
Public Service Ethics in Health Sciences Libraries

M. SANDRA WOOD

ABSTRACT

REFERENCE LIBRARIANS IN HEALTH SCIENCES libraries must provide accurate and up-to-date information in a timely fashion in response to the patient care and research needs of the health care profession. Discussed here are some of the issues involved in the provision of such services: quality of service, access to information, confidentiality, intellectual freedom, and liability. Although technologies such as online information retrieval, telefacsimile, and CD-ROM have improved access to information, they create their own problems, including potential for censorship and equal access to information. End-user searching raises new questions related to quality and information access.

INTRODUCTION

Professionalism, malpractice, liability, and ethics are concepts that have received increased attention by librarians over the past decade. The latest code of ethics was adopted by the American Library Association (ALA) (1981). The California Library Association (1978) has adopted a statement regarding professional responsibility of librarians, and in 1979 the Standards Committee of the Reference and Adult Services Division (RASD) of ALA (1979) adopted a section on "Ethics of Service" as part of its developmental guidelines. Related to these ethical codes is the concept of evaluation of quality of service (Judkins, 1986; Schwartz & Eakin, 1986). The literature conveys the impression that ethical concepts are inviolate and that the librarian

M. Sandra Wood, Reference Department, George T. Harrell Library, The Milton S. Hershey Medical Center, The Pennsylvania State University, POB 850, Hershey, PA 17033

LIBRARY TRENDS, Vol. 40, No. 2, Fall 1991, pp. 244-57

© The Board of Trustees, University of Illinois

must be perfect—the librarian always makes the correct decision in sensitive situations, is always good humored and self-effacing, and always provides the correct answer in a timely fashion.

Would that a discussion of professional ethics be so clearcut and easily described and that all librarians held the same ethical values. The truth is that professional ethics, in many cases, is situational and requires decision making on the part of the librarian. Not all librarians will make the same decision in any given situation, and the same librarian might not make the same decision should a similar situation arise again.

Ethics has been variously defined. It is regarded as “the moral principles by which a person is guided” (Murray, 1933, p. 312), “a group of moral principles or set of values” (*Webster’s Third*, 1965, p. 780), or “the principles of conduct governing an individual or a profession: standards of behavior” (*Webster’s Third*, 1965, p. 780). Certain professions are governed by codes of ethics—for example, medicine and law. The foundations of medicine are grounded in the Hippocratic Oath. The concept of “medical ethics” has an exact meaning, and physicians not adhering to these principles can find themselves in both professional and legal difficulties. The medical profession has traditionally monitored and censured itself, although more and more cases are being resolved in the courts.

In librarianship, the concept of ethics does not have such a historic background, and ethical principles are not well defined. Professional associations are without the power to enforce codes of conduct—e.g., the ALA Code of Ethics describes only general precepts. Over the years such codes have set standards that include everything from a librarian’s deportment and good manners to loyalty and integrity (Crawford, 1978). Literature aimed at the ethics of librarianship often approaches the topic on a more personal level, frequently incorporating the individual’s own values and ethical concepts.

HEALTH SCIENCES LIBRARIANS

Medical reference librarians share the same ethical concerns as reference librarians in academic, public, and special libraries. These concerns include access to information, quality of service, confidentiality, neutrality, and intellectual freedom. Two major features distinguish reference service in a health sciences library from other reference situations. These are, first, the technical nature of the literature, which encompasses the biomedical sciences, and second, the need for specialized bibliographic services resulting from the pressures and time constraints placed on health care personnel (Lewis, 1970). McClure (1982) indicates that the clientele served—physicians,

nurses, and other health care professionals—often need information immediately for patient care decisions. The reference librarian must provide accurate and up-to-date information in a timely fashion to meet the needs of a demanding profession. “Clinical emergencies” are fairly common occurrences in a health sciences library. New technologies such as telefacsimile, full-text databases, and electronic mail have made it easier for medical librarians to handle such requests. Whether the information is provided to a physician in a patient care setting or to a researcher meeting a grant deadline, immediacy is a critical need in health sciences reference librarianship. The reference librarian is also aware that erroneous information can adversely affect patient care or hinder vital research.

