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Editorial

Beginning of a New Era in Pharmacy Profession
Anantha Nagappa Naik

Review Article

**Good Pharmacy Practices (GPP) & Accreditation of Pharmacies:
Way to Professionalize Retail Pharmacy**
Manjiri S Gharat

Research Articles

**Perception Analysis of Antipsychotic Drugs Among Psychiatrists
in Tertiary Care Hospitals from South India**
Abhishek kumar

**Analysing Anti-Cancer Drugs Utilization Pattern In A Tertiary
Care Hospital In South India**
Shilpa Dua, Shipra Jain, Jyoti Choudhari and Divya Saxena

Short Communications

Medication errors: can we minimize it?
Manthan D Janodia, Sreedhar D and Virendra S Ligade

News and Events

**Training Course on Patient Counseling for Community Pharma-
cists**
Sampada Patvardhan

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Table of Contents

Editorial

Beginning of a New Era in Pharmacy Profession.

Ananth Nagappa Naik

Reviews

Good Pharmacy Practices (GPP) & Accreditation of Pharmacies: Way to Professionalize Retail Pharmacy.

Manjiri S Gharat

Research articles

Perception Analysis of Antipsychotic Drugs among Psychiatrists in Tertiary Care Hospitals from South India.

Abhishek Kumar

Analysing Anticancer Drugs Utilization Pattern in a Tertiary Care Hospital in South India.

Shilpa Dua, Shipra Jain, Jyoti Choudhari, Divya Saxena

Short communications

Medication Errors: Can we minimize it?

Manthan D Janodia, Sreedhar D, Virendra S Ligade

News

Training Course on Patient Counseling for Community Pharmacists

Sampada Patvardhan

From Editor's Desk

New era is witnessing the growth and fusion of Info-Pharma-Biotechnologies. Marching with this new era, roles and responsibilities of today's pharmacists are changing. The concept of community pharmacists is as old as our civilization when special care of patient was taken by the family members and physician or assistant of physician. Today role of pharmacists is not confined to the preparing and dispensing medication. Today's pharmacist is actively involved in educating, caring and counseling patients not only about the medication but also diseases, work pattern, food habits, life style and future risk factors related with their health; in true sense pharmacist has become patient's friend, philosopher and guide.

Association of Community Pharmacists of India and Manipal University has realized changing role and importance of community pharmacists in the development of community's health. They have inspired, motivated and supported us to launch this journal in order to provide common platform for community pharmacists around the globe.

Providing a discussion forum, collecting, sharing different views, linking the network and strengthening the concept of community pharmacy are main objectives of this journal. We expect support from all of our fellow pharmacists to contribute and build up our own mark in the healthcare of society.

On behalf of International Journal of Community Pharmacy, I extend our thanks to Dr. Ramdas M Pai, Chancellor, Dr. H. S. Ballal, Pro-Chancellor, Dr. Rajasekharan P Warriar, Vice Chancellor, Dr. Vinod Bhat, Registrar, International Admissions of Manipal University and Dr. Anantha Nagappa Naik, President ACPI, for their constant encouragement and support in this endeavour.

Prof. N. Udupa

Editor In Chief

Message from Editorial Board

The genesis of community pharmacy is traced back to 19th century. Although the profession of pharmacy has existed for centuries, until the 19th century there was no clear-cut institutional separation between medical and pharmaceutical role. With the advancement of medical science there was a constant need of a separate division to take care of drug related activities. The concept of pharmaceutical science was evolved to fulfill this need.

Role of pharmacist was not defined clearly and pharmacist was involved in different activities including dispensing of medication, sanitary officer, operator in operation theatres, compounder in hospital and clinics, selling medicines.

Today the professional role of pharmacist is changing from traditional roles and duties. His traditional roles are coupled with new roles like assisting the public to get best possible information about medications, diseases, life style changes to avoid future risk factors, advising about food habits, monitoring and counseling patient. These are new roles of community pharmacists to be played for the betterment of community's health.

Community pharmacist's roles are not only confined to advising and counseling patients but also discussing and advising physician about rational use of drug. In the endeavour to develop the concept of community pharmacy, we have started this journal to link the networking of all community pharmacists around the globe and sharing their ideas, experience, and views to strengthen the concept of community pharmacy.

This is the beginning of new era in the profession of pharmacy, we hope this will create our own mark and widen the horizons of pharmacy profession in near future to serve the community in true sense.

Anantha Nagappa Naik

President, ACPI

Instructions to Authors

Authors are encouraged to submit their manuscript to the Editor by electronic mail (ijcp.acpi@manipal.edu). If, an author cannot submit electronically, then two hard copies of manuscript and electronic version of the manuscript on disk should be submitted to the Editor. Accepted papers will be processed further, if the papers are rejected, the decision will be communicated to the corresponding author but the manuscripts will not be returned.

Preparing a manuscript:

Authors should keep their manuscripts as short as they reasonably can. Manuscripts should be typed double spaced on one side of good quality A4 size paper. Page number should appear in the upper right hand corner of each page, beginning with the title page. The language of manuscript must be simple and explicit.

Author's/Co-author's name or any other identification should not appear anywhere in the body of the manuscript to facilitate blind review.

Articles were accepted under following headings:

- a. Letter to Editor.
- b. Original Research Articles.
- c. Short communications.
- d. Perspectives (Innovative teaching methods, Innovative practice approach, Novel pharmaceutical care models, Debates and View points)
- e. Invited articles.
- f. Case reports.
- g. Drug Reviews.
- h. Events.

