

Safe, Effective and Efficient Use of Medicines: Getting the message across

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Safe, Effective and Efficient Use of Medicines?

Rational use of medicines requires that "patients receive *medications that are appropriate* to their clinical needs, in doses that meet their own *individual requirements*, for an adequate period of time, and *at the lowest cost* to them and their community"

www.who.int/medicines/areas/rational_use/en/



How to achieve this?



Concept of *Responsible Use* of Medicines

Term implies that the activities, capabilities and existing resources of *health system stakeholders* are aligned to ensure patients receive the right medicines at the right time, use them appropriately, and benefit from them.

[concept involves stakeholder responsibility]



“Benefits of responsible use of medicines”

(part of the International Pharmaceutical Federation [FIP] World Centennial Congress of Pharmacy and Pharmaceutical Sciences, October 2012, the Netherlands)



Seven Strategic Recommendations...

1. National List of essential medicines
2. National medicines procurement and supply systems
3. Accurate diagnosis to guide prescription and avoid overuse / underuse / misuse of medicines
4. Use of EBM treatment guidelines and directly target all key stakeholders.....
5. Initiatives to maximise adherence to treatment
6. Monitor medicine use to evaluate real-world efficacy
7. Ensure commitment of national authorities and engagement of prescribers, dispensers and patients to the principles and policies of responsible use of medicines



Tools to achieve these strategic goals?

- Clear message
- Credible message (i.e. scientifically based)
- Means of getting message to the target audience(s)
 - Healthcare professionals (HCPs)
 - Consumers / patients / all other health system personnel



National Medicines Information Centre

Established in 1994 by the Minister for Health

Remit to:

To promote the *safe, effective and economic* use of medicinal products in patients by the *proactive* and *reactive* provision of accurate drug information and advice to all members of the healthcare profession.

[In 1990s the National Therapeutics Advisory Committee identified a need for the provision of unbiased drug information]



National Medicines Information Centre

“It is expected that the Centre will be giving particular attention to the needs of health professionals working in the community where the major proportion of medicines are prescribed and dispensed”.

Mr. Brendan Howlin TD, former Minister for Health, September 1994



Getting the Message Across



NMIC Bulletin

- Aim to provide a systematic review of a specific disease + its treatment or therapeutic area
- Specific emphasis on topics of relevance to primary care
 - up-to-date information, scientifically rigorous, externally reviewed – balanced viewpoint of NMIC very important
 - Key messages highlighted
 - costs included where relevant
 - 4-page bulletin format with tables and graphs



Types of Message?

Topics derived from

- Periodic updates of common diseases
- Frequently received questions via the query answering service
- Evolving safety issues
- Recently issued guidance
 - National / international level
- Issues / topics raised at scientific meetings



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NON STEROIDAL ANTI - INFLAMMATORY DRUGS

SUMMARY

-  Ibuprofen is the safest NSAID (1, 2, 3)
-  Naproxen or Diclofenac are useful alternatives.
-  Indomethacin is more potent but has more GI toxicity.

Doctors should familiarise themselves with three or four of the NSAID's. The choice may be determined by recommendations from local practice formularies.

INTRODUCTION

In Ireland almost 10% of GMS prescriptions are for anti-inflammatory and anti-rheumatic products and there are over 90 different preparations from which to choose (1, 3). The different preparations vary in their pharmacological and toxic effects. There is also a wide variation in costs of treatment. Up to one in every 6 elderly patients is prescribed at least one of these agents (4) and elderly women are particularly susceptible to adverse effects. Serious GI problems may be avoided by excluding at risk patients, or using paracetamol where anti-inflammatory effect is not required e.g. Osteoarthritis. Prolonged use of paracetamol and non-steroidal anti-inflammatory drugs is associated with renal disease.

CLINICAL CONSIDERATIONS

- Patient response to different NSAID's can show marked variation. No one drug will suit all patients.
- Only one drug should be prescribed at a time. Most NSAID's produce their maximum effect within 2 weeks. If treatment is ineffective after this period another agent should be tried.
- NSAID's can be used on a PRN basis for intermittent symptoms but regular dosing is required for full anti-inflammatory effect.

WHEN TO PRESCRIBE

NSAID's are indicated for the treatment of a wide range of conditions associated with pain/inflammation including rheumatoid arthritis, ankylosing spondylitis, osteoarthritis, sero-negative arthropathies, peri-articular disorders and soft tissue injuries (5).




However as osteoarthritis has only a minor inflammatory component the use of simple analgesics e.g. paracetamol may be more appropriate (6) and thereby avoid adverse effects.

NSAID's are contraindicated in patients with active peptic ulcer and hypersensitivity reactions to aspirin/NSAID's. Treatment of gout may require more potent NSAID's which are associated with increased adverse effects.

ANY IMPORTANT DRUG INTERACTIONS?

Non Steroidal Anti-Inflammatory Drug can:-



-  Reduce the anti-hypertensive effect of ACE Inhibitors, Beta Blockers, Diuretics.
-  Reduce the excretion of Lithium.
-  The ulcerogenic effect of NSAID's may put patients taking Warfarin at increased risk of GI bleed (7).