The specific issues to be discussed in this article are quality of service, access to information, confidentiality, intellectual freedom, end-user searching, and liability in health sciences libraries. The discussion, however, is applicable to reference services in other types of libraries as well.

QUALITY OF SERVICE

Librarians are, or should be, concerned with quality of service. Ethics is integral to professionalism, and quality is at the heart of professionalism. It infiltrates all aspects of librarianship from bibliographic control to answering informational questions. In a medical library, quality reference service is especially important because responses can influence patient care decisions or alter directions of ongoing research.

Interestingly, quality control is the first standard for reference services developed by a committee of the Oregon Health Sciences Libraries Association (Judkins, 1986). The other standards proposed by this group are appropriateness, accuracy, documentation, timeliness of response, accessibility, confidentiality, and evaluation. The standards, intended as “components of minimally competent reference service,” actually reflect ethical concerns about the provision of the reference product. In the process of establishing measurable criteria for performance evaluation, reference librarians at The University of Michigan’s Alfred Taubman Medical Library developed a set of reference service standards that included indicators for evaluating these standards (Schwartz & Eakin, 1986). Through the use of an anonymous checklist, the reference librarians participated in peer review evaluations of their colleagues. Efforts of this type within reference departments are aimed at improving quality of reference service but ultimately reflect a concern for professional ethics.

Quality is a vague concept, but arguably it can include accuracy,

relevance, completeness, and timeliness. Shedlock (1988), in defining the quality of medical reference service, indicates that the "concern for quality is generally considered a mark of professionalism" (p. 49). He further indicates that quality can be defined in terms of "personal ideals" (p. 49), and that it is often influenced by the user's perception of how the information is delivered. For example, an accurate answer may not be perceived as such by the user because the librarian is vague concerning the source of the information or is simply not authoritative in delivering it. Alternatively, an inaccurate answer might be accepted because the librarian is very authoritative in delivering it.

ACCESS TO INFORMATION

Access to health sciences libraries is easier today than in the past. Hospitals, historically, have limited the use of their libraries to physicians; some did not admit nurses or other health care personnel to the doctors' library. Although this scenario might still take place in some hospitals, times have changed, and health sciences libraries have opened their doors not only to health care personnel but to patients and the general public as well. Academic health sciences libraries have traditionally been more available to the public than hospital libraries, although some still limit access. More than a decade ago, Jeuell et al. (1977) noted that more than 90 percent of medical school libraries opened their doors to the public.

Service Policies

Access to the collection does not guarantee reference service or even access to information. Health sciences libraries have policies on the provision of reference services. These policies describe what groups will receive reference service, the level of reference service offered, and under what circumstances the service will be provided—for example, by phone or in person. In some institutions, a distinction will be made between users from the institution (primary clientele) and users from outside of the institution (secondary clientele). Primary and secondary clientele may further be divided by category—for example, physicians versus nonphysicians or health care personnel versus patients.

Reference policies generally describe more extensive service to primary clientele, while restricting or, in some cases, denying service to unaffiliated individuals. Rainey (1988) discusses a detailed reference service policy for the provision of drug information by librarians at the Philadelphia College of Pharmacy and Science. This library's policy indicates level of user, and services provided or withheld.

Service to Health Care Professionals

In a health sciences library, a full range of reference services will be provided to the library's primary clientele—that is, the health care professionals of the institution. These services include, but are not limited to, mediated database searching; interlibrary loan; telefacsimile transmission; microcomputer laboratories; CD-ROM databases; end-user search services, either through online accounts or via a locally mounted database; instructional services; and ready reference. The health care professional recognizes the librarian as an expert information provider, leaving little room for the librarian to offer an opinion. However, the ethical concerns of confidentiality and quality, including timeliness and accuracy, are important.

Academic health sciences centers are beginning to implement the concept of Integrated Academic Information Management Systems (IAIMS), as espoused by Matheson (1982), wherein the library is seen as integral to the flow of information within an institution. Access to information not owned by the library is facilitated by telefacsimile transmission, electronic transmission, librarian and end-user access to bibliographic and full-text databases, and local area networks. With these new technologies come the ever present concerns of confidentiality, data security, and the need for continuing education so that the librarian can function in a changing environment.