Original research articles:

It should be arranged into the following sections:

- 1) Title page
- 2) Abstract and Key words
- 3) Introduction
- 4) Materials and Methods
- 5) Results
- 6) Discussion
- 7) Acknowledgement
- 8) References
- 9) Tables
- 10) Figures.

The total number of words should not exceed 3200.

Title page

It should be paginated as page 1 of the paper. It should carry the title, authors' names and their affiliations, running title, address for correspondence including e-mail address.

Title:

Must be informative, specific and short and not exceed 100 characters.

Authors and affiliations:

The names of authors and their appropriate addresses should be given.

It should be made clear which address relates to which author.

Running title:

It is a short title printed in the journal at the right top corner of right hand page of the article (except the lead page). A short running title of not more than 50 characters should be given.

Address for correspondence:

The corresponding author's address should be given in the title page. The fax number (if available) may be mentioned. The e-mail ID of the corresponding author or the contact e-mail ID must also be provided.

Abstract and key words**Abstract:**

It must start on a new page carrying the following information: (a) Title (without authors' names or affiliations), (b) Abstract, (c) Key words, (d) Running title. It should not exceed 200 words excluding the title and the key words. The abstract must be concise, clear and informative rather than indicative. New and important aspects must be emphasized. The abstract must be in a structured form consisting of OBJECTIVES, METHODS, RESULTS and CONCLUSIONS briefly explaining what was intended, done, observed and concluded. Authors should state the main conclusions clearly and not in vague statements. The conclusions and recommendations not found in the text of the article should not be given in the abstract.

Key words:

Provide 3-5 keywords which will help readers or indexing agencies in cross-indexing the study. The words found in title need not be given as key words.

Introduction

It should start on a new page. Essentially this section must introduce the subject and briefly say how the idea for research originated. Give a concise background of the study. Do not review literature extensively but provide the most recent work that has a direct bearing on the subject. Justification for research aims and objectives must be clearly mentioned without any ambiguity. The purpose of the study should be stated at the end. It should not exceed 500 words.

Material and methods

This section should deal with the materials used and the methodology - how the work was carried out. The procedure adopted should be described in sufficient detail to allow the study to be interpreted and repeated by the readers, if necessary. The number of subjects, the number of groups studied, the study design, sources of drugs with dosage regimen or instruments used, statistical methods and ethical aspects must be mentioned under the section. The methodology - the data collection procedure - must be described in sufficient detail. If a procedure is a commonly used one, giving a reference (previously published) would suffice. If a method is not well known (though previously published) it is better to describe it briefly. Give explicit descriptions of modifications or new methods so that the readers can judge their accuracy, reproducibility and reliability.

The nomenclature, the source of material and equipment used, with details of the manufacturers in parentheses, should be clearly mentioned. Drugs and chemicals should be precisely identified using their non-proprietary names or generic names. If necessary, the proprietary or commercial name may be inserted once in parentheses. The first letter of the drug name should be small for generic name (e.g., dipyridamole, propranolol) but capitalized for proprietary names (e.g., Persantin, Inderal). The routes of administration may be abbreviated, e.g., intraarterial (i.a.), intracerebroventricular (i.c.v.), intra-gastric lavage (i.g.), intramuscular (i.m.), intraperitoneal (i.p.), intravenous (i.v.), per os (p.o.), subcutaneous (s.c.), transdermal (t.d.).

Statistical Methods:

The details of statistical tests used and the level of significance should be stated. If more than one test is used it is important to indicate which groups and parameters have been subjected to which test.

Results

The results should be stated concisely without comments. It should be presented in logical sequence in the text with appropriate reference to tables and/or figures. The data given in tables or figures should not be repeated in the text. The same data should not be presented in

both tabular and graphic forms. Simple data may be given in the text itself instead of figures or tables. Avoid discussions and conclusions in the results section.

Discussion

This section should deal with the interpretation, rather than recapitulation of results. It is important to discuss the new and significant observations in the light of previous work. Discuss also the weaknesses or pitfalls in the study. New hypotheses or recommendations can be put forth.

Avoid unqualified statements and conclusions not completely supported by the data. Repetition of information given under Introduction and Results should be avoided. Conclusions must be drawn considering the strengths and weaknesses of the study. They must be conveyed in the last paragraph under Discussion. Make sure conclusions drawn should tally with the objectives stated under Introduction.

Acknowledgements

It should be typed in a new page. Acknowledge only persons who have contributed to the scientific content or provided technical support. Sources of financial support should be mentioned.

References

It should begin on a new page. The number of references should normally be restricted to a maximum of 25 for a full paper. Avoid citing abstracts as references.

Papers which have been submitted and accepted but not yet published may be included in the list of references with the name of the journal and indicated as "In press". A photocopy of the acceptance letter should be submitted with the manuscript. Information from manuscript "submitted" but "not yet accepted" should not be included.

Avoid using abstracts as references. The "unpublished observations" and "personal communications" may not be used as references but may be inserted (in parentheses) in the text.

References are to be cited in the text by superscribed number and should be in the order in which they appear. References cited only in tables or in legends to figures should be numbered in accordance with a sequence established by the first identification in the text of the particular table or illustration.