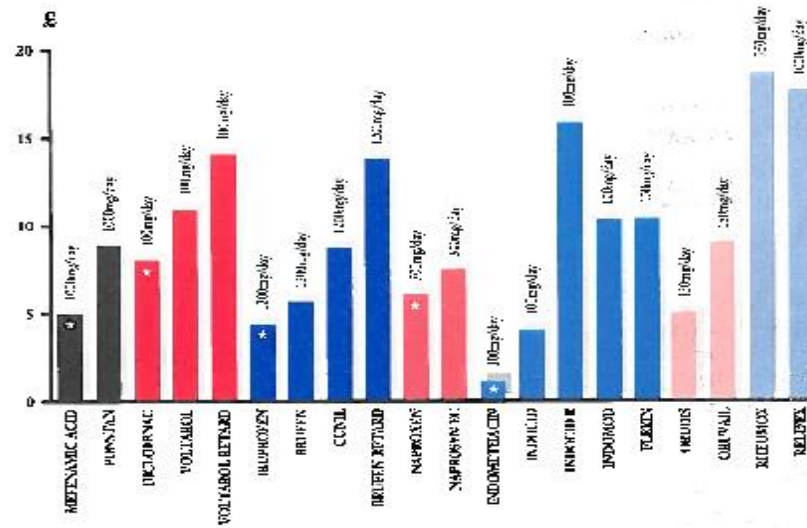
COST CONSIDERATION

- Newer NSAID's tend to be more expensive than the older products.
- Slow release preparations are also more expensive.
- Combined preparations of Misoprostol/NSAID are available and considerably cheaper than prescribing Misoprostol and NSAID individually (5).
- Almost £10 million was spent by the GMS on these medicines in 1993.

COST OF 28 DAYS TREATMENT

Drugs costs are based on data from GMS 1994

★ - Generic



REFERENCES

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11. Drug therapy 1994 July; 25 - 33
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Every effort has been made to ensure that this information is current and fully up-to-date.

Costs and availability of medicines may change from time to time. Prescribers are recommended to check local pricing data sheets for a specific indication or drug use.



Distribution

- Costly to distribute to doctors and pharmacists
[national centre with finite budget]
- Needed to find a carrier who could share / take over the costs
 - Sent with GMS payments board mail to GPs and pharmacists
- NMIC also circulates the bulletin via an email list (for all HCPs)
 - useful for electronic storage, for future reference
 - enables wider distribution at no additional cost

please sign up if you would like to be on our emailing list



Future developments?

- Currently working to develop CME facility for bulletins on NMIC website
- Increasing email distribution list, especially for those HCPs who are not in receipt of paper copies



Any other ways of getting the message across?

Not all messages require bulletin format

Not all messages can wait for inclusion in bulletin

Some messages (e.g. safety issues) may evolve over time



Therapeutics Today Newsletter

Established in 2001 to deal (in a more informal structure) with such issues / prescribing dilemmas.

Monthly distribution

Deals with “hot topics in prescribing” including

- Updated prescribing information
- Safety notices (IMB/EMA)
- Recent articles (media attention)
- Pharmacoeconomic analyses
- Stock shortages



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Therapeutics Today

We would like to introduce you to the first issue of "Therapeutics Today" produced jointly by the National Medicines Information Centre and the Trinity College Department of Therapeutics at St. James's Hospital, Dublin. The Newsletter will focus on delivering objective, unbiased drug information advice, which we believe, will be of benefit to prescribers. Currently bulletins from the National Medicines Information Centre review individual drugs, drug groups or a condition in detail. Clearly it is not possible to cover all commonly used medicines and changes in therapy. To complement these comprehensive bulletins we believe there is a need to draw prescribers' attention to recent developments in therapeutics.

Through our editorial team and specialist advisors around the country we would hope to identify emerging trends in therapeutics. We will also draw readers' attention to new drugs, new indications for current therapy and new therapeutic guidelines. We will also highlight some new contraindications or serious adverse effects that are emerging. By its nature we will not be able to provide comprehensive reviews but we will supply references on request.

We hope you will find this service of use. The Medicines Information Centre is available to provide more information on any of these topics. We would also welcome your comments, both favourable and unfavourable. Have a look at our first offering and tell us what you think.

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Editorial Team

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Query Answering Service

Service operated by specially trained medicines information pharmacists

Accepts queries from all HCPs

Phone, email [fax, letter]

Operates within office hours Mon – Fri with voicemail out-of-hours

Provides evidence-based responses to specific queries – provides the HCP with information to address a specific practice issue

Queries feed into the Centre's publications



Meeting / Training Sessions








- NMIC has increased its “formal” educational activities in recent years
- Undergraduate medical and pharmacy students
- Postgraduate training sessions for
 - GP and RCPI trainees
 - MSc. pharmacy and pharmaceutical medicine students

[important to get the message out there but also helps NMIC learn about the hot topics and ensures that the publications are relevant for the HCP audience]



Seven Strategic Recommendations...

(to promote responsible use of medicines)

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Food for thought

In relation to safe, effective and efficient use of medicines, the same message should be shared by *all stakeholders* in the health service

Major way of getting message across is by *ongoing interaction* with the target audience

It makes sense for all to work together to get the message out there!



Finally

Old African proverb.....

“If you want to go fast, go alone; if you want to go far, go together”

NMIC welcomes interaction with HCPs in order to get the rational prescribing message out there!



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Questions?

