

Medical Criminology Notes #3

Access to Medical Literature in Medical Criminology*

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There are no published data on the effects of inadequate information exchange between the forensic sciences, between medicine and law, or between medicine and criminology. Nonetheless, we are all familiar with the lag between scientific discovery and the reflection of new knowledge in formal judicial opinions or statutes. Moreover, anyone who has conducted thorough interdisciplinary investigations can attest to the dearth of cross-citations between disciplines. Until recently, for example, most writings on rape or murder by psychiatrists, sociologists, forensic pathologists, law enforcement spokesmen, or concerned citizens suggested that the authors did not even know of the existence of data and opinions from other perspectives. The production of such insular writings has by no means ceased.

Elsewhere I have expressed the opinion that disciplinary isolationism might be reduced by information exchange,^{1,2} and effective use of available indices is an important element in such exchange. There are many sources of abstracts and citations to the medical literature, and several are aimed specifically at forensic medicine or the forensic sciences. Of these latter, the one that has shown the greatest promise is the *International Bibliography of the Forensic Sciences*. All the others are incomplete and irregular, or focus exclusively on citations of avowedly medicolegal import, or both.

The *International Bibliography of the Forensic Sciences* may be deserving of the same criticisms, but is less obviously so. Each annual edition includes a list of citations organized under 64 subject headings. These bibliographies have four major problems. The first is that the data base is undefined, although the editor's acknowledgements in the 1975 edition³ imply that *Index Medicus* is a basic source of citations.*** Not knowing the data base, the user does not know what other sources to consult to ensure

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***If so, it would be another major shortcoming if only those *Index Medicus* subject headings corresponding more or less to the *International Bibliography* headings were consulted. As those who scan the lists of headings in this paper will notice, there are far more than 64 that have an obvious bearing on the forensic sciences.

comprehensiveness. The second problem is that the criteria for selection of citations from the data base are unstated. Thus, the user can only assume that the working criterion is pertinence to issues identified as forensic, as judged by the editors. Thus, if the editor's judgment differs from that of the user, or if the user is seeking information on a topic not identified as forensic, the absence of citations from these lists may be mistakenly interpreted as evidence for the absence of a recent publication on the topic. The third problem is that the reduction of all possible categories of information to 64 subject headings results in low resolving power. For example, the only subject headings referring directly to human behavior are ALCOHOL AND ALCOHOLISM, CHILD ABUSE, CRIME AND CRIMINOLOGY, ETHNOLOGY, HOMICIDE, JUVENILE DELINQUENCY, SELF MUTILATION, SEX PROBLEMS, SUICIDE, UNREST, and WAR CRIMES. Thus, the user may need to go through many unrelated citations to find citations on some more specific topic. The fourth problem is that the only clue to the language in which the cited articles are written is the abbreviated journal title. Thus, the user may divert resources to securing access to articles in languages he or she cannot read.

In contrast to the specifically forensic or medicolegal information sources are the published information sources that span the entire range of medical sciences. Those published by the Institute for Scientific Information (ISI) are superior in their coverage of specialized medicolegal journals, but are inconvenient to use. *Science Citation Index*, for example, can be used as a subject index but requires much leafing and jotting down of citations. The weekly *Current Contents* issues contain subject indices, but use words occurring in article titles rather than fixed subject headings and, being weekly, require even more leafing than *Science Citation Index*. Of course, for researchers with the determination and resources to keep thoroughly informed, there is no substitute for the ISI publications.*

For the purpose of generating topical bibliographies of journal articles, however, the publications of the National Library of Medicine (NLM) are unequalled in convenience and medical coverage. The monthly and annual cumulative volumes of *Index Medicus* are the most familiar NLM publications, and for good reason. In effect, *Index Medicus* provides annual listings of the year's publications on each of thousands of topics.