The references must be verified by the author(s) against the original documents. The list of references should be typed double spaced following the Vancouver style.

Examples are given in Annexure II.

Tables

Each table must be self-explanatory and presented in such a way that they are easily understandable without referring to the text. It should be typed with double spacing and numbered consecutively with Arabic numerals. Provide a short descriptive caption above each table with foot notes and/or explanations underneath. The number of observations, subjects and the units of numerical figures must be given. It is also important to mention whether the given values are mean, median, mean \pm SD or mean \pm SEM. All significant results must be indicated using asterisks. Appropriate positions for the tables within the text may be indicated.

Check list for table

- Serially numbered?
- Short self explanatory caption given?
- Columns have headings?
- Units of data given?
- 'n' mentioned?
- Mean \pm SD or Mean \pm SEM given?
- Statistical significance of groups indicated by asterisks or other markers?
- P values given?
- Rows and columns properly aligned?
- Appropriate position in the text indicated?

Figures

Each figure must be numbered and a short descriptive caption must be provided. All significant results should be indicated using asterisks. For graphs and flow charts, it is not necessary to submit the photographs. A manually prepared or computer drawn figure (with good contrast) on a good quality paper is acceptable.

Identify each figure/diagrams on the back with a typed label which shows the number of the figure, the name of the leading author, the title of the manuscript and the top side of the figure. The approximate position of each figure should be marked on the margin of the text.

Legends for figures should be typed under the figure if possible or on a separate sheet. Large/complex tables or figures may be submitted in "Final Print (camera ready) format" which will be scanned and printed as such.

Check list for figure

- Serially numbered? Self explanatory caption given?
- X and Y axes graduated?
- X and Y axes titled (legend)?
- Units mentioned (if necessary)?
- Different symbols/markers for different groups given?
- SD or SEM represented (graphically)?
- Statistical significance indicated?
- Approximate position in the text marked?

Short communications:

The manuscript should not be divided into sub-sections. It may have up to 1200 words (including a maximum of 5 references) and one figure or one table.

Letter to the Editor:

A letter can have a maximum of 800 words (including a maximum of 4 references) with one simple figure or table. The manuscript should not have sub-sections.

Review articles:

These should contain title page, summary (need not be structured) and key words. The text proper should be written under appropriate sub-headings. The authors are encouraged to use flowcharts, boxes, cartoons, simple tables and figures for better presentation. The total number of text words should not exceed 5000 and the total number of figures and tables should not be more than 10.

Methods

The format and other requirements are same as that of short communication.

Manuscript submission: Checklist

- Cover letter
- Copyright statement signed by all authors
- Three copies of manuscript with photocopies of illustrations attached to each.
- Title page

- Title of manuscript
- Full name(s) and affiliations of author(s); institution(s) and city(ies) from which the work originated.
- Name, address, telephone and fax numbers and e-mail address of corresponding author
- Running title
- Number of pages, number of figures and number of tables.

- Abstract - in structured form along with title, key words and running title.
- Article proper (double spaced)
- Acknowledgements (separate sheet)
- References
- Tables
- Figures/photographs and legends
- Permissions to reproduce published material

ANNEXURE I

EDITOR IN CHIEF

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- Authors should be ready to take public responsibility for the content of the paper.
- All the authors in a manuscript are responsible for the technical information communicated. For this reason it is necessary that all authors must read and approve the final version of the manuscript before signing the consent and declaration form.

* Conflicts of interests if any, the details must be declared in a separate sheet.

ANNEXURE II

EXAMPLES OF REFERENCES - VANCOUVER STYLE

From Uniform Requirements for Manuscripts,

www.icmje.org

Articles in journals

1. Standard journal article

List the first six authors followed by et al. (Note: NLM now lists up through 25 authors; if there are more than 25 authors, NLM lists the first 24, then the last author, then et al.)
Vega KJ, Pina I, Krevsky B. Heart transplantation is associated with an increased risk for pancreatobiliary disease. *Ann Intern Med* 1996 Jun 1;124(11):980-3.

As an option, if a journal carries continuous pagination throughout a volume (as many medical journals do) the month and issue number may be omitted. (Note: For consistency, the option is used throughout the examples in Uniform Requirements. NLM does not use the option.)

Vega KJ, Pina I, Krevsky B. Heart transplantation is associated with an increased risk for pancreatobiliary disease. *Ann Intern Med* 1996;124: 980-3.

More than six authors:

Parkin DM, Clayton D, Black RJ, Masuyer E, Friedl HP, Ivanov E, et al. Childhood leukaemia in Europe after Chernobyl: 5 year follow-up. *Br J Cancer* 1996;73:1006-12.

2. Organization as author

The Cardiac Society of Australia and New Zealand. Clinical exercise stress testing. Safety and performance guidelines. *Med J Aust* 1996; 164: 282-4.

3. No author given

Cancer in South Africa [editorial]. *S Afr Med J* 1994;84:15.

4. Article not in english

(Note: NLM translates the title to English, encloses the translation in square brackets, and adds an abbreviated language designator.) Ryder TE, Haukeland EA, Solhaug JH. Bilateral infrapatellar seneruptur hostidligere frisk kvinne. Tidsskr Nor Laegeforen 1996;116:41-2.

5. Volume with supplement

Shen HM, Zhang QF. Risk assess-ment of nickel carcinogenicity and occupational lung cancer. Environ Health Perspect 1994;102 Suppl 1:275-82.

6. Issue with supplement

Payne DK, Sullivan MD, Massie MJ. Women's psychological reactions to breast cancer. Semin Oncol 1996; 23(1 Suppl 2):89-97.

7. Volume with part

Ozben T, Nacitarhan S, Tuncer N. Plasma and urine sialic acid in non-insulin dependent diabetes mellitus. Ann Clin Biochem 1995;32(Pt 3):303-6.

8. Issue with part

Poole GH, Mills SM. One hundred consecutive cases of flap lacerations of the leg in ageing patients. N Z Med J 1994;107(986 Pt 1):377-8.

9. Issue with no volume

Turan I, Wredmark T, Fellander-Tsai L. Arthroscopic ankle arthrodesis in rheumatoid arthritis. Clin Orthop 1995;(320):110-4.

10. No issue or volume

Browell DA, Lennard TW. Immuno-logic status of the cancer patient and the effects of blood transfusion on antitumor responses. Curr Opin Gen Surg 1993:325-33.

11. Pagination in roman numerals

Fisher GA, Sikic BI. Drug resistance in clinical oncology and hematology. Introduction. *Hematol Oncol Clin North Am* 1995 Apr;9(2):xi-xii.

12. Type of article indicated as needed

Enzensberger W, Fischer PA. Metronome in Parkinson's disease [letter]. *Lancet* 1996;347:1337. Clement J, De Bock R. Hematological complications of hantavirus nephropathy (HVN) [abstract]. *Kidney Int* 1992;42:1285.

13. Article containing retraction

Garey CE, Schwarzman AL, Rise ML, Seyfried TN. Ceruloplasmin gene defect associated with epilepsy in EL mice [retraction of Garey CE, Schwarzman AL, Rise ML, Seyfried TN. In: *Nat Genet* 1994;6:426-31]. *Nat Genet* 1995;11:104.

14. Article retracted

Liou GI, Wang M, Matragoon S. Precocious IRBP gene expression during mouse development [retracted in *Invest Ophthalmol Vis Sci* 1994; 35:3127]. *Invest Ophthalmol Vis Sci* 1994;35:1083-8.

15. Article with published erratum

Hamlin JA, Kahn AM. Herniography in symptomatic patients following inguinal hernia repair [published erratum appears in *West J Med* 1995;162:278]. *West J Med* 1995;162: 28-31. Books and Other Monographs (Note: Previous Vancouver style incorrectly had a comma rather than a semicolon between the publisher and the date.)

16. Personal author(s)

Ringsven MK, Bond D. Gerontology and leadership skills for nurses. 2nd ed. Albany (NY): Delmar Publishers; 1996.

17. Editor(s), compiler(s) as author

Norman IJ, Redfern SJ, editors. Mental health care for elderly people. New York: Churchill Livingstone; 1996.

18. Organization as author and publisher

Institute of Medicine (US). Looking at the future of the Medicaid program. Washington: The Institute; 1992.

19. Chapter in a book

(Note: Previous Vancouver style had a colon rather than a p before pagination.) Phillips SJ, Whisnant JP. Hypertension and stroke. In: Laragh JH, Brenner BM, editors. Hypertension: pathophysiology, diagnosis, and management. 2nd ed. New York: Raven Press; 1995. p. 465-78.

20. Conference proceedings

Kimura J, Shibasaki H, editors. Recent advances in clinical neuro-physiology. Proceedings of the 10th International Congress of EMG and Clinical Neurophysiology; 1995 Oct 15-19; Kyoto, Japan. Amsterdam: Elsevier; 1996.

21. Conference paper

Bengtsson S, Solheim BG. Enforcement of data protection, privacy and security in medical informatics. In: Lun KC, Degoulet P, Piemme TE, Rienhoff O, editors. MEDINFO 92. Proceedings of the 7th World Congress on Medical Informatics; 1992 Sep 6-10; Geneva, Switzerland. Amsterdam: North-Holland; 1992. p. 1561-5

22. Scientific or technical report

Issued by funding/sponsoring agency: Smith P, Golladay K. Payment for durable medical equipment billed during skilled nursing facility stays. Final report. Dallas (TX): Dept. of Health and Human Services (US), Office of Evaluation and Inspections; 1994 Oct. Report No.: HHSIGOEI69200860. Issued by performing agency: Field MJ, Tranquada RE, Feasley JC, editors. Health services research: work force and educational issues. Washington:

National Academy Press; 1995. Contract No.: AHCPR282942008. Sponsored by the Agency for Health Care Policy and Research.

23. Dissertation

Kaplan SJ. Post-hospital home health care: the elderly's access and utilization [dissertation]. St. Louis (MO): Washington Univ.; 1995.

24. Patent

Larsen CE, Trip R, Johnson CR, in-ventors; Novoste Corporation, assignee. Methods for procedures re-lated to the electrophysiology of the heart. US patent 5,529,067. 1995 Jun 25.
Other Published Material

25. Newspaper article

Lee G. Hospitalizations tied to ozone pollution: study estimates 50,000 admissions annually. The Washington Post 1996 Jun 21;Sect. A:3 (col. 5).

26. Audiovisual material

HIV+/AIDS: the facts and the future [videocassette]. St. Louis (MO): Mosby-Year Book; 1995.