Service to Patients and the General Public

In health sciences libraries, access to the collection and reference services to patients and the general public will vary according to institutional policy. Most hospital libraries provide information services to patients, although the level may be minimal simply due to staffing constraints. Some hospitals have established consumer health information libraries and make this information available to the general public as well. Academic health sciences libraries may allow public access to the collection but provide minimal or no reference service to the general public.

Interpretation of information is an ethical issue that arises with reference service to the general public. Rainey (1988) points out that the librarian is viewed differently as an information provider by a health care professional than by the general public and cautions against "giving opinions, evaluating the information, or recommending therapy based on the...information" (pp. 60-61). The lay person tends to view the health sciences librarian as a subject expert who delivers health care information. For this reason, the librarian should refrain from providing interpretation or opinion. Eakin (1980) has differentiated between health information and health education. As an information provider rather than a health educator,

the librarian should disseminate the information "without interpretation, without opinion or counseling, and with no attempt to influence the actions or decision making of the individual" (p. 223).

Librarians may work closely with clinical departments, perhaps functioning as a Clinical Medical Librarian. When providing information to the patient as part of the health care team, the librarian either knows or has access to the patient diagnosis so that the patient's information needs can be defined. However, when dealing with a request for health care information from the general public, the librarian cannot be sure that the individual has the necessary information to ask the appropriate question. The reference interview is important, but no amount of questioning can elicit the proper information when the individual does not know the diagnosis or is unsure of what he or she really wants.

Not all requests from the general public, of course, are related to patient care. Some are for high school or college term papers or just for general interest. Since health sciences libraries may not collect materials for the lay person, it is frequently necessary to refer the user to a physician or, when appropriate, to the public or college library for relevant materials. Hospital and public libraries have joined in formal cooperative efforts to make health care information more available to the general public (Goodchild, 1978; Gartenfeld, 1978). With the increased demand for consumer health information, public and medical libraries have become more aware of the services that each have to offer (Wood & Renford, 1982).

CONFIDENTIALITY

Confidentiality is an ethical issue of concern to all librarians. The ALA code of ethics states that: "Librarians must protect each user's right to privacy with respect to information sought or received, and materials consulted, borrowed, or acquired" (American Library Association, 1981, p. 335). According to Stover (1987), the major problems related to confidentiality in libraries are that it conflicts with freedom of information; that the codes are unenforceable, largely undefined, and without penalties; and that they are too broad to be effective in real situations. In recent years, this issue has been spotlighted by the FBI's request for cooperation by librarians for information on library use by "suspicious" individuals. Many states have laws that protect confidentiality of library records, and librarians should familiarize themselves with the laws pertaining to their individual situation.

In a health sciences library, concerns about confidentiality arise frequently. The importance of confidentiality is most obvious,

perhaps, in a clinical situation, where the librarian would have access to patient care information. For example, Clinical Medical Librarians (CMLs) have existed for about fifteen years. CMLs make rounds with the health care team and provide patient-specific information. They have access to patient records, are privy to physician-patient confidences, and are subject to the same ethical standards governing confidentiality as the physician.

Mediated online searching, a routine activity in most health sciences libraries, creates inherent problems regarding confidentiality. As Shaver (1985) points out, the patron is required to fill out a form for the online search, and many libraries keep an actual copy of the search after it is completed. Online search records, along with the log book kept for statistics, may inadvertently be accessible to nonlibrarians and therefore violate the client's right to privacy. Confidentiality may also be violated inadvertently by leaving materials to be picked up at an unattended location. Searches (or other materials such as interlibrary loan items) that are not on a "reserve shelf" at a reference or information desk, may accidentally be viewed by others. Materials should always be "packaged" to avoid inadvertent breach of confidentiality, especially if the pickup point is not attended.

The online search analyst is often confronted with judgmental decisions regarding confidentiality. What should be done when a MEDLINE search is requested by a faculty member on the same topic as a search requested previously by another physician (Wood & Renford, 1982, p. 84)? To reveal the first requester's name and topic to the second requester would be a breach of confidentiality, but if the search analyst has reason to believe that the two individuals might actually be working together on a project, then the duplicate search would waste time and money. The search analyst might ask whether the two users had been in touch with each other.