To make effective use of *Index Medicus*, the user must gain familiarity with the available subject headings. This is not a difficult task and can be approached in several ways. The infrequent user may simply wish to entrust the task to a librarian or research assistant. I would hope, however, that scholars would keep in mind the doctrine of *respondeat superior*, and take no consolation in the fact that librarians, secretaries, statisticians, and others are so easily scapegoated. Those who choose to become familiar with the subject headings for themselves can consult the annual list of *Medical Subject Headings*,⁴ appended to which are categorized lists of medical subject headings. It takes considerable time to scan or read the complete

*I have found an average of 26 original articles per week in *Current Contents: Social & Behavioral Sciences* and 20 original articles per week in *Current Contents: Clinical Practice* that are related to my work and are in English or so promising as to be worthy of translation. Approximately half of these are related to medical criminology or forensic medicine.

alphabetical list of subject headings, which for 1978 is 353 pages long and includes approximately 10,000 major headings and a similar or greater number of cross-references. The categorized lists are more convenient. In 1978, for example, there were 17 pages of headings categorized as Psychiatry and Psychology and 7 pages of headings categorized as Anthropology, Education, Sociology and Social Phenomena. Because the categorized lists are organized in accord with traditional disciplinary boundaries, however, they promote an illusion of inclusiveness which could impede interdisciplinary thought and information exchange. The user who relies upon the categorized list for his or her discipline will find only those citations from other disciplines which were also listed in a category of the user's discipline by virtue of an informative title or an imaginative act on the part of an indexer at the NLM.

I had hoped to provide the readers of this Note with a list of *Index Medicus* subject headings that would encompass every topic of conceivable relevance to medical criminology and forensic medicine. Unfortunately, the third abridgment of that list contained over 1,800 headings and was, in any case, limited by my notions of "conceivable relevance" and the boundaries of medical criminology and forensic medicine. As it would be a disservice for me to impose my limitations upon others even if space permitted such a list, I am instead offering a sampling of subject headings to whet the reader's appetite.

In keeping with the theme of this series of Medical Criminology Notes, the list of 250 subject headings in medical criminology includes items reflecting the level of analysis of diverse disciplines. Included are many of the major drugs of abuse but few of the specific psychotropic agents used to control behavior, for the latter headings correspond to bibliographies with a smaller proportion of citations that I judge to be pertinent. Only a few terms for wounds and injuries are included, even though I believe that injuries are the outcomes that medical criminology should be directed toward reducing. These and other ambiguities, idiosyncrasies, and arbitrary decisions would mark any attempt to provide a list of subject headings corresponding to some field of interest, and this is why there is no point in attempting to be comprehensive here.*

Although the primary purpose of the lists of headings that follow is to facilitate the reader's access to medical literature by emphasizing that there are readily available annual bibliographies in *Index Medicus* for each of the denoted topics, these lists have two other uses. The first is adaptability to personal or institutional information retrieval systems. In 1974 Rappeport presented his personal indexing system to the readers of the *Bulletin* with the expressed hope of seeing other suggested systems.⁵ Rappeport stated that *Index Medicus* subject headings are too complicated or too cumbersome and are not suited to the needs of forensic psychiatrists. Clearly the complete list of some 10,000 headings is too cumbersome for private tear-sheet and reprint files. Nonetheless, these headings have the great advantage of corresponding to topical bibliographies. By collapsing categories, deleting unwanted categories, and adding one's personal interests,

*Similar conditions obtain for the list of 100 Medical Subject Headings Relating to Other Aspects of Forensic Medicine (see Appendix).

one may use the complete list or the samplings presented here as the basis for an uncomplicated and logical subject index to medical aspects of medical criminology or forensic medicine.

The second use for these and other lists of terms is to stimulate conceptual associations. I am frequently puzzled by the requests of students and residents for "research ideas" and am tempted to suggest that they talk to patients, look at their surroundings, or read a dictionary. Discursive writing and didactic teaching seem to have limitless power to inhibit creativity of the part of the recipient, by focusing attention on just those issues that are least in need of research. Although it is true that what we need are data on testable and important hypotheses, not simply hypotheses, there may be much to be gained by brainstorming. For example, one skeptical browser through a 2,400 item list I had prepared asked what ESTRUS SYNCHRONIZATION had to do with medical criminology. I replied that we do not know that human pheromones have nothing to do with sex offenders' target choices. Nor do I know if this is worthy of investigation, for the probable costs and benefits are necessarily uncertain.

