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1- GUIDELINE UPDATE 2021 OF HEART FAILURE

Written by : EYAD ABDELLATIF

2021 ESC Clinical Practice Guidelines on cardiovascular disease prevention in clinical practice Targets for blood lipids, blood pressure, and glycemic control in diabetes are as recommended in recent ESC guidelines on dyslipidemias, hypertension or diabetes. However, a new stepwise treatment-intensification approach is advocated to achieve these targets, with consideration of CVD risk, treatment benefit of risk factors, risk modifiers, comorbidities, and patient preferences.



For the first time, the guidelines explicitly state that smoking cessation is recommended regardless of weight gain, as weight gain does not lessen the benefits of cessation. Regarding exercise, adults of all ages should strive for at least 150–300 minutes a week of moderate-intensity, or 75–150 minutes a week of vigorous-intensity, aerobic physical activity, or an equivalent combination.

New in the guidelines is a recommendation to reduce sedentary time and engage in at least light activity throughout the day to reduce all-cause.

The guidelines extend to policy interventions at the population level, with a new section that recommends putting in place measures to reduce air pollution, reducing the use of fossil fuels, and limiting carbon dioxide emissions.



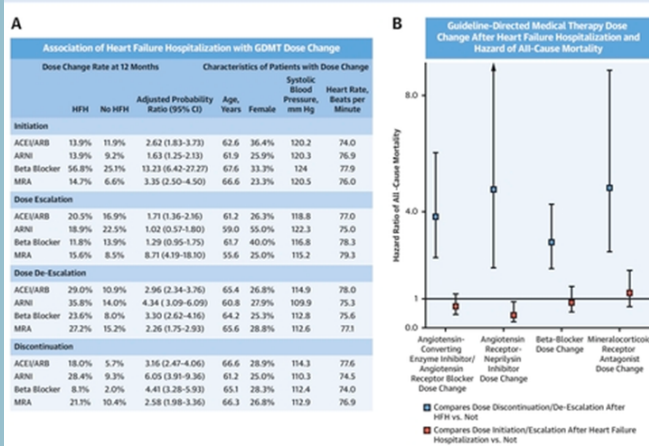
JACC

The authors sought to evaluate the association of heart failure hospitalization (HFH) with guideline-directed medical therapy (GDMT) prescribing patterns among patients with heart failure with reduced ejection fraction (HFrEF).

HFrEF positively associated with changes in GDMT, including initiation, dose escalation, discontinuation, and dose de-escalation. discontinuation of GDMT after HFH associated with increased risk of all-cause mortality. Educational endeavors are needed to ensure GDMT is not inappropriately held in the setting of HFH. For those in whom GDMT must be held/decreased, improvement tools at discharge and post-discharge titration clinics may help ensure lifesaving GDMT regimens remain optimized.



CENTRAL ILLUSTRATION: Heart Failure Hospitalization Associations With Guideline-Directed Medical Therapy Changes and Subsequent Hazards of All-Cause Mortality



Srivastava, P.K. et al. J Am Coll Cardiol HF. 2021;9(1):28-38.



2- FDA ANNOUNCEMENT 2021 FOR NEW DRUG TO HELP IDENTIFY OVARIAN CANCER.

Written by AYA ASHRAF

November 29, 2021 - FDA Approves New Imaging Drug to Help Identify Ovarian Cancer Lesions

The U.S. Food and Drug Administration confirmed Cytalux (pafolacianine), an imaging drug help surgeons in identifying ovarian cancer lesions. This drug is designed to promote the ability to set the place of additional ovarian cancerous tissue that is normally difficult to find out during surgery.

Cytalux is defined as diagnostic agent that is taken in the form of IV injection prior to surgery in adult patients with ovarian cancer thus, it used to help the surgeons identifying ovarian cancer lesions during surgery.



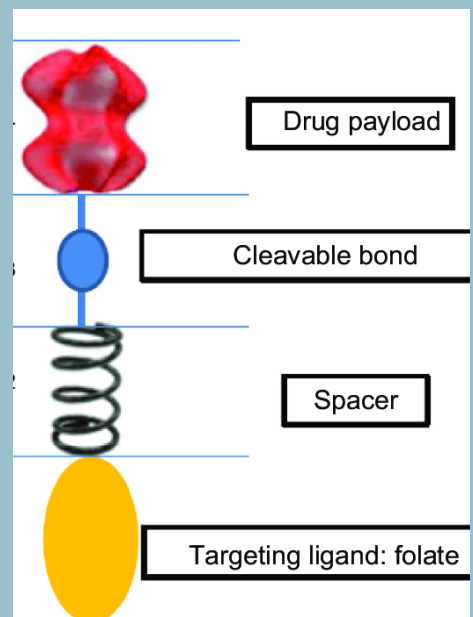
"The FDA's approval of Cytalux can help enhance the ability of surgeons to identify deadly ovarian tumors that may otherwise go undetected," said Alex Gorovets, M.D., deputy director of the Office of Specialty Medicine in the FDA's Center for Drug Evaluation and Research. "By supplementing current methods of detecting ovarian cancer during surgery, Cytalux offers health care professionals an additional imaging approach for patients with ovarian cancer"



The American Cancer Society estimates that ovarian cancer will be the deadliest disease in 2021, because of informing more than 21,000 new cases of ovarian cancer and more than 13,000 deaths. The usual treatment of ovarian cancer is to remove as many of the tumors as possible by surgery or using chemotherapy to stop the growth of malignant cells and identify specific cancer cells.



Ovarian cancer often causes the body to overproduce a specific protein in cell membranes called a folate receptor. After administration via injection, Cytalux binds to these proteins and illuminates under fluorescent light, boosting surgeons' ability to identify the cancerous tissue. Currently, surgeons rely on preoperative imaging, visual inspection of tumors under normal light or touch examination to identify cancer lesions. Cytalux is used with a Near-Infrared fluorescence imaging system cleared by the FDA for specific use with pafolacianine.



Common side effects of cytalux:

The infusion-related reactions, including nausea, vomiting, abdominal pain, flushing, dyspepsia, chest discomfort, itching and hypersensitivity.

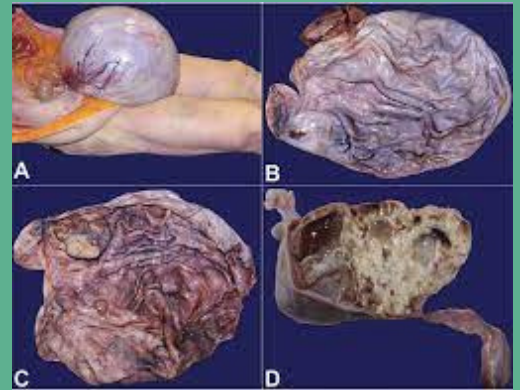
Contraindication of cytalux:

Cytalux is contraindicated for a pregnant woman because it may cause fetal harm.



The effectiveness and safety of Cytalux was evaluated in a randomized, multi-center, open-label study of women diagnosed with ovarian cancer or with high clinical suspicion of ovarian cancer who were scheduled to undergo surgery.

Of the 134 women (ages 33 to 81 years) who received a dose of Cytalux and were evaluated under both normal and fluorescent light during surgery, they found that 26.9% had at least one cancerous lesion detected that was not observed by standard visual or tactile inspection.



Patient counseling:

The use of folate, folic acid, or folate-containing supplements should be avoided within 48 hours before

There is a risk of image interpretation errors with the use of Cytalux to detect ovarian cancer during surgery, including false negatives and false positives.



The FDA previously granted Cytalux orphan-drug, priority and fast track designations.

The FDA granted the approval to On Target Laboratories LLC.

3-EGYPTIAN HEALTHCARE UPDATE 2021 FOR RHEUMATOID ARTHRITIS.

Written by ANWAR AMBARAK

Abstract:

Background:

Rheumatoid Arthritis (RA) is a systemic, autoimmune and inflammatory disorder that is associated with progressive degeneration of the joint restoration of physical activity and incapacitation

Aim: The objective of the study was to assess factors that affect the self-management of patients suffering from rheumatoid arthritis.

Design: An exploratory research description plan was used. Setting: This study was carried out at the National Medical Institute of Damanhur –affiliated to the General Organization for teaching hospitals and Institutes at the Medical clinics in the out- patient department. Study subject: A targeted sample of 100 adult patients of both genders (male and female) suffering from rheumatoid arthritis.

Tools: Patient interviewing questionnaire, Rheumatoid Arthritis Disease Activity Scale, Rheumatoid Arthritis Self-Efficacy and Rheumatoid Arthritis Self-Management practices Questionnaire.

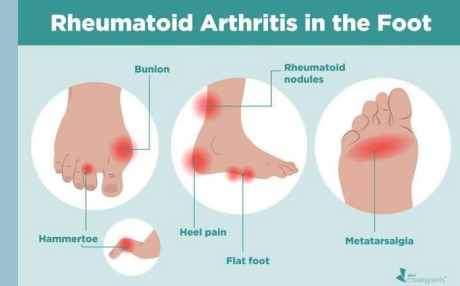
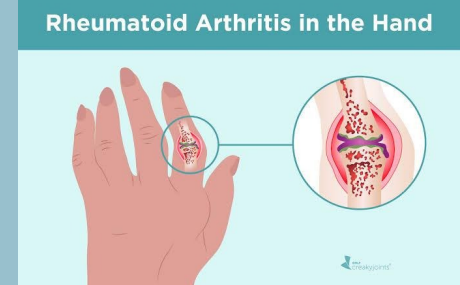
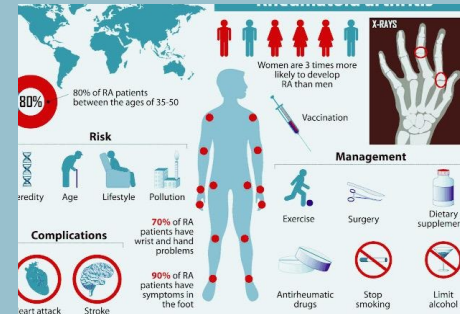
result: Approximately 58% of the patients examined had an unsatisfactory level of awareness of RA self-management. Furthermore, 32% of them had low activity related to the illness.

Conclusion: Over half of the patients studied had insufficient knowledge about rheumatoid arthritis. A third of them also had a low participation rate. In addition, over half of the patients studied had a moderate level of self efficiency and half had a moderate level of total self management. There was a very significant positive correlation between the total knowledge of the subjects studied , Although there is a very significant negative relationship between total disease activity in the patients studied and self-management.

Recommendation: The educational self-management curriculum should be an integral part of the overall management of patients with rheumatoid arthrit

Keywords:

Rheumatoid arthritis , self-management , self-efficacy ,disease activity

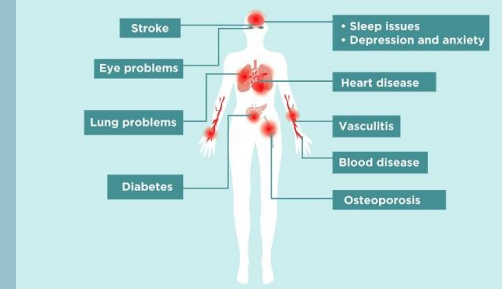


Introduction:

Rheumatoid Arthritis is considered one of the most prevalent chronic conditions in the middle aged to late adulthood and is ranked among the top 10 causes of disability as nearly 54.4 millions people in the United States of 18 years or older have been diagnosed with arthritis (Barbour, Helmick, Boring & Brady, 2017).

It affects females more often than males, and its incidence rises with age (Centres for Disease Control and Prevention, 2018).

Rheumatoid Arthritis Comorbidities

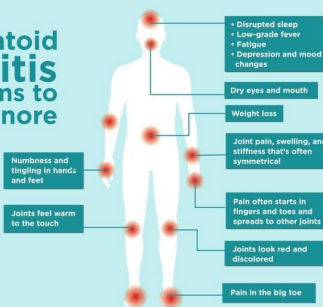


Rheumatoid arthritis (RA) :

Is a chronic auto-immune disorder of unknown etiology affecting the connective tissue in synovial joints, muscles, tendons and fibrous tissues. It is the most common form of chronic inflammatory arthritis characterized by symmetrical peripheral arthritis, which often leads to the destruction of articular cartilage, bone destruction and functional impairment. As a systemic disease, RA may result in a variety of extraarticular manifestations, including fatigue, subcutaneous nodules, lung involvement, pericarditis, peripheral neuropathy, vasculitis, and hematologic abnormalities .