27. Legal material

Public law: Preventive Health Amendments of 1993, Pub. L. No. 103-183, 107 Stat. 2226 (Dec. 14, 1993).

Unenacted bill: Medical Records Confidentiality Act of 1995, S. 1360, 104th Cong., 1st Sess. (1995)

Code of Federal Regulations:

Informed Consent, 42 C.F.R. Sect. 441.257 (1995).

Hearing: Increased Drug Abuse: the Impact on the Nation's Emergency Rooms: Hearings Before the Subcomm. on Human Resources and Intergovernmental Relations of the House Comm. on Government Operations, 103rd Cong., 1st Sess. (May 26, 1993).

28. Map

North Carolina. Tuberculosis rates per 100,000 population, 1990 [demo-graphic map]. Raleigh: North Carolina Dept. of Environment, Health, and Natural Resources, Div. of Epidemio-logy; 1991.

29. Book of the Bible

The Holy Bible. King James version. Grand Rapids (MI): Zondervan Publishing House; 1995. Ruth 3:1-18.

30. Dictionary and similar references

Stedman's medical dictionary. 26th ed. Baltimore: Williams & Wilkins; 1995. Apraxia; p. 119-20.

31. Classical material

The Winter's Tale: act 5, scene 1, lines 13-16. The complete works of William Shakespeare. London: Rex; 1973. Unpublished Material

32. In press

(Note: NLM prefers "forthcoming" because not all items will be printed.) Leshner AI. Molecular mechanisms of cocaine addiction. N Engl J Med. In press 1996.

Electronic material

33. Journal article in electronic format

Morse SS. Factors in the emergence of infectious diseases. Emerg Infect Dis [serial online] 1995 Jan-Mar [cited 1996 Jun 5];1(1):[24 screens].

Address of editor

The Editor

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Good Pharmacy Practices (GPP) & Accreditation of Pharmacies: Way to Professionalize Retail Pharmacy

Mrs Manjiri S Gharat

Hon.Secretary, Community Pharmacy Division, Indian Pharmaceutical Association &

Vice-Principal, K M Kundnani Pharmacy Polytechnic, Ulhasnagar, Mumbai

The entire retail sector in the country is getting more organized & is becoming consumer oriented. Consumer satisfaction is the motto of today. Retail pharmacy being part of healthcare system has tremendous opportunity to serve to the consumer & enhance image of profession & contribute to the societal health. To be with changing times, what's most needed in retail pharmacy sector is the professional approach. If one needs to be professional, then there is requirement to have some well developed standards & procedures for all the activities of the retail pharmacy.

What is GPP (Good Pharmacy Practices)?

All practicing Pharmacists are obliged to ensure that the service they provide to every patient is of appropriate quality Good Pharmacy Practice (GPP) is the way to practice 'Community Pharmacy' in a professional way. In 1993, International Pharmaceutical Federation (FIP) adopted international guidelines for GPP. FIP is the global association of national pharmaceutical associations of more than 100 countries in the world. Some developed countries like USA, Canada, Denmark, Australia, UK, already have their GPP guidelines framed and implemented for more than last 10 years now. In India, the industry sector, Good Manufacturing Practice (GMP) has been implemented for quite some time now. All the activities in an industry are carried out as per GMP guidelines and by following Standard Operating Procedures (SOP). Taking cue from this, in March 2002, the Community Pharmacy Division of Indian Pharmaceutical Association (IPA CPD) drafted the GPP guidelines for India. The objective of framing such guidelines was to ensure that in the long run all pharmacies implement and achieve the standards in accordance with the FIP guidelines.

Corresponding address: Mrs Manjari S Gharat, Vice principal, KM Kundnani Pharmacy Polytechnic, Ulhasnagar, Kalyan, Mumbai, India

In year 2005, IPA CPD developed first GPP Training Manual for the country. Realizing that the retail pharmacy in other countries & In India is quite different at present, this manual was made taking into account the ground realities in the country in retail pharmacies. Thus it has become extremely down-to-earth. It is an excellent guide for practicing pharmacists to implement GPP in their pharmacies & an ideal tool for Pharmacy teachers to teach the concepts of Community Pharmacy to the young budding pharmacists.

The manual contents are

1. Six modules on Regulatory Affairs, Procurement and Inventory Management, Storage and Stock Management, Dispensing, Patient Information, Rational Use of Medicines.
2. Reference Standard Operating Procedures (SOPs), which can be adopted as it is or tailored to suit one's own pharmacy.

Many pharmacists in different parts of the country have started using GPP manual & are realizing the benefits of the same.

What is Accreditation?

Accreditation is a process of quality assurance whereby the routine activities, services, systems, and supporting processes within the pharmacy are critically appraised to ensure that pharmacies develop performance standards in accordance to GPP guidelines. It is in the form of a rating system for pharmacies, which helps to self assess criteria and provides guidelines to meet or comply with GPP standards. In other words, the process of accreditation helps to achieve the best quality of activities, services, systems and supporting processes that remains constant over a long period of time, and draws tangible results. Accreditation is a concept that is implemented in related fields in other countries and is also prevailing for other fields or areas in India. We have accreditation systems in place for educational institutes, hospitals, pathology laboratories and blood banks but not yet for retail pharmacies.

Why Accreditation?