The lists of subject headings that follow correspond precisely to headings from the NLM's *Medical Subject Headings: 1978*.⁶ As these are amended annually, the serious user will find it helpful to consult the annual lists of new terms and deleted terms.

250 Medical Subject Headings for Medical Criminology:

ABORTIFACIENT AGENTS	AUTOPSY
ABORTION, CRIMINAL	AVOIDANCE LEARNING
ACTING OUT	BARBITURATES
AGE DETERMINATION BY	BIOLOGICAL WARFARE
SKELETON	BLAST INJURIES
AGE DETERMINATION BY	BLOOD STAINS
TEETH	BRAIN INJURIES, ACUTE
AGGRESSION	BREATH TESTS
ALCOHOL DETERRENTS	BURNS
ALCOHOL DRINKING	CADAVER
ALCOHOL INTOXICATION	CANNABIS
AMNESIA	CANNIBALISM
AMOBARBITAL	CAPITAL PUNISHMENT
AMPHETAMINES	CASTRATION
AMYGDALOID BODY	CHEMICAL WARFARE
ANDROGEN ANTAGONISTS	CHEMICAL WARFARE AGENTS
ANGER	CHILD ABUSE
ANOMIE	CIVIL DISORDERS
ANTHROPOMETRY	COCAINE
ANTISOCIAL PERSONALITY	COERCION
ANXIETY, CASTRATION	COMPETITIVE BEHAVIOR
ASPHYXIA	COMPULSIVE BEHAVIOR
ATOMIC WARFARE	CONTRACEPTIVES, POSTCOITAL
ATTITUDE TO DEATH	CONTUSIONS
AUTHORITARIANISM	COPROPHAGIA
AUTOMATISM	CORONERS/MEDICAL EXAMINERS

COUNTERTRANSFERENCE
 (PSYCHOLOGY)
 CRIME
 CRIMINAL PSYCHOLOGY
 CRIMINOLOGY
 CRISIS INTERVENTION
 CROWDING
 CULTURAL DEPRIVATION
 CYPROTERONE
 DEATH CERTIFICATES
 DEATH, SUDDEN
 DELUSIONS
 DENIAL (PSYCHOLOGY)
 DERMATOGLYPHICS
 DISLOCATIONS
 DISPLACEMENT (PSYCHOLOGY)
 DISSOCIATIVE REACTION
 DOPING IN SPORTS
 DRINKING BEHAVIOR
 DRUG ABUSE
 DRUG & NARCOTIC CONTROL
 DRUG SCREENING
 DRUG WITHDRAWAL SYMPTOMS
 EMBALMING
 EMERGENCIES
 ENVIRONMENT, DESIGNED
 EPILEPSY, TEMPORAL LOBE
 EPILEPSY, TRAUMATIC
 EROTICA
 ESCAPE REACTION
 EXPERT TESTIMONY
 EXPLOSIONS
 EXTRAVERSION (PSYCHOLOGY)
 FEAR
 FIRES
 FIRST AID
 FOLIE A DEUX
 FOREIGN BODIES
 FORENSIC DENTISTRY
 FORENSIC MEDICINE
 FORENSIC PSYCHIATRY
 FRACTURES
 FRUSTRATION
 GALVANIC SKIN RESPONSE
 GAMBLING
 GLUE SNIFFING
 GUILT
 HALLUCINATIONS
 HALLUCINOGENS
 HANDWRITING
 HATE
 HEAD INJURIES
 HEROIN ADDICTION
 HOMICIDE
 HOSTILITY
 HYPNOSIS
 HYPNOTICS AND SEDATIVES
 HYSTERICAL PERSONALITY
 ID
 IMITATIVE BEHAVIOR
 IMMOBILIZATION
 IMPULSIVE BEHAVIOR
 INCEST
 INFANTICIDE
 INTERNAL-EXTERNAL CONTROL
 INTERVIEW, PSYCHOLOGICAL
 JEALOUSY
 JURISPRUDENCE
 JUVENILE DELINQUENCY
 KLINEFELTER'S SYNDROME
 KORSAKOFF'S SYNDROME
 LIBIDO
 LIE DETECTION
 LIFE CHANGE EVENTS
 LIMBIC SYSTEM
 LYING
 LYSERGIC ACID DIETHYLAMIDE
 MASOCHISM
 MASTURBATION
 MATERNAL DEPRIVATION
 MEDROXYPROGESTERONE
 MEMORY DISORDERS
 MEPERIDINE
 Mescaline
 METHADONE
 METHAQUALONE
 MILITARY MEDICINE
 MILITARY SCIENCE
 MINIMAL BRAIN DYSFUNCTION
 MORALS
 MORPHINE ADDICTION
 MORTUARY CUSTOMS
 MORTUARY PRACTICE
 MUSCLE RELAXANTS, CENTRAL
 MUSTARD COMPOUNDS
 NARCISSISM
 NARCOTICS
 NAVAL MEDICINE

NAVAL SCIENCE
 NITROGEN MUSTARD
 COMPOUNDS
 NUDISM
 OPIUM
 PARANOIA
 PATERNAL DEPRIVATION
 PERSONALITY DISORDERS
 PHENCYCLIDINE
 PLEASURE-PAIN PRINCIPLE
 PLETHYSMOGRAPHY
 POISON CONTROL CENTERS
 POISONING
 POISONS
 POPULATION DENSITY
 POSTMORTEM CHANGES
 POVERTY
 PRISONERS
 PRISONS
 PROJECTION
 PROPAGANDA
 PROPOXYPHENE
 PROSTITUTION
 PROTECTIVE CLOTHING
 PROTECTIVE DEVICES
 PSYCHOLOGICAL WARFARE
 PSYCHOMOTOR AGITATION
 PSYCHOSES, ALCOHOLIC
 PSYCHOSES, MANIC-DEPRESSIVE
 PSYCHOSES, TOXIC
 PSYCHOSEXUAL DEVELOPMENT
 PSYCHOSOCIAL DEPRIVATION
 PUBLIC HOUSING
 PUNISHMENT
 RACE RELATIONS
 RAPE
 REHABILITATION, VOCATIONAL
 REJECTION (PSYCHOLOGY)
 REPRESSION
 RESIDENCE CHARACTERISTICS
 RESIDENTIAL TREATMENT
 RESTRAINT, PHYSICAL
 RESUSCITATION
 RIGOR MORTIS
 RIOT CONTROL AGENTS,
 CHEMICAL
 RIOTS
 RUNAWAY REACTION
 SADISM
 SCHIZOPHRENIA, PARANOID
 SECURITY MEASURES
 SEDATIVES, NONBARBITURATE
 SELF CONCEPT
 SELF MUTILIATION
 SEMEN
 SEX CHROMOSOME
 ABNORMALITIES
 SEX DEVIATION
 SEX OFFENSES
 SKID ROW ALCOHOLICS
 SOCIAL ALIENATION
 SOCIAL BEHAVIOR DISORDERS
 SOCIAL CONDITIONS
 SOCIAL CONTROL, FORMAL
 SOCIAL CONTROL, INFORMAL
 SOCIAL DOMINANCE
 SOCIAL PROBLEMS
 SOCIAL RESPONSIBILITY
 SOMATOTYPES
 SOMNAMBULISM
 SPATIAL BEHAVIOR
 SPECIMEN HANDLING
 SPOUSE ABUSE
 STIGMATIZATION
 SUDDEN INFANT DEATH
 SUGGESTION
 SUICIDE
 SUICIDE, ATTEMPTED
 SUPEREGO
 SURVIVAL
 TABOO
 TATTOOING
 TEAR GASES
 TELEVISION
 TEMPORAL LOBE
 TERRITORIALITY
 TESTOSTERONE
 THEFT
 THIOPENTAL
 TOXICOLOGY
 TRANQUILIZING AGENTS, MAJOR
 TRANQUILIZING AGENTS, MINOR
 TRANSPORTATION OF PATIENTS
 TRANSVESTISM
 TRAUMA CENTERS
 TRUTH DISCLOSURE
 UNEMPLOYMENT
 VIOLENCE

VOLITION
WAR
WAR CRIMES
WOUNDS AND INJURIES

WOUNDS, GUNSHOT
WOUNDS, NONPENETRATING
WOUNDS, PENETRATING
WOUNDS, STAB

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Elementary methodological critique and some suggestions for the dissemination of existing information.
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4. National Library of Medicine: *Medical Subject Headings: 1978*. Washington, D.C., U.S. Government Printing Office, 1978
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6. National Library of Medicine: *op. cit.*, n. 4

Appendix: 100 Medical Subject Headings Relating to Other Aspects of Forensic Medicine

ABORTION, LEGAL
ABORTION, SEPTIC
ABORTION, THERAPEUTIC
ACCIDENTS, AVIATION
ACCIDENTS, INDUSTRIAL
ACCIDENTS, TRAFFIC
ADOPTION
AUTOMOBILE DRIVER
EXAMINATION
BIOETHICS
CARCINOGENS
CHILD, ABANDONED
CHILD ADVOCACY
CHILD, INSTITUTIONALIZED
CHILD, UNWANTED
CIVIL RIGHTS
CUSTODIAL CARE
DIAGNOSTIC ERRORS
DISABILITY EVALUATION
DIVORCE
ELIGIBILITY DETERMINATION
ETHICS
ETHICS, MEDICAL
ETHICS, PROFESSIONAL
EUGENICS
EUTHANASIA

FOOD POISONING
FOSTER HOME CARE
GENETIC COUNSELING
HERMAPHRODITISM
HIPPOCRATIC OATH
HOMOSEXUALITY
HOSPITALIZATION
HOSPITALS, PSYCHIATRIC
HUMAN EXPERIMENTATION
HUMAN RIGHTS
IATROGENIC DISEASE
ILLEGITIMACY
INFORMED CONSENT
INSEMINATION, ARTIFICIAL
INSURANCE
INSURANCE, ACCIDENT
INSURANCE BENEFITS
INSURANCE, LIABILITY
INSURANCE, LIFE
LEGAL GUARDIANS
LEGISLATION
LEGISLATION, DRUG
LEGISLATION, HOSPITAL
LEGISLATION, MEDICAL
LEGISLATION, NURSING
LEGISLATION, PHARMACY

LICENSURE	PROFESSIONAL STANDARDS
LICENSURE, MEDICAL	REVIEW ORGANIZATIONS
LICENSURE, NURSING	PSYCHOSES, SENILE
LICENSURE, PHARMACY	PSYCHOSES, TRAUMATIC
MALINGERING	PSYCHOSURGERY
MALPRACTICE	QUACKERY
MEDICAL RECORDS	QUARANTINE
MUNCHAUSEN SYNDROME	RADIATION INJURIES
NATIONAL HEALTH INSURANCE,	SEX DIFFERENTIATION
UNITED STATES	DISORDERS
NEUROSES, POST-TRAUMATIC	SEX DISORDERS
NURSE-PATIENT RELATIONS	SHOCK THERAPY, ELECTRIC
OCCUPATIONAL DISEASES	SHOCK THERAPY, INSULIN
PATERNITY	SOCIAL SECURITY
PATIENT ADMISSION	STERILIZATION, FEMALE
PATIENT DISCHARGE	STERILIZATION, MALE
PATIENT IDENTIFICATION	STERILIZATION, SEXUAL
SYSTEMS	TERATOGENS
PHILOSOPHY	TRANSPLANTATION
PHILOSOPHY, MEDICAL	TRANSSEXUALISM
PHILOSOPHY, NURSING	UNITED STATES FOOD AND
PHYSICIAN-PATIENT	DRUG ADMINISTRATION
RELATIONS	VENEREAL DISEASES
PLACEBOS	VETERANS DISABILITY CLAIMS
PREMARITAL EXAMINATIONS	VIVISECTION
PRIVILEGED COMMUNICATION	WHIPLASH INJURIES
PROFESSIONAL-PATIENT	WILLS
RELATIONS	WORKMEN'S COMPENSATION