

Syllabus for Ph.D. Kaumarbhritya (first six months)

1. Basic Introduction to Clinical Research Methodology identifying the priority areas of Kaumarbhritya.
2. Defining research problem specific to paediatrics and formulation of hypothesis.
3. Selection of the research problem and Research design: observational and interventional, descriptive and analytical, preclinical and clinical, qualitative and quantitative.
4. Recent Developments in the field of Kaumarbhritya.
5. Need for clinical trials in children and Risk Categories in Pediatric Research.
6. First in human pediatric clinical trials.
7. Challenges in clinical trials in children, Informed consent and assent methods related to children's perspectives and children as informants.
8. Laws and regulations in pediatric drug development.
9. Information about Institutional Ethics Committee (IEC) and Animal Ethics Committee (AEC) and their functions. Procedure to obtain clearance from respective committees, including filling up of the consent forms and information sheets and publication ethics.
10. Introduction to bioinformatics, scope of bioinformatics, role of computers in biology. Introduction to Data base- Pub med, Medlar and Scopus. Accession of databases.
11. Pharmacovigilance for ASU drugs and National Pharmacovigilance Programme for ASU drugs.
12. Ethical principles impacting research in children.
13. Strength of Kaumarbhritya in present scenario.
14. Ethical aspects in KashyapaSamhita and other samhitas related with Kaumarbhritya

Reference Books

1. *AyurvediyaAnusandhanPaddhati* – P.V. Sharma
2. Goyal R.C. *Research Methodology for Health Professionals*. New Delhi: Jaypee Brothers Medical Publishers (P) Ltd., 2013
3. Indrayan A. *Basic Methods of Medical Research*. 3rd Edition. Delhi: AITBS Publishers, 2016
4. Altick and Fenstermaker. (2007). *The Art of Literary Research*. 4th ed. W. W. Norton. Castle, Gregory. *Blackwell Guide to Literary Theory*. Blackwells,
5. Bowling, A. (2002). *Research Methods in Health* (2nd ed). Buckingham: Open University Press.
6. Deepika Chawla and Neena Sondhi. (2011). *Research Methods- Concepts and cases*. New Delhi: Vikas Publishing House.
7. Greenhalgh, T. (2006) *How to Read a Paper: The Basics of Evidence-Based Medicine*. (3rd ed) Blackwell
8. Kothari- CR (2004). *Research Methodology- Methods and Techniques* (Second Revised Edition). New Age International Publishers- New Delhi.
9. Kumar, R. 2005. *Research Methodology: a Step-by-Step Guide for Beginners*, 2nd ed. Thousand Oaks, CA, London: Sage Publications.

10. PetterLaake, HaakonBreienBenestad and BjørnReino Olsen. (2007). Research Methodology in the Medical and Biological sciences. Academic Press is an imprint of Elsevier, 84 Theobald's Road, London WC1X 8RR, UK. ISBN: 978-0-12-373874-5
11. Relevant portions of AyurvedicSamhitas and other texts related to Kaumarbhritya.