RA as well involved with multiple serious and potentially life-threatening extra-articular manifestations that can also contribute to the physical disability and psychological morbidity of RA that lead to depleted the quality of life, higher direct and indirect costs, and societal burden of the disease (Giles, 2019).

Rheumatoid Arthritis symptoms to never ignore



Physical Therapy Benefits for Rheumatoid Arthritis



Rheumatoid arthritis (late stage)



Self management :



Chronic disease self-management is an intervention, program or service designed to promote healthy behaviours and routines, and result. Although SM processes differ depending on the disease, routine care routines include recognizing symptoms, medication adherence, nutrition and exercise maintenance, managing family relationships, friends and suppliers, and managing the psychological answer. SM empowers people to be responsible. in their care, dealing with day-to-day outpatient care.

Self management includes drug management as prescribed by the physician , complementary therapies (e.g. thermotherapy, exercises, massages therapy), hydrotherapy, resting, and receiving support and advice or social support from family and others.



Research question:

What are the factors affecting self-management of patients with rheumatoid arthritis?

According to the research Design and Tools :

	N	%
Gender :		
Male	25	25
Female	75	75
Age in years :		
< 30	12	12
30 - 40	16	16
40 - 50	27	27
50 - 60	45	45
\bar{x} S.D	43.75 ± 8.33	
Marital status :		
Married	67	67
Not Married	33	33
Educational level :		
Illiterate	39	43.3
Read and Write	17	18.9
Secondary education	14	15.6
High education	20	22.2
Occupation :		
Work	44	44
Not working	56	56
Residence :		
Urban	40	40
Rural	60	60

Table 1 : Frequency and percentage distribution of the studied patients according to their socio-demographic characteristics (n=100).



Total knowledge about rheumatoid arthritis & its associated self-management

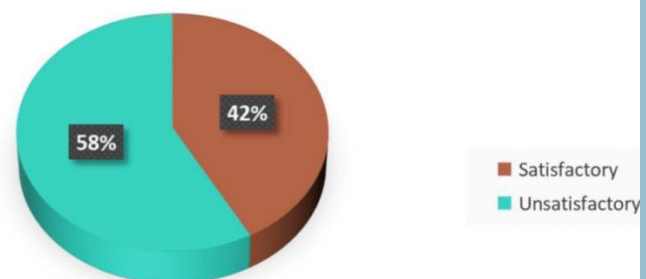


Figure 1 : Percentage distribution of the studied patients according to their total knowledge about rheumatoid arthritis and its associated self-management (n=100).

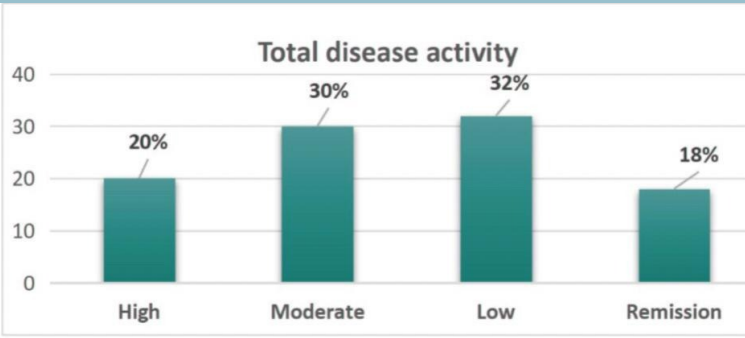


Figure 2 : Percentage distribution of the studied patients according to their total disease activity (n=100).

	Patient's knowledge	Patient's self-efficacy	Patient's disease activity	Patient's self-management
Patient's knowledge	—	r = 0.352 p = .000**	r = 0.020 P = 0.848	r = 0.334 P = 0.001**
Patient's self-efficacy	r = 0.352 p = .000**	—	r = -.390 p = .000**	r = 0.418 P = .000**
Patient's disease activity	r = 0.020 P = 0.848	r = -.390 p = .000**	—	r = -.307 P = .003**
Patient's self-management	r = 0.334 P = 0.001**	r = 0.418 P = .000**	r = -.307 P = .003**	—

(*) Statistically significant at p<0.05—(**) highly significant at p < 0.01

Table2 :Correlation between the patient's knowledge, self-efficacy, disease activity and self- management.

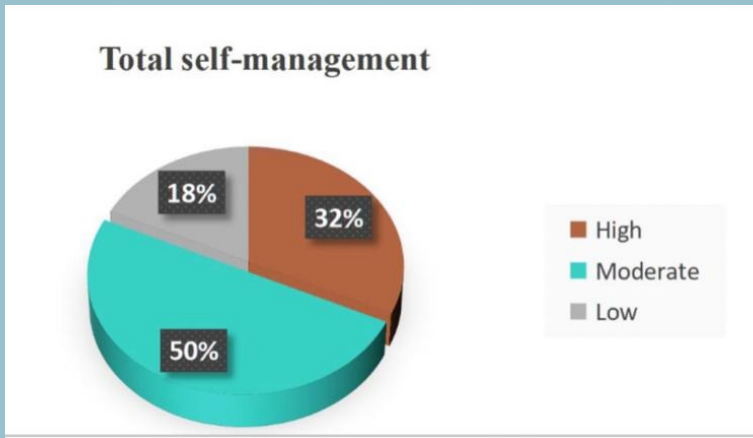


Figure 3: Percentage distribution of the studied patients according to their total self- efficacy (n=100).

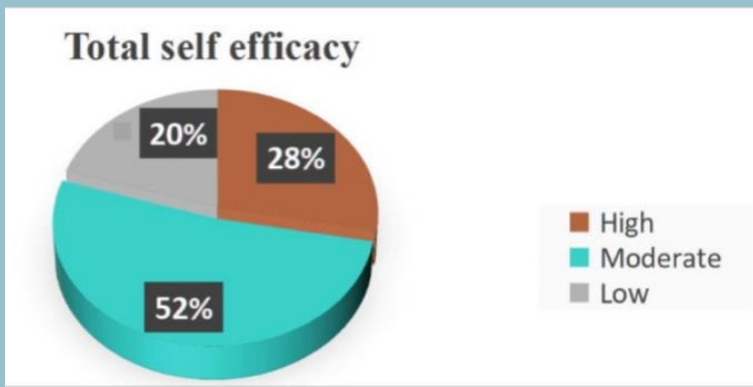



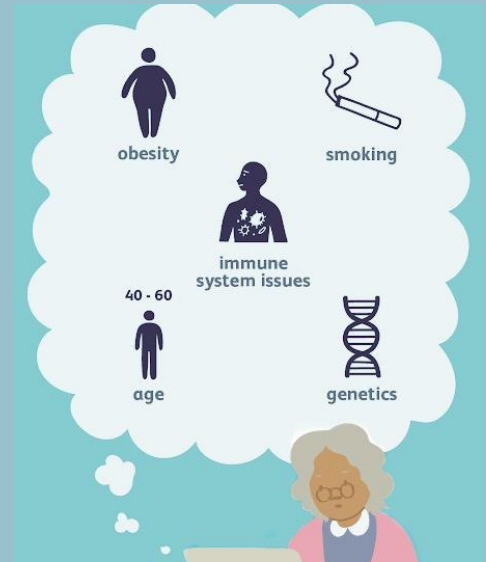
Figure 4 : Percentage distribution of the studied patients according to their total self- management (n=100).

Answer : 

More than half of the patients studied had inadequate awareness of rheumatoid arthritis and its associated self-management. In addition, 1/3 had low levels of disease activity. Furthermore, over half of the patients studied had a moderate level of self-efficacy and half had a moderate level of total self-management. This study found that there was statistically significant relation of socio-demographic characteristics (age, gender, educational level, occupation, and financial status), anxiety and stress, Patients' knowledge, disease activity, duration of disease, self-efficacy and social support with self-management of rheumatoid arthritis.



This indicates that knowledge and awareness is the best solution for self-management

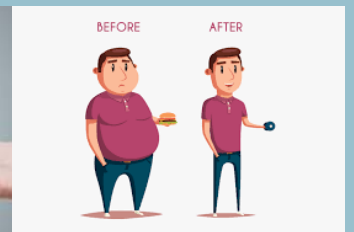


Advices for RA patients to live longer

1. exercising regularly
2. Stay away from sadness and stress
3. eating an anti-inflammatory diet
4. using equipment, such as straps, to support affected joints when necessary



5. losing weight, if overweight
6. avoiding high-intensity sports or other activities that put excessive pressure on affected joints
7. adhering to any treatments that a doctor advises, even when symptoms have not flared up
8. quitting smoking, if relevant



COMMON RA TREATMENTS

<p>NSAIDS A.k.a. non-steroidal anti-inflammatory drugs (think ibuprofen). Often need high doses.</p>	<p>DMARDs Short for disease-modifying anti-rheumatic drugs. Usually your first line of treatment.</p>
<p>BIOLOGICS Newest kids on the Rx block. Offer powerful and highly targeted treatment to slow RA progression.</p>	<p>STERIODS Helpful for calming flares. Can be injected into joints for quick relief. Best for short-term use only.</p>

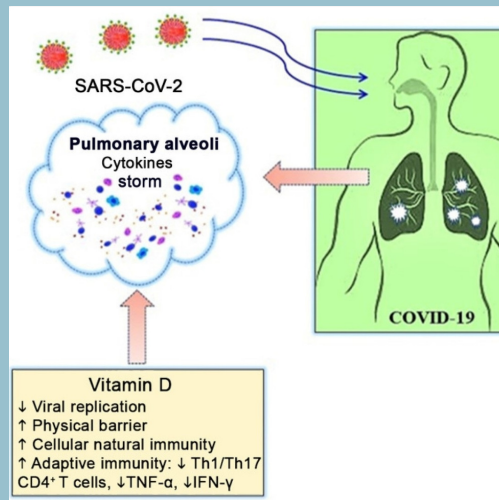
The best advice is to live your life no matter what And take care of yourself .

4- COVID -19 AND VITAMIN-D CORRELATION.

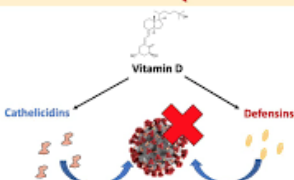
Written by DINA GAMAL

Vitamin D is well known for its involvement in bone health and calcium–phosphorus metabolism, numerous new activities of this vitamin have lately been proposed, including immune response modulation in infectious and autoimmune illnesses .

Vitamin D is made up of fat-soluble secosteroids that have a variety of immunomodulatory, anti-inflammatory, antifibrotic, and anti-oxidant properties.



Vitamin D, Immune System, & SARS-CoV-2 (COVID-19)



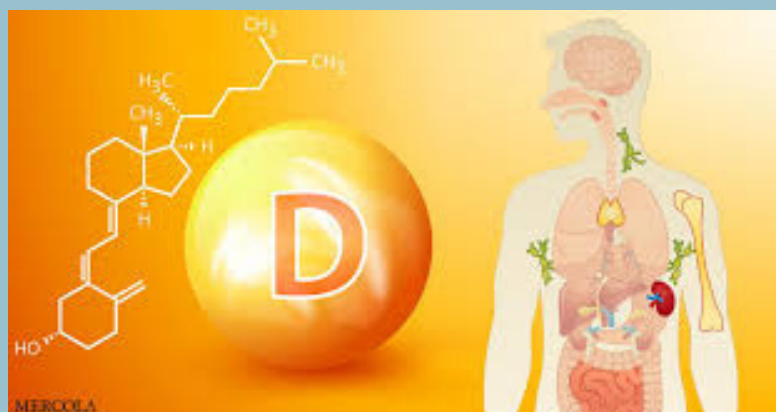
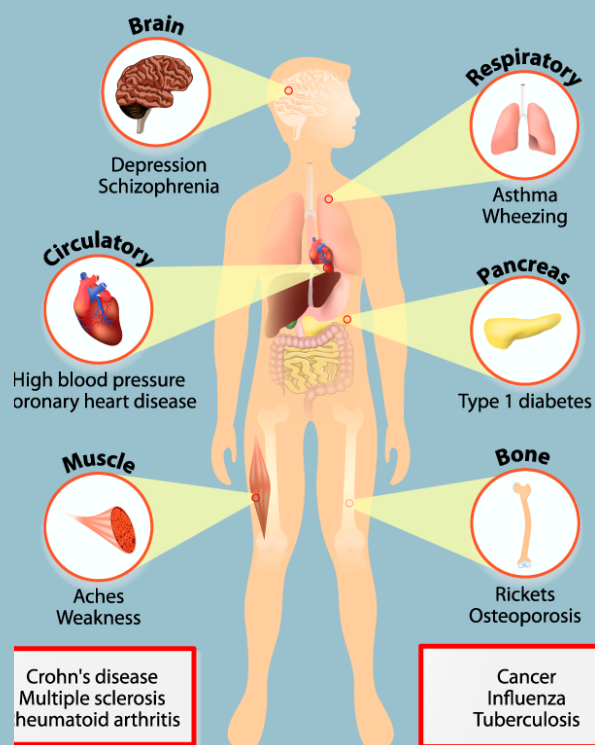
Vitamin D supports the normal function of the **immune system**

Many other functions, such as insulin production stimulation and effects on myocardial contractility, have only lately been found. Vitamin D is necessary for the immune system to function properly. The majority of immune system cells, such as macrophages, B and T lymphocytes, neutrophils, and dendritic cells, are affected by vitamin D²⁴. T and B lymphocytes can produce 1,25(OH)₂D₃, a vitamin D active metabolite that suppresses T cell growth and activation.

vitamin D also decreases pro-inflammatory cytokine synthesis while increasing anti-inflammatory cytokine production. Vitamin D suppresses the adaptive immune system while promoting the innate immune system, which helps to balance the immunological response and give an anti-inflammatory response overall.

Patients with vitamin D deficiency, on the other hand, have higher levels of chemical markers of inflammation. The current study is the first and most extensive of its kind, involving both severe and asymptomatic COVID patients, and measuring vitamin D levels as well as inflammatory markers in order to connect the two. Because COVID-19 is an emerging pandemic with a variable level of seropositivity in society, and none of the sample size formulas fits well with a satisfactory reduction in the chances of error, the authors of the current study preferred to use period-based inclusion of subjects over specifying the sample size.

VITAMIN D deficiency



Vitamin D insufficiency significantly raises the risk of severe disease following SARS Cov-2 infection. In vitamin D deficient COVID-19 individuals, the inflammatory response is also more intense.

All of this results to higher morbidity and death in COVID-19 patients who are vitamin D deficient. With the present COVID-19 pandemic in mind, the authors propose that people who are at risk for COVID-19 take vitamin D supplements.

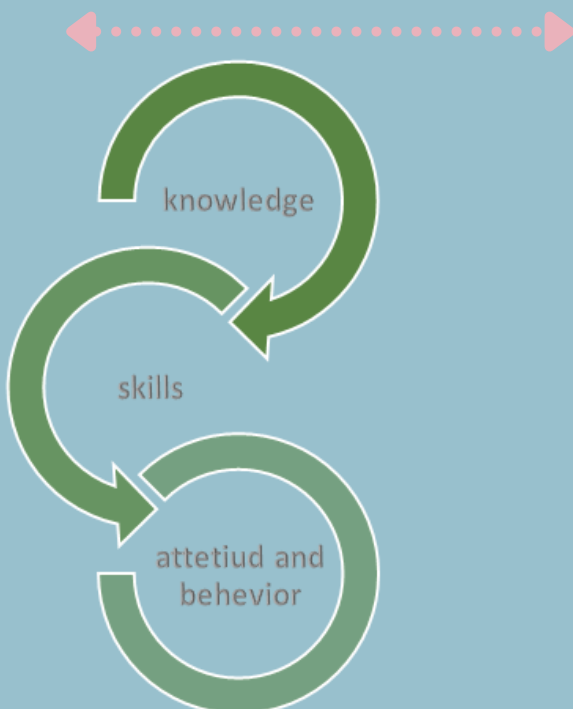
5- HOW TO BE A PROFESSIONAL PHARMACIST?

Written by HAGAR ABDELMOHSEN

Pharmacists are the most accessible healthcare provider for many people. The pharmacist nowadays has become the most important member in healthcare provision, his role not only shortened on dispensing drugs, on the contrary he can keep patient's health care in a good condition by optimizing the medication therapy with a high efficacy and minimal toxicity, and also responsible of the disease treatment plan from A to Z. However, to maintain this position in the society you have to work very hard to achieve the role of a good professional



Figure [6]



First of all, we need to know what is meant by professionalism: An individual's adherence to a set of standards that can be expressed into: “Knowledge, skills and respectful behavior”

Secondly, we need to discover the meaning of each expression above.[5]

1-Knowledge

Do not confine your knowledge on what you learnt from school to university, life is full of mysteries, you should keep learning and gaining as much knowledge as you can without stopping specially if you are in the medical field because pharmaceutical information without general knowledge can make you closed minded person which is not professional and that will not help you in your professional life.[7]

I STRONGLY BELIEVE IN THIS PHRASE

Once you stop learning start dying



Attitude

- away of thinking of every person towards something.
- a natural feel
- what you think
- thinking oriented

Behavior

- a reflex reaction of someone toward any situation or for another person
- something learned from life situations
- what you do
- action oriented

2-Attitude and behavior

As a result of this comparison we can summarize that if you have a good professional attitude, you will definitely have a good behavior to deal with different situations smoothly.[4]

3-Skills

1. Communication skills:-

This skill is a core of anybody's job especially if you are pharmacist, because you have to insure that you can communicate with your patient with a good manner so you can understand and instruct him for the medication with the right dose as well as giving a good explanation about the medicine if needed.



Figure II [6]

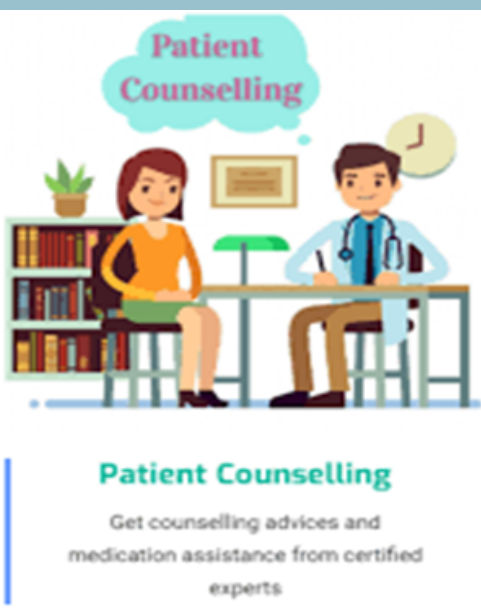


Figure III [6]

2. Good listening:-

Being a pharmacist means you will deal with all classes of society, and this requires you to listen carefully to everyone and give each patient space to explain his complaint, and that type of listing could make you the best in this field specially if you are dealing with different type of people all day every day and this will minimize the error ratio in dispensing prescriptions.



3. Accuracy:-

And this might be the most important skill in the health care field because the pharmacist should understand that if the prescription is not accurate that can lead the patient to a disease he doesn't need at all in another words it can cause a kill situation.



Figure IV [6]

4. Honesty:-

Any pharmacist should have a confidence to confront any medical staff about their mistakes in giving a wrong prescription for example the physicians or nursery might make mistakes giving a medicine that can be wrong because they did not review the whole situation and here we come as a clinical pharmacist this is our role to fix their mistakes without hesitating at all because we are talking about people's life.



Figure V[6]



Figure VI[6]

5. Mathematical skills:-

The numerical skills are critical topic for the pharmacist to calculate pharmaceutical dosing for the patients or even in pharmaceutical ingredient manufacturing.



6. Ethics:-

Ethics for patient

We should respect patient's privacy especially when living in closed community therefore we must preserve his rights in all stages of treatment because we all human.

Ethics for Work colleagues

We must respect each other, without misusing their mistakes in a way or another, maintaining a respectful friendly relationship as well as respecting their privacy.[2][3]



Figure VII[6]

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- [3] <https://www.careeraddict.com/pharmacist-skills>
- [4] Professionalism lecture, Dr.Seif Elhadidi.
- [5] A lecture in FUE, level 5, Dr. Yasser Omar.
- [6] All the figures imported from google image finder.
- [7] Self-knowledge.