Today retail or community pharmacies are facing competitive challenges. In such circumstances, if the existing pharmacies do not act fast, we can expect dramatic decrease in business. On the other hand, if we also compete tough, through upgradation,

professionalization, and taking the advantage of our long standing existence and faith of our clients, and an already existing client base we can either hope that everything will turn out all right, or we can actively plan to make sure it does. Accreditation is a way by which we can actually begin to upgrade ourselves!

There is a saying in business - "If you don't plan your future, someone else will". The Accreditation process is an important first step in ensuring that Community Pharmacy will control its own future.

Accreditation Pilot Project in Mumbai & Goa

IPA CPD has developed accreditation Manual & Working sheet in year 2006. In first of its kind of project in India, IPA conducted a pilot accreditation (supported by WHO India Office & Drugs Controller General of India) in Mumbai & Goa in 60 pharmacies. The response from the pharmacists was encouraging & more number of pharmacies showed interest to get enrolled in such project indicating that they are realizing importance of it in changing times.

So it is a happening time for Community pharmacy in India. It can be certainly said that in few years from now we will see visible changes in the way pharmacy is practiced in India & we will be proud "Pharmacists" serving the profession & the society.

Perception Analysis of Antipsychotic Drugs Among Psychiatrists in Tertiary Care Hospitals from South India

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Introduction and Objectives:

Despite of several recommendations and scientific data, polypharmacy and overdosing has been common problem in India, Guidelines to be followed for treatment algorithm has always been an issue for debate, so through a brief study it has been tried to make out prescription among psychiatrists regarding guidelines they follow in Indian perspective. Antipsychotic drugs are one of the major segment in which decision making is a critical step. Through this study an effort has been made, to make out the perception level regarding poly pharmacy and overdosing among psychiatrists. This study has also been very successful in analyzing the perception variables for antipsychotic drugs, like cost, efficacy, availability, company image, information, problems, and patient education. The purpose of this study is to analyze perception of antipsychotic drugs among psychiatrists. With help of this study it will provide relevant knowledge about polypharmacy and prescribing pattern among physicians.

Research Design:

Definition of the information needed-

Information which was generated from literatures was purely based on giving support to primary data results. Polypharmacy and overdosing information was beneficial in knowing positive and negative aspects of prescribing pattern of psychiatrists. This study has been pursued with the help of primary and secondary data analysis.

Primary Data Collection

Primary data was collected by surveying psychiatrists in two tertiary care hospitals from south India. Twelve questionnaires were framed on different perception variables as

mentioned above. Results were derived from samples size of twenty. This survey was divided on the basis on how many patients do psychiatrists visits a day. It was as follows

- 1) Ten patients in a day
- 2) Twenty patients in day
- 3) Forty patients in a day

Secondary Data Analysis

Secondary data was generated with the help of various literatures provided in internet as well as dissertation works. Data collection from literatures sources revealed that polypharmacy and overdosing has been seriously debated not to be prescribed. But it has also been revealed that perceptions regarding these phenomena among psychiatrists are conflicting.

Questionnaire Design

Questionnaire consisted of open and close ended questions regarding perceptions for antipsychotic drugs among psychiatrists.

Sampling Frame

The target population identified was psychiatrists who were involved in diagnosis and treatment with antipsychotic drugs. No bias was made towards imposing. Twenty questions were framed to interview psychiatrists selected from two tertiary care hospitals from south India.

Plan of Data Analysis

This survey was divided on the basis on how many patients do psychiatrists visits a day. It was as follows

- 1) Ten patients in a day
- 2) Twenty patients in day

3) Forty patients in a day.

Purpose of dividing psychiatrists on the basis of patients visit was to compare the perception on the basis of experience. Twelve questionnaires were framed for antipsychotics on different perception variables like polypharmacy and overdosing, cost, efficacy, availability, company image, information, problems, and patient education; this has been analyzed individually.

Results and Discussion:

When psychiatrists asked about implementation of any Indian guidelines, they were very enthusiastic and supportive towards need of mandatory guidelines in India. It was seen that as per experience psychiatrists were dealing with complicated problems like schizophrenia, substance dependence, bipolar affective disorder, panic disorder, generalized anxiety. It was analyzed that psychiatrists who were attending 40 patients per day were prescribing antipsychotics, based on cost variables where as other psychiatrists were prescribing on efficacy variable.

It has been analyzed that psychiatrists who were visiting 40 patients were referring mostly journals, and psychiatrists with less number of patients were utilizing all the other resources including journals for new drug therapy. When psychiatrists were interviewed about relapse of psychiatric problems after drug use in patients then “frequent relapse” was the most common answer that all revealed. It indicates that relapse is seen during the antipsychotic therapy.

When it was been asked about consideration about educational background of patients during treatment then most of psychiatrists with 40 patients were in support of its “not required”, while psychiatrists with 20 & 10 patients were in support with “its required”. When psychiatrists were asked about polypharmacy and high dosage prescribing pattern then it was anonymously answered as, “it is being practiced when situation demands”. And they were supporting these prescribing pattern should not be viewed as poor prescribing pattern.

When it was been asked-“clinical experience rather than treatment algorithm is more influencing prescription pattern” then answers were mixed but majority were strongly

agreeing algorithm and scientific evidence. As per suggestions is concerned psychiatrists were supporting with this statement “if patient and family both are given education about facts of antipsychotic treatment then there won't be any problem about patient noncompliance”.

Limitations of Study:

- The number of participating hospitals and patients were limited owing to strict inclusion criteria and a short research period.
- Subjective patient outcomes were not examined.
- There was no intervention to improve prescribing practice.

Conclusion and Recommendation

Antipsychotic drugs are one of the major segment in which decision making is a critical step, and results which has been derived from this study reflect a portion of psychiatrist's perception. There is a need of mandatory guidelines in Indian perspective where polypharmacy and overdosing are usually practiced, so considering these aspects in positive way Indian guidelines for treatment algorithm should be framed.

Analysing Anti-Cancer Drugs Utilization Pattern in A Tertiary Care Hospital in South India

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Introduction:

Each year cancer is newly diagnosed in 9 million people worldwide and it causes 5 million deaths¹. It is second to cardiovascular disease as a cause of death in developed countries and overall causes 10% of all deaths in the world. It is usually regarded as a problem of developed world, but more than half of all cancers are seen in three quarters of the world's population who lives in developing countries².

The most important risk factors are increasing age(risk doubles between age 45 a and 65), Previous breast cancer in the same patient, family history of breast cancer, if blood relative is pre menopausal and has bilateral breast cancer (risk is nine fold), If blood relative is post menopausal and has breast cancer (risk is two fold)

Objectives and Importance of Study:

This study was carried out to measure attitude and perception of physicians about anti-cancer drugs utilization in a tertiary care hospital in South India. It expected to reveal information about which type of cancer is more prevalent and type of therapy used in the treatment of cancer. Comparing feasibility and success rate of various treatments of cancer was another objective of the study.

Research Design:

Definitions and terminologies:

Analyse: To examine the structure or content of something in detail

Perception: Perception is the process by which organisms interpret and organize sensation to produce a meaningful experience of the world.

Primary data collection:

Primary data was collected by interviewing cancer specialists from a tertiary care hospital in South India

Questionnaire design: questionnaire with both open and close ended questions was designed and administered.

Sampling frame:

Sampling process: convenient sampling

Respondents: cancer specialists

Sampling unit: a tertiary care hospital in South India

Sampling size: 20 cancer specialists

Plan of data analysis: Primary data was analysed on the basis of percentage analysis method.

Results and discussion:

From the analysis of all responses received from cancer specialist, following results were derived-

In all type of cancers mainly combination drugs are used, 40% of doctors have suggested for Cisplatin as a best choice of drug for treatment. 47% of physicians have agreed to use all types of dosage forms in the treatment. 40% of respondents have suggested that anti cancer drugs are most effective by parental route. 70% of respondents are selecting anti cancer drugs on the basis of its efficacy rather than price, less side effects, and popular brand name. Respondents believe that, with advances in genetics and molecular biology, treatment modality is likely to increase rapidly. They all are of opinion that, future of cancer treatment is going to be more curative and more preventive aspects are to be evolved to reduce incidence. Treatment of cancer is becoming more and more precise to target the cancer cells so as to spare tissues and avoid side effects. In the views of respondents multi modality drugs will prevail cancer in near future.

Conclusion and Recommendations:

Interpretation of results indicates that the majority of cancer specialists were of the view that treatment or selection of drug for cancer is depends upon type and stage of cancer. Only one type of drug can not be enough for specific type of cancer. Usually combination drugs are used for treating the cancer. In the view of respondents breast cancer is more prevalent in females and head and neck cancer is most prevalent in males. Efficacy of the drug is most important factor in selecting drugs.

Limitations:

As study is restricted to only one tertiary care hospital from south India, the information is not sufficient and conclusive for analysing perception of all the cancer specialists. This study was restricted only twenty cancer specialists.

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Medication Errors: Can We Minimize it?

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Manipal.

According to WHO a Medication Error is defined as “Any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health care professional, patient, or consumer. Such events may be related to professional practice, health care products, procedures, and systems, including prescribing; order communication; product labeling, packaging, and nomenclature; compounding; dispensing; distribution; administration; education; monitoring; and use. (NCC MERP, 1998) ¹.

Thus, a medication error refers to something which is preventable but occurs due to ignorance of either healthcare professional or by consumer himself. A study was carried out by Institute of Medicine in the US that has highlighted that more people die in a given year as a result of medication error than motor vehicle accidents, breast cancer or AIDS. According to Peter Honig, an FDA expert on drug – risk assessment, “Name confusion is one of the most common causes of drug related errors” ².

Look-alike or sound-alike (LA/SA) health products refer to names of different health products that have orthographic similarities and/or similar phonetics (i.e. similar when written or spoken). These similarities may pose a risk to health by contributing to medical errors in prescribing, documenting, dispensing or administering a product. These medication errors may be more likely to occur because of contributing factors such as identical doses, dosage forms or routes of administration, similar packaging or labeling, incomplete knowledge of drug names, illegible handwriting, verbal order errors and even lack of an appropriate knowledge-base³. A few examples of look alike, sound alike brands in India are *Celin* and *Celib*. *Celin* is a vitamin preparation whereas *Celib* is a pain killer. *Eltocin* is an antibiotic whereas *Eltroxin* is used to treat hypothyroidism ⁴. And if prescription is not legible, it is natural that while dispensing the medicine, an error is bound to occur. This would lead to nightmare for the patient who is taking medicine.

In India no system exists where an authentic data on medication error is available. Medication error puts several lives at stake in addition to a huge amount of money. The question is who is to be blamed for medication error? What required are concerted efforts on the part of all healthcare providers to put a mechanism into place that would minimize medication errors and save lives of millions of patients and save huge sum of money? The government can act as a facilitator by enacting legislations and help set up a mechanism where medication errors are brought to the notice of healthcare providers.

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News

Training Course on Patient Counseling for Community Pharmacists

In view of this changing era in retail pharmacy, Maharashtra State Chemists and Druggists Association (MSCDA) took great initiative in launching the one week (6 days) training course in Patient Counseling. It was the first ever course held in India with focus on retail pharmacists and was designed to educate the pharmacist at the counter.

The first batch was trained at Maharashtra State Pharmacy Council's DIC, Mumbai from 5th February'2007 to 10th February'2007 for 4 hours everyday in the afternoon session. Second batch was conducted from 12th March 2007 to 17th March 2007 and the third batch was conducted from 16th April 2007 to 21st April 2007. Both these batches were conducted in the morning sessions of 4 hours each. In total, 84 pharmacists from Mumbai, Navi Mumbai and various suburbs have attended these three batches of training course in patient counseling till date. All participants were pharmacists from the community (retail) pharmacy shops. The fourth batch of Training Course in Patient Counseling was successfully completed in May 2007 and 32 pharmacists as participants came in from various parts of Western Maharashtra, like Pune, Kolhapur, Sangali, Satara and Solapur. They attended the 5 days course and the summarized feedback indicated that course helped them regain confidence in their clinical abilities. In this 4th batch, the talk on *Drug Regulations and Laws* by FDA personnel and a very interactive session with Dr.Suhas Pingle, Hon.Secretary –IMA, Maharashtra was additionally included. Recently through Council's DIC, during 30th July to 4th Aug 2007, 5th PCC batch was trained and the feedback from all earlier was taken on last day, where all batches came together. Dr.Gopalani, Dermatologist and Dr.Ravel, Cardiologist, spoke on *Pharmacists' Role in Handling of Patients at Retail Counter* and also about various irrational Fixed Dose Combinations in market today.

In each batch the Patient Counseling Event Competition is one of key feature where the groups of participants do role play to carry out counseling session towards a given specific case study. This part of course makes each participating pharmacist experience the intricacies involved in patient counseling in real life.

The course was organized by Maharashtra State Pharmacy Council's Drug Information Centre and funded by Maharashtra State Chemists and Druggists Association (MSCDA).

Company representatives from Cipla (for asthma management devices) and Eli Lilly/ Novo Nordisk/ Johnson & Johnson (for diabetes management devices) do visit for detailed demonstration to pharmacists in this course just after the disease etiology is discussed by an expert faculty. Till date retail pharmacists have never formally been detailed about such medical devices in-depth, making them less confident about its use and therefore they do not advice or inform patients buying these products in their drug store. Thus, our sessions on these new devices do give very retail pharmacists' positive opinion towards the pharma companies whose experts spend time on detailing here. It is very essential.

The topics covered in the course are as follows:

- Introduction and Aim of the course
- Patient Psychology
- Communication skills
- Good Pharmacy Practices
- Use of internet and how to refer reliable books
- Diabetes and patient counseling, Case Studies on Diabetes
- Hazards of Self medication by patients
- Sir J.J Hospital experience in patient counseling
- Heart disorders and patient counseling
- Hypercholesterolemia, Case studies on Cholesterol
- Patient instructions- I and II parts
- Hypertension and patient counseling, Case studies on hypertension
- Asthma and patient counseling, Case studies on Asthma
- Compliance
- Misuse of antibiotics
- Concept of accreditation
- Importance of patient counseling
- Recommending OTC medicines
- NDDS and demonstration on how to use them
- Storage of medicines

- HIV/AIDS and role of pharmacist
- Tuberculosis
- Counseling in Pediatrics
- Counseling in Psychiatry
- Interpreting Lab values
- Concept of pharmaceutical care/ health promotion
- Explaining how to take dosage forms-Demonstration and video clippings

The list of faculty members for these courses is as follows:

- Raj Vaidya, Vice-President, Indian Pharmaceutical Association-CPD
- Dr. Sampada. P. Patvardhan, Director-DIC, MSPC, Mumbai
- Manjiri Gharat, Vice-Principal, Kundanani College of Pharmacy
- Zarine Khety, Chief Pharmacist, Saifee Hospital, Mumbai
- Dr. Saravdekar, Chief Pharmacist, Sir J.J Hospital, Mumbai
- Dr. Madhusudan.P. Joshi, Principal, Savarde College of Pharmacy, Goa
- Dr. Atmaram Pawar, Professor, Bharati Vidyapeeth's College of Pharmacy, Pune
- Dr. Bhadalikar(M.D.), Practicing Psychiatrist
- Gurunath Sule, DIC-Project Specialist, MSPC, Mumbai
- Suresh Shinde, HR Consultant, Mumbai
- Dr. Krishna. Iyer, Professor, Bombay College of Pharmacy, Mumbai
- Mr. Jayprakash Kabra, HR Consultant, Thane

One week after the successful completion of the course, participants in each batch have undergone theory and viva exam and the certificate of the course are given only to pharmacists who have qualified in exams.

The participants were satisfied about the contents of the course and were willing to participate in future for such type of training.

<p>Course Coordinator: Raj Vaidya Course Facilitator: Dr. Sampada. P. Patvardhan</p>
