

**OPTIMAL HEALTH &  
POSTGRADUATE STUDY: A  
FOCUS ON WELLNESS, STRESS  
MANAGEMENT &  
PHARMACEUTICAL SERVICES**

**2<sup>ND</sup> NATIONAL POSTGRAD DEVELOPMENT  
IMBIZO**

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# WHAT IS STRESS?

- Many definitions, but a useful one by Professor Richard S. Lazarus (1966):

“Stress occurs when an individual perceives that the demands of an external situation are beyond his or her perceived ability to cope with them.”

## **On a biological level, when there is a stressor:**

- The Sympathetic Nervous System is activated to give the “flight, fright or fight” response:
  - Release of neurotransmitters epinephrine (adrenaline) and norepinephrine (noradrenaline)
  - Faster heartbeat
  - Dry mouth
  - Pupil dilation
  - Lungs expand
  - Blood glucose levels increase
  - Blood flow to skeletal muscle is improved
- Cortisol, the “stress hormone”, is released to help the body deal with stress. If cortisol levels are elevated for too long, this can result in “burnout”.

# PRACTICAL EXERCISE ON PAGE 3 OF CHAPTER 8 OF THE POSTGRADUATE TOOLKIT ON CD – ASSESSING YOUR QUALITY OF LIFE

<b>TIME DEMANDS</b>	
<b>SENSE OF DIRECTION</b>	
<b>CAREER</b>	
<b>PERSONAL/ PROFESSIONAL VALUES</b>	
<b>RECREATIONAL ACTIVITIES</b>	
<b>TALENTS</b>	
<b>SPIRITUALITY</b>	
<b>HEALTH</b>	
<b>RELATIONSHIPS</b>	
<b>MONEY</b>	

# SOME STRESS MANAGEMENT TIPS

## Daily quiet time

- Meditation
- Breathing exercises
- Sufficient sleep

## Regular exercise

- Cardiovascular and weight-bearing exercises
- Pilates exercises

## Eating healthily

- Low GI, low fat diet
- [www.gifoundation.com](http://www.gifoundation.com)
- [www.cookingfromtheheart.co.za](http://www.cookingfromtheheart.co.za)

# SOME STRESS MANAGEMENT TIPS CONT.

**Quality time with your loved ones**

**Seeking professional help**

- Counselling services
- Employee Wellness Programme
- Financial management specialist
- Some people rely on medication (OTC/ prescription) to manage their stress – this may relieve some of the symptoms (e.g. insomnia), but the underlying cause of the stress is not addressed. Also, such medication should not be used on a long-term basis due to the risk of side-effects, including addiction.

# IRRATIONAL DRUG USE

- Irrational drug use is a major problem.
- Can lead to drug-related problems (DRP), which can cause patient morbidity and/ or mortality
  - Ernst and Grizzle's (2001) study: the cost of DRP for ambulatory patients in the USA in 2000 was greater than \$177.4 billion
- Can occur due to errors on the part of prescribers, pharmacists, patients and others who may be involved (e.g. nurses, family members of patients)

# RATIONAL DRUG USE

- Is medication (prescription/ OTC/ complementary) appropriate for a specific patient?
- In terms of:
  - Drug-disease interactions?
  - Drug-drug interactions (with other medication, including OTC and complementary medicine)?
  - Drug-food interactions?
  - Allergies/ hypersensitivity reactions?



# RATIONAL DRUG USE

- Dosage?
- Frequency of administration?
- Dosage form?
- Duration of therapy?
- Age?
- Weight?
- Pregnant or breastfeeding? Or other special-risk population (e.g. elderly, renal failure)?
- Possible effects of excipients?

# PHARMACEUTICAL CARE

- Pharmaceutical care is “a practice for which the practitioner takes responsibility for a patient’s drug therapy needs and is held accountable for this commitment” (Cipolle, Strand & Morley, 1997 cited in van Mil, Schulz & Tromp, 2004: 303)
  - Could decrease the potential for DRP
  - Involves taking responsibility for a patient’s health outcomes
  - Not just the domain of pharmacists! Doctors and other health-care professionals can and should play an invaluable role in the provision of pharmaceutical care.

# PHARMACEUTICAL CARE

- The Good Pharmacy Practice (GPP) standards published by the South African Pharmacy Council (SAPC) outline various standards for the provision of pharmaceutical care – pharmaceutical care is not just the technical function of processing a prescription and issuing medication.
- These standards include (SAPC, 2010):
  - Ensuring that pharmacotherapy is appropriate
  - Detecting drug interactions
  - Detecting adverse effects of drugs

# PHARMACEUTICAL CARE

- Assessing whether patients are compliant with their pharmacotherapy
- Counselling patients (providing information and advice) so that medication is used correctly and safely
- Counselling patients about possible dietary modifications
- Liaising with other health-care professionals (such as doctors) when necessary

# PHARMACEUTICAL CARE

- Performing a medication review (includes assessment phase, development of a care plan and a follow-up evaluation to assess patient outcomes)
- Generic substitution (unless not permitted to do so in terms of the Medicines and Related Substances Act 101 of 1965)
- A recent study (Cassim and Dlodlu, 2012) found that one retail pharmacy, from the perspective of patients, was always compliant with only 2 out of 10 GPP standards

# SCHEDULING OF DRUGS

- In terms of the Medicines and Related Substances Act 101 of 1965, drugs in South Africa are classified into schedules (S0-S7).
  - To all intents and purposes, we would only deal with S0-S6.
  - S0-2: OTC
  - S3 and above: Need a prescription
  - Purpose of scheduling is to regulate the access that the public has to different types of drugs:
    - For patient safety

# SCHEDULING OF DRUGS

- For different schedules, various rules in terms of how they should be stored in pharmacies
- Examples:
  - S2: Decongestant combinations, cough syrups
  - S3: Antihypertensive medication, oral contraceptives
  - S4: Antibiotics, antiretrovirals
  - S5: Sedative-hypnotics, antipsychotic medication, certain pain-killers
  - S6: Strong opioids (e.g. morphine)

# SOME GENERAL ADVICE

- Always use medication exactly as it has been prescribed
  - Timing is NB
  - If you are not sure, ask your doctor or pharmacist
- Potential for dependence and abuse with certain drugs (e.g. S2 codeine-containing formulations)
- Before taking any new medication (including OTC and complementary/ traditional medicines), always ask your doctor or pharmacist first



# SOME GENERAL ADVICE

- Be compliant with your pharmacotherapy – e.g. antibiotics, chronic medication
- **Non-pharmacological approaches to treatment are also very NB (e.g. dietary modifications, exercise, physiotherapy)**

# REFERENCES

- Cassim, L. and Dlodlu, D. 2012. 'Impact of a performance management system in a South African retail pharmacy on the provision of pharmaceutical care to patients', *South African Pharmaceutical Journal*, 79(4): 51-58.
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- SAPC. 2010. *Good pharmacy practice in South Africa*. 4<sup>th</sup> ed. Arcadia: SAPC.
- van Mil, J. W. F., Schulz, M. & Tromp, Th. F. J. 2004. 'Pharmaceutical care, European developments in concepts, implementation, teaching, and research: a review', *Pharmacy World & Science*, 26(6): 303-311.

**THANK YOU VERY MUCH FOR YOUR TIME!**

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