Shaver (1985) also indicates that the online search analyst should ask permission of the client to consult with another librarian about a search formulation. This author disagrees with such a viewpoint. Physicians do not ask patients for permission to consult with another physician. Librarians should not be expected to do so, either. Librarians who are consulted about a search formulation should treat it in confidence as they would any other request.

In a corporate setting, where clients and searchers are held accountable for costs, it may not be appropriate to protect the confidentiality of a search request (Shaver, 1985). It might be argued that a similar situation exists in hospitals, where cost effectiveness and cost control are vital. Should hospital librarians run a duplicate MEDLINE search request when they know that another member of

the patient care team already has the necessary information? Respect for confidentiality should be tempered by the situation.

In a health sciences library, medical malpractice questions are likely to be received, especially as online search requests, either from the prosecuting or defending attorneys (or defending physician). Confidentiality can become a major issue when the reference librarian receives the same request for information from an outside attorney as well as from the institution's own attorney. In one such situation, the librarian was requested to furnish the institution's lawyer with the same information that was provided to the other attorney. In another case, the hospital administrator allowed a lawyer, who was prosecuting a case against the institution, access to the library but then later asked the librarian to provide him with everything that the attorney requested. The librarian should refuse to comply with requests that would violate the confidentiality of another client (Wood & Renford, 1982).

INTELLECTUAL FREEDOM

Intellectual freedom involves the right of individuals to express their opinion without fear of punishment. It represents First Amendment rights of freedom of speech, and it is a right zealously guarded by academia. The intellectual freedom of both the library user and the librarian are issues in the provision of information services. Librarians as individuals have certain ethical or moral values that can come into play in performing their job as librarians. Consciously or unconsciously, personal values, societal values, and the professional obligation of providing objective information are weighed or judged against each other every time a librarian is asked to provide an answer to a reference question or to make a book selection for the collection. Objectivity, individual rights, and censorship are discussed here as components of intellectual freedom.

Objectivity/Bias

Reference librarians in all types of libraries are faced with helping library users find answers to questions that may be controversial or that may reflect values that conflict with those of the librarian. In the process of deciding which sources to consult or what level of service to provide, the opportunity for bias (or lack of objectivity) arises. White (1990) uses the word *even-handedly* (p. 73) rather than *neutrality* when speaking of professional responsibility; *objectivity* is used here to mean "without bias."

In a health sciences library, these "difficult" questions tend to come up more frequently, perhaps, because the subject matter lends itself to issues that involve health care, issues for which there may

be multiple viewpoints and no "right" answer. For example, a reference librarian who is opposed to abortion and involved in the right-to-life effort may be asked by a client for a list of local abortion clinics. Librarians cannot let their viewpoint influence the provision of information to the client. Similar questions that are routine in a medical library might involve topics such as euthanasia, a patient's right to die, a parent's right to withhold treatment for a child, acquired immunodeficiency syndrome (AIDS), homosexuality, reproductive technologies, and fetal research. The reference librarian, in all cases, should avoid bias, approach the topic objectively, and provide the best answer possible. Failure to provide information when the proper source is known could also be construed as censorship.

Crowe and Anthes (1988) raise the idea of judging ethical significance by considering the consequences. They indicate that actions "must be viewed in light of both professional commitments and responsibility to society" (p. 129). This concept is further illustrated by Hauptman's (1976) "experiment" in which librarians who were asked for information about making a bomb provided the information requested to the user. The reference librarian in a health sciences library who is confronted with a distraught patron who requests information on suicide should probably provide the information but might also consider contacting the institution's social service department should the circumstances warrant it.

The Librarian's Rights

Librarians may find themselves in situations outside of work where their own ethical values conflict with stated institutional policies. For example, the librarian who is involved in anti-abortion issues may find that the pro-life group with which he or she is working is planning to picket the hospital where the librarian is employed. The institution has a policy stating that employees who picket the hospital will be fired. The librarian will have to decide which is more important—the job or the principles. However, librarians' rights to participate in such activities, so long as it does not affect their work, must be defended.

Censorship

Librarians have fought censorship through the years, but it continues to rear its nasty head in many shapes, sizes, and forms. Mika and Shuman (1988) indicate that censorship occurs because people, librarians included, have value systems, and it is these values that influence their actions and motives (p. 317). Censorship in libraries is discussed most frequently in relation to selection of materials. Librarians should not allow their own biases to influence

selection, nor should they allow others, through political or other pressures, to censor materials for library purchase.

Another type of censorship that has become prevalent recently is due to severe financial problems that all libraries have been experiencing. The budget has always limited what could be purchased, but the gap between money available and cost of materials is increasing. This is especially evident in the selection of reference tools where the choices of format have become more varied and the costs continue to escalate. Almost all major indexes are now available in print format, online, or on CD-ROM. Health sciences libraries have the choice of acquiring MEDLINE on CD-ROM in seven different versions! CD-ROM databases are expensive. They are usually acquired on a lease-only basis with a discount for print subscribers, thus discouraging cancellation of the print copy. The equipment on which CD-ROM is run is also expensive and requires increased staff time for monitoring. Services such as *Reference Update* and *Current Contents on Disk* offer weekly updates on floppy disks. Libraries simply cannot afford to subscribe to all of these new technologies. Decisions all too frequently must be made based on cost alone, and, despite an obvious need for a resource, acquisition of a new service or technology may either be delayed or totally avoided due to lack of money. Library users are therefore denied access to materials because the library's budget is inadequate. This also could be considered inadvertent censorship. Although librarians have responded with resource sharing, networking, and information referral services, these methods may not be adequate to avoid censorship or guarantee access to information.

Another form of inadvertent censorship has been alluded to earlier in this article. Quality of service is at the heart of ethics and is especially important when dealing with new technologies. Physicians and biomedical researchers rely heavily on the online search analyst to perform MEDLINE searches. Despite the impact of end-user searching, described later, health care personnel continue to request mediated computer searches on MEDLINE and other online databases. The search analyst must conduct a reference interview, formulate the search utilizing Medical Subject Headings (MeSH) or appropriate terminology, and make decisions on terms to exclude or how to narrow a search. As more fully described in an earlier article (Wood & Renford, 1982), "quality, or lack of quality, in computer search services can be considered a form of censorship" (p. 83) and, as discussed later, could involve malpractice. In the past, library users have tended to accept what the computer says as final. However, as health sciences personnel become more computer literate and as more users begin doing their own searching, the limitations

of computer searching may become evident. It is possible to retrieve information from a computer only if the information was input into the computer. The possibility exists for human error (or incompetence) on both ends of the process.

END-USER SEARCHING

Perhaps the biggest influence on reference librarians in the 1980s was the introduction of end-user searching. (End-users are those individuals who do their own searching rather than relying on a search intermediary.) This has resulted in a changed role for the reference librarian. Increasingly, health sciences librarians are functioning as information consultants and educators (Schwartz, 1987). Initially, many librarians experienced conflict when asked to train nonlibrarians to search because they feared that their role as online search analysts would become extinct. It is now obvious that there is room for both search analysts and end-users, but a major ethical question remains: are the end-users really getting what they want? From the beginning, reference librarians were concerned with whether end-users would find what they needed—would they do “good searches” (Wykoff, 1985, p. 57)? With the advent of CD-ROM technology, end-user searching has exploded. Plutchak (1989) describes the “satisfied and inept end user” (p. 45), who is totally happy with the results, but has in fact run a rather poor search with little retrieval. This situation may be more common than might originally have been suspected for two reasons. First, it has been shown that people will accept a response generated by computer in preference to the same result from a reference librarian, and second, people have difficulty admitting their inadequacies—i.e., that perhaps they did not input the correct terms. Users will accept a zero retrieval for a search run on CD-ROM MEDLINE because the “computer said there was nothing,” although in fact the results were due to a typographical error or incorrect input.

It could be argued that this situation is not any different from those who search the card catalog or a printed index and do not find what they want. The difference, however, is the technology. Library users who search manually for information and cannot find it, tend to blame themselves. Library users are now looking at “the computer as an information panacea,...the ultimate solution in providing information” (Kibirige, 1988, p. 377). This places more responsibility on the librarian to educate the end-user about database content and how to search databases.

Computerized information sources, whether CD-ROM, OPAC (Online Public Access Catalog), or online bibliographic database, are not always the first choice for finding information. For example,

certain factual information is more easily found in a printed directory. Even if the client comes to the library with the belief that the answer will be found in a computer database, it is wrong to direct the client to the CD-ROM terminal without explaining that the answer could be found faster and easier in a printed directory. The decision to use a print versus an online resource may also be an economic one.

LIABILITY

Although liability is an issue that has concerned information professionals in recent years, there seems to still be some debate as to "whether it is a valid concern" (Pritchard & Quigley, 1989, p. 57). Information professionals, whether librarians or independent information brokers, are beginning to realize that the possibility of being sued for malpractice is real. The lack of formalized standards does not protect the information professional from liability (p. 58). Pritchard and Quigley (1989) go on to define "two types of negligence that can lead to liability for the information professional: parameter negligence—you neglected to consult the correct source [and] omission negligence—you consulted the correct source, but failed to locate the correct answer(s)" (p. 60). Because of the technical nature of the information and the fact that it is frequently intended for patient care, health sciences librarians especially must assess liability risks. Rainey (1988) has commented on the liability concerns of providing drug information. The liability of librarians in providing LATCH (Literature Attached To CHart) service has not yet been determined (Babish & Warner, 1983). Gray (1989) concludes that "health sciences librarians do face potential liability for the negligent provision of information that results in physical injury to others" (p. 36). Although this has yet to be tested in court, librarians should develop disclaimers as part of their responsibility as information professionals (Allen, 1982, p. 43). Librarians and other information professionals must consider the need to take out malpractice insurance.

CONCLUSION

Although some of the circumstances described in this article are unique to health sciences librarians, in many cases the ethical concerns are the same as those shared by other information professionals. Ethics is inextricably linked with professionalism, and with professionalism comes "the willingness to assume responsibility for one's actions" (Hauptman, 1979, p. 199). Librarianship may not be a "profession" in the sense of medicine or law, but the ethical values that librarians hold, whether personal (societal) or professional (stated in a formal

code of ethics), go a long way toward the provision of quality unbiased information.

ACKNOWLEDGMENTS

The author would like to thank the following for their editorial comments: Diane Schwartz, University of Michigan, Ann Arbor, Michigan; Suzanne Shultz, Polyclinic Medical Center, Harrisburg, Pennsylvania; Virginia Lingle, Hershey Medical Center, Pennsylvania State University, Hershey, Pennsylvania; and Nancy Hewison, Purdue University, West Lafayette, Indiana.

REFERENCES

- Allen, L. S. (1982). Legal and ethical considerations in providing health information. In A. M. Rees (Ed.), *Developing consumer health information services* (pp. 42-48). New York: Bowker.
- American Library Association. Committee on Professional Ethics. (1981). Statement on professional ethics 1981. *American Libraries*, 12(June), 335.
- American Library Association. Reference and Adult Services Division. Standards Committee. (1979). A commitment to information services: Developmental guidelines. *RQ*, 18(3), 275-278.
- Babish, J. M., & Warner, E. R. (1983). LATCH: Initiating a program and addressing legal concerns. *Medical Reference Services Quarterly*, 2(2), 17-30.
- California Library Association. Committee on Professional Ethics. (1978). Draft statement of professional responsibility for librarians. *California Librarian*, 39(January), 35-38.
- Crawford, H. (1978). In search of an ethic of medical librarianship. *Bulletin of the Medical Library Association*, 66(3), 331-337.
- Crowe, L., & Anthes, S. H. (1988). The academic librarian and information technology: Ethical issues. *College & Research Libraries*, 49(20), 123-130.
- Eakin, D.; Jackson, S. L.; & Hannigan, G. G. (1980). Consumer health information: Libraries as partners. *Bulletin of the Medical Library Association*, 68(2), 220-229.
- Gartenfeld, E. (1978). The community health information network. *Library Journal*, 103(October 1), 1911-1914.
- Goodchild, E. Y.; Furman, J. A.; Addison, B. L.; & Umbarger, H. N. (1978). The CHIPS project: A health information network to serve the consumer. *Bulletin of the Medical Library Association*, 66(4), 432-436.
- Gray, J. A. (1989). The health sciences librarian's exposure to malpractice liability because of negligent provision of information. *Bulletin of the Medical Library Association*, 77(1), 33-37.
- