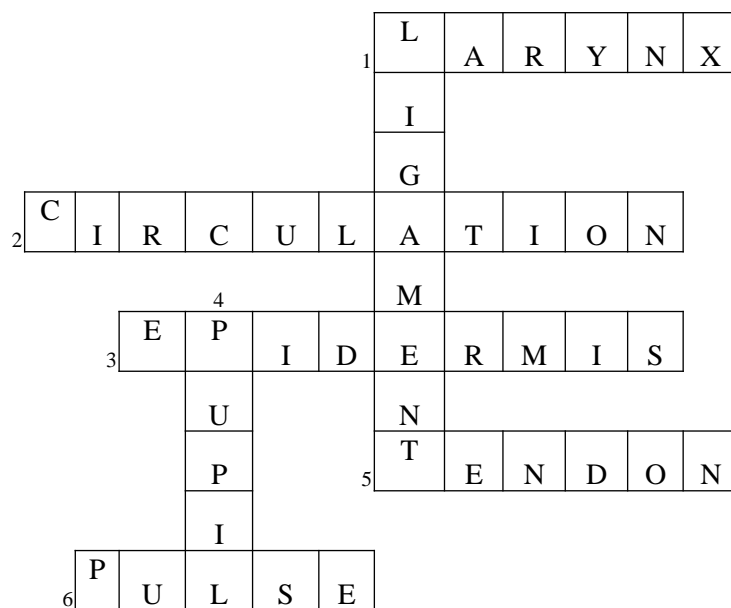
Social science



Sources of energy



Body System

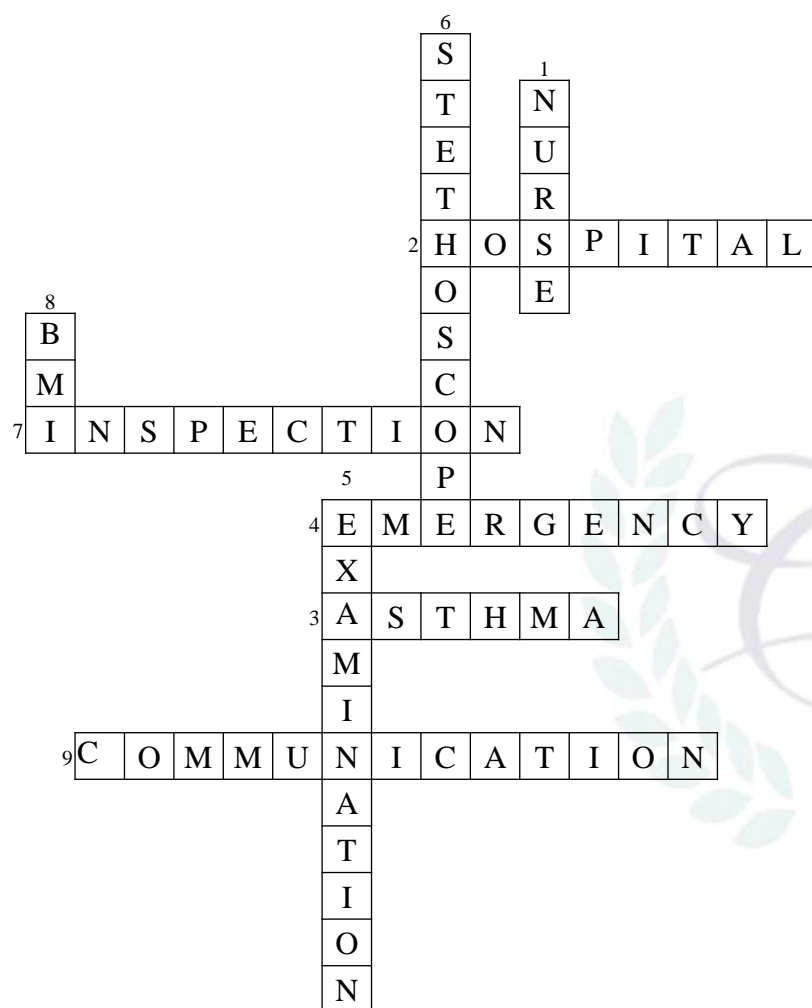




ANSWER KEYS

CROSSWORD PUZZLE

Nursing Foundation



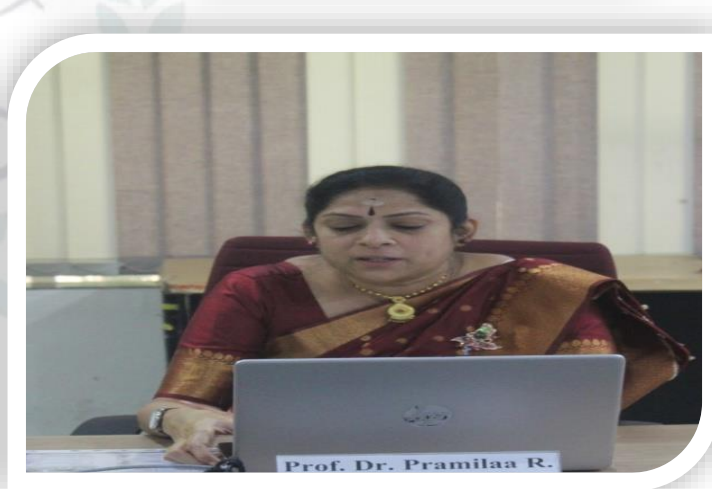
COLLEGE REPORT

Chirayu College of Nursing belongs to the Chirayu Charitable Foundation, and the college was established in 2012, in Bhopal. M.P. This year we have completed the long journey of victory: Chirayu at 10. We believe the future will build on a long and proud history of educating successful nurses for professional practice. After the pandemic, everyone recognized the value of nursing as the noble profession. A good institution can only create enthusiastic and passionate group of nurses, we are lucky to be one among them. The college visualized an array of curricular, co-curricular and extracurricular activities during the academic year 2021-22 this would have definitely helped the students to boost up their confidence in nursing and update their knowledge about the profession. Various health related days were celebrated as SNA gatherings, and students were provided with opportunities to participate in Medical camps in different parts of Madhya Pradesh. Students were also allowed to participate in various inter-competitions and thereby they have received ample of opportunities to showcase their talents. Students were provided with adequate chances to field, community visits and clinical exposure in and out of Bhopal.

Chirayu College of Nursing organized annual day of 2021-2022 academic year on 06/05/2022. Sixth edition of e-souvenir release was done with the theme - Resilience: Envisioning nursing for a Post Pandemic World. The program commenced with prayer song by B.Sc. nursing students, welcome speech was allocated by Mrs. Thamarai Selvi, Professor, CCON and lighting of lamp by the dignitaries Dr Ajay Goenka, MD, CMD Chirayu Charitable Foundation, Bhopal, Mrs. Neelam Goenka, Treasurer, Chirayu Charitable Foundation, Dr. Ulka Shrivastava, HOD, Ophthalmology Department CMCH, Dr. Amarnath Seth, Medical Director, CMCH, Dr. Ashutosh Mangalgiri, Medical Superintendent CMCH and Prof. Dr. Pramila. R. Principal, CCON. Then Mrs. Monika Sehgal Assistant Professor Briefed in short Annual day Celebration at Chirayu Nursing College. Then the winners in curricular, co curricular and extracurricular activities were awarded with certificate and medals by the dignitaries. Due to pandemic, students were not awarded in the last academic year, therefore, the awards were bestowed for the two academic years. Followed by it the official release of Souvenir was done by all the dignitaries and the dignitaries expressed the usefulness this guide in the profession. Thereafter, the Editor in Chief of e-Souvenir and the Principal of Chirayu College of Nursing Prof. Dr.Pramila. R, addressed the gathering followed by the Chief Guest's address by Dr.Ulka Shrivastava, HOD, Ophthalmology Department, CMCH, Bhopal. Blessings from Medical Director and Medical Superintendent were bestowed by Dr. Amarnath Seth and Dr. Ashutosh Mangalgiri in order. The Presidential address was delivered by Dr. Ajay Goenka, CMD, Chirayu Charitable Foundation, Bhopal, who inspired and motivated the students about better contributions to the society at large in the upcoming years. It was then continued with felicitation of guests and the program ended by showering indebtedness towards the gathering by Mrs. Sherin Annie Varghese, Professor, CCON. After this, the event followed with cultural programs of B.Sc. and GNM students and the program ended with National Anthem.



A Virtual International Conference was organised on 14th JUNE 2022 with the Theme- “Covid-19: Trauma Eventuated & Lessons Shaping Our Future”. The program was initiated under the leadership of Prof. Dr. Pramilaa R. Principal, Chirayu College of Nursing. We had two international speakers for this event. The program began at 10:00 am with welcome speech allocated by Mrs. Thamarai Selvi M, Professor, CCON, followed by the Lighting of lamp by the dignitaries. The theme of Virtual International Conference was unfolded by Prof. Dr. Lilly Christopher, Ex-Principal, Kasturba College of Nursing, Bhopal. The program headed with the Inaugural Address by Mrs. Sunita Shiju, Registrar, MPNRC and Presidential Address by our Chief Patron Dr. Ajay Goenka CMD, Chirayu Charitable foundation. The moderator for Scientific Sessions was introduced by Ms. Jyoti Majumdar, Lecturer, CCON. Mrs. V. Chandrakala, Professor, the program was well moderated by Prof. V. Chandrakala. KIMS College of Nursing, Secunderabad, the moderator for the scientific sessions introduced the speakers and moderated for all four scientific sessions. It was followed by Scientific Session I on Educational change during a pandemic by Dr. Pramilaa R. Principal, CCON and Scientific Session II on Reflections during Covid 19 and future of work trends by Dr. Ajay Goenka CMD, Chirayu Charitable foundation. Scientific sessions III and IV were presented by international speakers, Mr. Vinu Kochpurackal Sasi, PhD Scholar, Registered Nurse, New Zealand and Dr. Anumol Thomas, DNP, APRN FNP-C CCRN TTS, Houston, USA. They discussed about the challenges faced by them and other nursing personnel in their respective countries during Covid-19 pandemic. The moderator, Prof. V. Chandrakala, highlighted the main points and asked the participants to write their doubts in chat box. There were 599 participants. The participants were informed to fill the feedback forms to ensure their e-certificates of participation. The conference ended with the vote of thanks by Mrs. Sherin Annie Varghese, Professor, CCON. Dignitaries’ from different parts of world were given opportunity to participate in Virtual International Conference.



“No matter how difficult the days may get, don’t forget the reason you become a nurse”. International Nurses Day on 12th May 2022 was celebrated under the leadership of Prof. Dr. Pramilaa R. Principal, Chirayu College of Nursing, with the motive to encourage budding nurses. The theme for the year 2022 was A voice to lead Invest in Nursing and respect rights to secure global health. The students were posted in different areas of hospital at 08:00 am along with the faculty. Students demonstrated their skills in nursing procedures like bed making, monitoring vital signs, oral hygiene, venipuncture etc. Students also presented health education on different health related topics in OPD area. They were supervised by the assigned faculties. At 3:00 pm, the celebration headed with cake cutting ceremony by our Chief Patron, Dr. Ajay Goenka, CMD, Chirayu Charitable Foundation, Mrs. Neelam Goenka, Treasurer, Chirayu Charitable Foundation, Dr. Ashutosh Mangalgi, Medical Superintendent, CMCH, Ms. Aakriti Goenka, Secretary, Chirayu Charitable Foundation and Prof. Dr. Pramilaa R. Principal, Chirayu College of Nursing, Bhopal. The program ended by best wishes from Dr. Ajay Goenka, Secretary, Chirayu Charitable Foundation for all the nurses. The dignitaries admired the students for the noble profession.

The International Yoga Day was celebrated on 22th June 2022 in library of Chirayu College of Nursing, Bhopal. Our guests for the day were Dr. Ulka Shrivastava, Dr. Ashutosh Mangalgiri, our respected Principal Prof. Dr. Pramila R to gave knowledge and importance about yoga day in our, daily life to students of both B.Sc (N) and GNM students. About 330 students, and 08 teaching faculty members participated in the event. The event started at 3:00 pm in the evening with introduction on yoga, its advantages and history. The program was guided by Mr Vibhore Tiwari, Sports officer CMCH, there was a warming up session (neck rotation, shoulder rotation, hip and knee rotation etc.) During this function various Yoga Asana along with its benefits on studies, improving concentration and relaxation were explained by the Yoga Instructor. All students enjoyed yoga session very much. At the end of this auspicious session of “International Yoga Day”, everybody took a pledge to include Yoga in one’s daily routine like other necessary activities and also inspire others to include Yoga in their daily life.



College of Nursing organized Continuing Nursing Education on 5th September, 2022. The program was initiated under the leadership of Prof. Dr. Pramila R. The program began at 10:30 am with welcome speech allocated by Mrs. Thamarai Selvi M, Professor, CCON, followed by the Lighting of lamp by the dignitaries. Dr. L. Gopichandran, President TNAI Delhi Branch, Associate Professor, College of Nursing, AIIMS New Delhi threw the light on vision of CNE and its importance in nursing profession. Then program headed with the Inaugural Address by our Chief Patron Dr. Ajay Goenka CMD, Chirayu Charitable foundation. Principal’s address was delivered by Prof. Dr. Pramila R. Principal, CCON. The inaugural ceremony came to an end with vote of thanks by Mrs. Sherin Annie Varghese, Professor, CCON. At 11:00 am, Dr. L. Gopichandran, President TNAI Delhi Branch, Associate Professor, College of Nursing, AIIMS New Delhi began his session on Nurse led heart failure management. He discussed regarding heart failure, its management, heart failure services at AIIMS (Delhi) and the role of nurses in heart failure management program. The session was very interesting and informative.

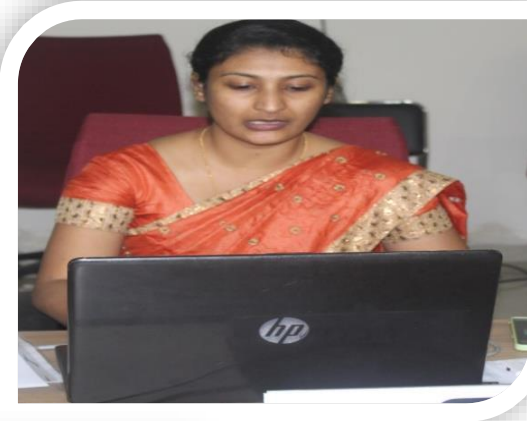
There were 400 participants including nursing faculty, nursing staff and nursing students. It was a great session for us to update our professional knowledge. After the session, Prof. Dr. Pramila R. Principal, Chirayu College of Nursing felicitated Dr. L. Gopichandran, Associate Professor, College of Nursing, AIIMS New Delhi with certificate and memento followed by photo session of students with the resource person.



A Virtual International Research Meet was organized on 21/09/2022 and 22/09/2022. The program was initiated under the leadership of Prof. Dr. Pramila R. Principal, Chirayu College of Nursing. The program began at 10:00 am with welcome speech allocation by Ms. Jyoti Majumdar, Lecturer, CCON. The program proceeded with Lighting of lamp by dignitaries. The unfolding of theme of Virtual International Research Meet was done by Mr. Elby K Paul, Associate Professor, Chirayu College of Nursing, Bhopal, he highlighted regarding the topics of scientific sessions and the importance of the theme. We had 2 international speakers and 3 speakers from different parts of India and virtual research meet gives opportunity that how far you are also, we can join in one window. The program headed with the Inaugural Address by Dr. Ajay Goenka, MD, CMD, Chirayu Charitable foundation. Thereafter, the speakers for the Scientific Sessions were introduced by Mrs. Sherin Annie Varghese, Professor, CCON. It was followed by Scientific Session I on Generating research ideas by Dr. Pramila R, Principal, CCON, madam focused on different ways of generating ideas for the research. The Scientific Session II on Advanced thinking in research methods and practice were presented by Dr. Viji George, Clinical Excellence Program Manager, Magnet Program Director, North Texas, US. In her presentation, madam highlighted in-depth approaches of qualitative and quantitative methods. Then, Mrs. Sherin Annie Varghese introduced the jury for the Oral Research Paper presentations. The jury for oral research paper presentation were Dr. A. Maria Therese, Professor, Mother Theresa Post Graduate and Research Institute of Health Sciences, Pondicherry and Dr. Pratibha Swamy, Associate Professor, College of Nursing, NIMHANS, Bengaluru. There were seven research paper presentations on day one. The presenters were given ten minutes to present and two minutes to answer the questions of the jury. Interacting with proficient dignitaries is one of the blessing for our team.

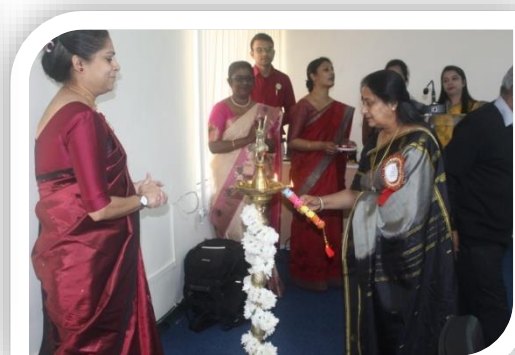
The day Two Virtual International Research meet began with the Introduction of Resource Persons for Scientific Session by Mrs. Sherin Annie Varghese, Professor, CCON. The Scientific Session III on Integrity in qualitative research was dealt by Dr. Rajini Peter, Principal, College of nursing, AIIMS, Nagpur, madam focused on different methods of qualitative research. Later the Scientific Session IV on Developing and testing self-report scales was explained in detail by Dr. Yeow Chye Ng, Associate Professor, University of Alabama, United States, sir highlighted different methods of developing and testing self-report scales. The Oral Research Presentations of day two began at 11:40 am and the Jury (Dr. A. Maria Therese and Dr. Pratibha Swamy) evaluated the presentations of eight presenters.

The program headed towards the valedictory address by Dr. Ajay Goenka, M.D., CMD, Chirayu Charitable foundation. The jury for e-poster presentation was introduced by Mrs. Sherin Annie Varghese, Professor, CCON. The jury for e-poster presentation were Dr. Achamma Varghese, Principal, Shubhdeep College of Nursing, Indore and Dr. R. Babu, Principal, DIT College of Nursing, Uttarakhand. The announcement of results of e-poster was done by Mrs. Monika Sehgal, Assistant Professor, CCON. The winner for E- Poster was Ms. Goh Yuet Lee, Clinical Nurse Educator, University Malaya Medical Centre, Malaysia. Subsequently the result of Oral Research Paper Presentations was done by Dr. Pratibha Swamy, the winner was Ms. Betsy George, Assistant Professor, Malankara Orthodox Syrian Church College of Nursing, Kerala. The winners for oral research and poster presentation were awarded with Rs. 5000/-. There were 410 participants. The participants were informed to fill the feedback forms to ensure their e-certificates of participation. The conference ended with the vote of thanks by Mr. Arpit Narekar, Assistant Professor, CCON.

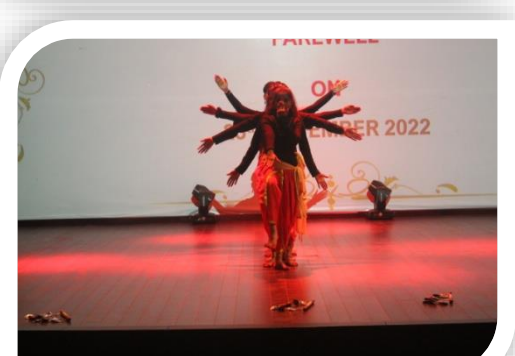


One more precious stone is adding to our college. Inauguration of Conference hall on 22nd November, 2022. The program was initiated with ribbon cutting ceremony by Dr. Ajay Goenka at 11:00 am. The program proceeded with prayer song and continued with welcome speech allocated by Ms. Jyoti Majumdar, Lecturer, Chirayu College of Nursing followed by the Lighting of lamp by the dignitaries. The program headed with the Principal's Message by Prof. Dr. Pramila R., Principal, Chirayu College of Nursing, Bhopal. Madam focused on the different benefits of conference hall for the faculty and the students. The Presidential Address was delivered by Dr. Ajay Goenka, M.D., CMD, Chirayu Charitable Foundation, Bhopal. Sir mentioned the importance of all the facilities at conference hall for the development of faculty. The vote of thanks was allocated Mr. Arpit Narekar, Assistant Professor, CCON. The program ended with National Anthem.





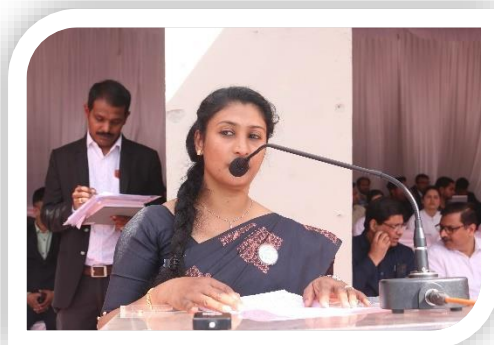
Every end is a new beginning, with passion and compassion another batch of students of Chirayu is going to start their new journey. Farewell Celebration for Outgoing students of M.Sc. Nursing, P.B.B.Sc Nursing, B.Sc. Nursing and GNM was on 25th November, 2022. The program was initiated under the leadership of Prof. Dr. Pramila R. Principal, Chirayu College of Nursing, with the motive to provide an opportunity for junior students to say bye in a formal way. The program began at 12 noon with Prayer song . Welcome speech was allocated by Ms. Jyoti Majumdar, Lecturer, Chirayu College of Nursing, followed by the Lighting of lamp by the dignitaries (Dr. Ajay Goenka, CMD, Chirayu Charitable Foundation, Dr. Ashutosh Mangalgiri, Medical Superintendent, CMCH, Dr. Ulka Shrivastava, Medical Superintendent, CMCH, Dr. Manohar M. Bende, Dean, CMCH and Prof. Dr. Pramila R. Principal, Chirayu College of Nursing). Memento were handed over to the students and the graduation Oath was administered by Mrs. Sherin Annie Varghese, Professor, Chirayu College of Nursing, Bhopal. The program headed with Sharing of experiences by the Coordinators and graduating students. The Coordinators shared their love for the students and the difficulties they faced to manage the students, they also wished them good luck for future. Prof. Dr. Pramila R., Principal, Chirayu College of Nursing showered her blessings. In her address, she mentioned about future opportunities and support from the college. Then, Dr. Ulka Shrivastava, Medical Superintendent addressed the gathering, which then continued with the address by Dr. Ashutosh Mangalgiri, Medical Superintendent, Chirayu Medical College and Hospital and Dr. Manohar M. Bende, Dean, CMCH. It then proceeded with Chief Patron's Address by Dr. Ajay Goenka, CMD, Chirayu Charitable foundation, sir mentioned the experiences and skills students have received at Chirayu College of Nursing. The gratitude towards the guests was expressed by felicitating the dignitaries and allocation of vote of thanks by Mrs. Merlin Vinod, Lecturer, Chirayu College of Nursing. The program then continued with cultural events by the Junior students. The event followed by different cultural programs by junior students. The program ended with National Anthem and snacks were distributed to students.



Subsequently, Chirayu College of Nursing organized Freshers Day Celebration for new batches of B.Sc. Nursing and GNM on 2nd December, 2022. The program was initiated under the leadership of Prof. Dr. Pramilaa R., Principal, Chirayu College of Nursing, with the motive to encourage the new batches. The program began with Prayer song from B.Sc. Nursing III students. Welcome speech was allocated by Mrs. Sherin Annie Varghese, Professor, Chirayu College of Nursing, followed by the Lighting of lamp by the dignitaries (Dr. Ajay Goenka, CMD, Chirayu Charitable Foundation, Dr. Ashutosh Mangalgiri, Medical Superintendent, CMCH, Dr. Ulka Shrivastava, Medical Superintendent, CMCH, Dr. Manohar M. Bende, Dean, CMCH and Prof. Dr. Pramilaa. R., Principal, Chirayu College of Nursing). The program headed with Principal's address by Prof. Dr. Pramilaa. R., Principal, Chirayu College of Nursing. In her address, she mentioned about the facilities available at Chirayu College of Nursing. Then Dr. Ulka Shrivastava, Medical Superintendent addressed the gathering, which then continued with the address by Dr. Ashutosh Mangalgiri, Medical Superintendent, Chirayu Medical College and Hospital and Dr. Manohar M. Bende, Dean, CMCH. It then proceeded with Chief Patron's Address by Dr. Ajay Goenka, President, Chirayu Charitable foundation. Sir focused on the importance of nurses and nursing profession in the society. Then the students of new batches of B.Sc Nursing and GNM were given the opportunity to introduce themselves one by one. The gratitude towards the guests was expressed by allocation of vote of thanks by Mrs. Thamarai Selvi M, Professor, Chirayu College of Nursing. The program was anchored by Mrs. Monika Sehgal, Assistant Professor, CCON. The program ended with National Anthem.



Thereafter, Chirayu College of Nursing organized a colourful and memorable event Chirayu 10: Mission of benevolence Celebration on 22/02/2023 under the leadership of Prof. Dr. Pramila R., Principal, outside the OPD area and medical college auditorium from 09:30 am to 02:30 pm. The celebrations began at the OPD area with inaugural Celebration with greeting allocation by Mrs. Monika Sehgal, Assistant Professor, CCON and with official inauguration of celebrations by releasing balloons to the air by the dignitaries. There were over 2000 people witnessing this event. The rhythm and magnitude of inauguration was highlighted through a grandiose ethnic rock dance representing four different states of India from four directions of India keeping Chirayu at the centre with a total of 160 students clubbed with students for College Anthem i.e. 320 students performing a magnanimous visual and auditory treat for the mass gathered around by unleashing of College Anthem.





Then there was Laudation by the special invitee Prof. Dr. Usha Ukande, Ex Principal Choithram College of Nursing, Indore, Dr Ashutosh Mangalgiri, Medical Superintendent, CMCH and Dr. Manohar M Bende, Dean, Chirayu Medical College, Bhopal. Mr. Baiju S Lecturer, Bhopal Memorial Hospital and Research Centre College of Nursing, an Ex- M.Sc Nursing Student of Chirayu shared his experiences in expedition with Chirayu Nursing College in his nursing career. This then continued with inaugural address by Dr. Ajay Goenka, M.D., President, Chirayu Charitable Foundation highlighting the mission that he has for the college in the decades to come. The inaugural Ceremony ended by expressing indebtedness to everyone present in the celebration at 10:30 am. The celebration got the momentum with the exhibition of Models, Paintings and Charts of students followed with High Tea with snacks outside the auditorium.



The Celebrations at the Medical College Auditorium commenced with a prayer song at 11:30 am. Welcome Speech was allocated by Mrs. Thamarai Selvi, Professor, CCON. This was then continued with lighting of the lamp by the dignitaries and the Peroration of the Chief Guest by Honorable Minister of Medical Education His Excellency Dr. Vishwas Sarang at 11:40 am virtually. Later Dr. Usha Ukande, Ex Principal, Choithram College of Nursing, Indore Addressed the gathering. The event then continued with Ms. Pooja Manoriya, Lecturer, National Mental Health and Research Centre, Sehore an ex student of our college sharing her experiences.



Then there was an oration by our Principal, Prof. Dr. Pramila. R and speech by Dr. Ulka Shrivastava, Medical Superintendent, CMCH. This was followed with Presidential address by Dr. Ajay Goenka, President, Chirayu Charitable Foundation and Award distribution for the exemplary performance to both Teaching faculty and pass-out students who work at CMCH.



The cultural feast began at 12:40 pm with a mind blowing Welcome dance from GNM students and followed by the Documentary Journey of Chirayu by Prof. Dr. Pramila. R, Principal, Chirayu College of Nursing, Bhopal. This was followed by a fabulous Mahabharath Dance, Comedy Skit, Mime showing the differences between old and new generation, an eye catching mesmerizing Shiv Thandav, a mime, a vibrant folk dance, a puppet show , meaningful concept dance and the students took the audience to the height of visual and auditory treat through these fabulous cultural feast. The existing students and the alumni participated in these events with great joy and enthusiasm. The vibe of the celebration was so penetrating for the audience that they could carry the memories for another decade to come. The program then advanced with showing gratitude towards the dignitaries by felicitation, and vote of thanks by Ms. Jyoti Majumdar, Lecturer, CCON. The Celebrations of Chirayu 10: Mission of Benevolence ended at 02:30 pm with National Anthem and a Photo Session with the alumni and the dignitaries. Then the celebration mood continued with a Splendid Lunch.





Then, Chirayu College of Nursing organized the 11th lamp lighting ceremony for 2022-23 B.Sc. Nursing and GNM first year students on 05th April 2023. The program was initiated under the leadership of Prof. Dr. Pramilaa R. Principal, Chirayu College of Nursing, with the motive to guide the new comers through the path of Florence Nightingale. The program began at 10:30 am with Procession of B.Sc. and GNM students to their seats headed by their class coordinators. It was followed by Prayer song from B.Sc. students. Welcome speech was allocated by Mrs. Monika Sehgal, Assistant Professor at CCON, followed by the dignitaries (Dr. Ajay Goenka, President., Chirayu Charitable Foundation, Prof. Blessy Varghese, Professor and HOD Jaipur Hospital College of Nursing, Dr. Manohar M Binde, Dean, Chirayu Medical College, Dr. Ulka Shrivastav, Medical Superintendent, CMCH, Dr. Ashutosh Mangalgiri, Medical Superintendent, Chirayu Medical College and Hospital and Prof. Dr. Pramilaa R. Principal Chirayu College of Nursing) lighting the lamp. Then the Significance of Lamp lighting was explained by Ms. Muskan Sahu, B.Sc Nursing IV year Student. The program headed with Passing of the light by Prof. Dr. Pramilaa R., Principal, Chirayu College of Nursing and Prof. Blessy Varghese, Professor and HOD of OBG, Jaipur Hospital College of Nursing. After passing the light, Oath was administered by Mrs. Thamarai Selvi M, Professor at Chirayu College of Nursing, Bhopal following this the Freshers song the lamp lighting song. It was followed with the Presidential Address by Dr. Ajay Goenka President, Chirayu Charitable foundation. The annual report of the college was then presented by Prof. Dr. Pramilaa R., Principal, Chirayu College of Nursing, Bhopal



The Chief Guests address by Ms. Blessy Varghese, Professor and HOD, Jaipur Hospital College of Nursing. With the blessings and motivational words from all the dignitaries the budding nurses were welcomed to Chirayu family. Thereafter the regular volunteer outgoing students were awarded with medal of appreciation and honour. The gratitude and honour towards the guests were expressed through felicitating them with a memento as a token of love and appreciation. The program came to an end with the vote of thanks allocation by Mrs. Sherin Annie Varghese, Professor, CCON and followed with National Anthem then there was a delicious lunch for all the students, parents and staff by the management.



Following that Chirayu College of Nursing organized SNA gathering on 26/04/2023 to observe World Health Day, World Tuberculosis Day, World Autism Day and World Malaria Day under the leadership of Prof. Dr. Pramilaa R. Principal, CCON with the motive of enhancing the participant's knowledge and to encourage the students. The SNA gathering commenced with Prayer song at 02:30 pm by B.Sc Nursing II year students in the presence of eminent dignitaries, Dr. Ulka Shrivastava Medical Superintendent, Chirayu Medical College and Hospital, Dr. Arvind Athavale HOD, Department of Preventive and Social Medicine, Chirayu Medical College and Hospital, Dr. Mayank Gupta, Assistant Professor, Department of Ophthalmology, Chirayu Medical College and Hospital and Prof. Dr. Pramilaa R., Principal, Chirayu College of Nursing. Followed by this an earnest welcome address was delivered by Mrs. Thamarai Selvi, Professor, Chirayu College of Nursing, Bhopal. Dr. Mayank Gupta, Assistant Professor, CMCH presented a seminar on awareness on Glaucoma and after that Dr. Arvind Athavale HOD, Department of Preventive and Social Medicine, CMCH presented a seminar on WHO Day: Health for All. After these two effective and knowledgeable sessions Dr. Ulka Shrivastava Medical Superintendent, CMCH addressed students with her inspirational words.



The Principal's address was given by Prof. Dr. Pramila R, Principal, CCON. She focused on the students to maintain punctuality at the college, clinicals as well as in hostel after outing, also to submit their scholarship documents and college fees on time. Madam also warned students regarding decorum in class and to show respect and dignity towards faculty and seniors and she encouraged the efforts of students' regarding participation in poster presentation. Then the distribution of certificates for participation in poster competition which was announced by Mr. Pratheesh P T, Assistant Professor, CCON. The program headed by felicitation of the guests by Prof. Dr. Pramila R, Principal Chirayu College of Nursing by honouring with mementos. The vote of thanks was proposed by Mr. Arpit Narekar, Assistant Professor, CCON and the program ended with National Anthem.



Batches 2022-2023



B.Sc I Year



B.Sc II Year



B.Sc III Year



B.Sc IV Year



GNM I Year

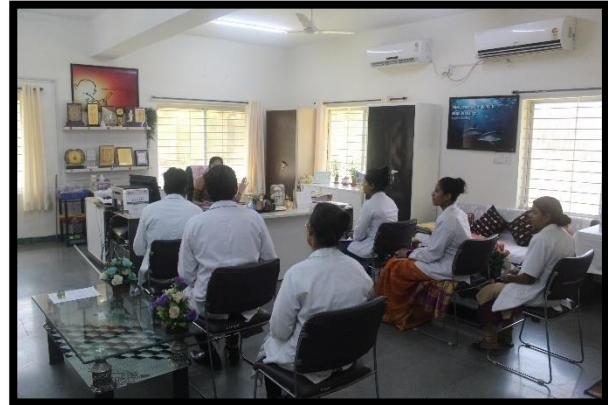


GNM II Year



GNM III Year

Various committees are formed annually for better functioning of academic activities of the college. Every committee is given committee in charge and members and each committee meeting is held every month is chaired by Principal except extra curricular and library committee which meet once in three months.

**CURRICULUM COMMITTEE****HOSTEL AND MESS COMMITTEE****HEALTH COMMITTEE****GUIDANCE AND COUNSELLING COMMITTEE****EDITORIAL COMMITTEE****ANTI RAGGING COMMITTEE**



The college ensured the well being of students through class coordinators meeting which is conducted every month chaired by Principal.



Proper check of each faculty member's responsibilities and to appreciate their work faculty meeting is held monthly.

College Topper



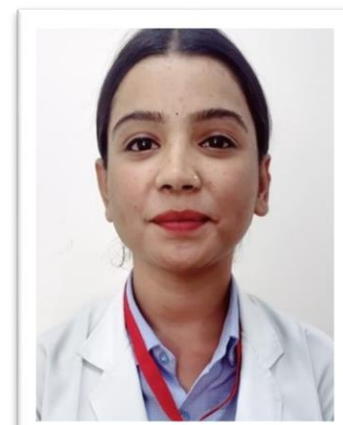
Nandini Yadav
B.Sc I Year



Vanshika Yadav
B.Sc II Year



Meenu Yadav
B.Sc III Year



Muskan Sahu
B.Sc IV Year



Management and Principal with Teaching Staff

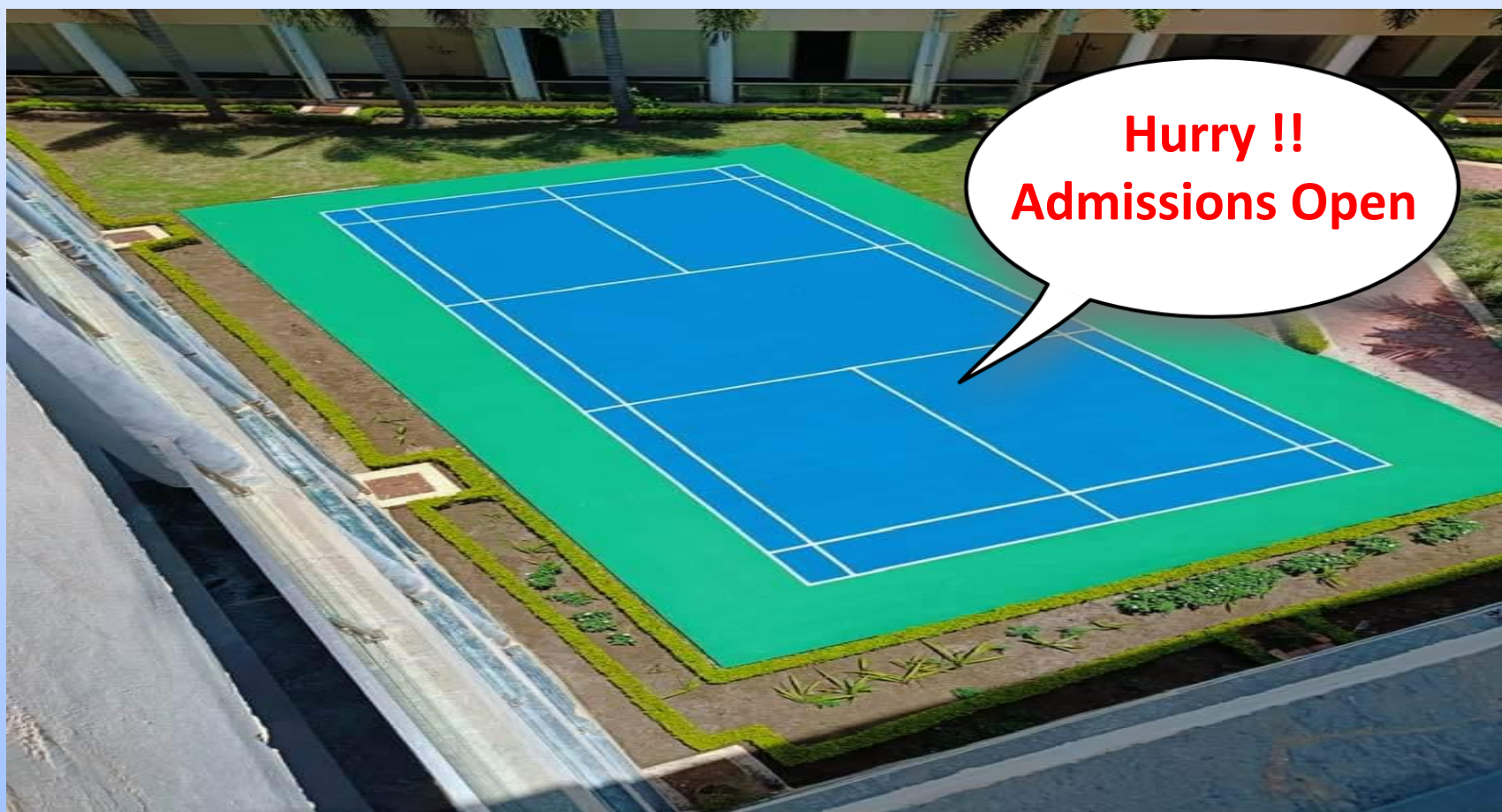


CHIRAYU COLLEGE OF NURSING, BHOPAL

A Unit of Chirayu Charitable Foundation

ADMISSIONS OPEN FOR THE ACADEMIC YEAR 2023-24

AFFILIATED TO MPMSU & APPROVED BY INC, MPNRC



**Hurry !!
Admissions Open**

COLLEGE

1. Attractive infrastructure as per INC norms
2. Well ventilated spacious & advanced classroom
3. Library & E-Library
4. Well equipped nursing labs
5. Furnished IT Lab

HOSTEL

1. Well furnished room
2. Mess facilities
3. Recreation facilities
4. 24x7 guarded with security
5. Separate boys and girls hostel

HOSPITAL

1. NABH accredited own 850 bedded hospital
2. Chirayu Cancer Hospital and Chirayu Critical Care Hospital
3. Adopted Community

CAMPUS

1. Lush green and lake view campus
2. ATM & cafeteria
3. Sports ground
4. Free transportation



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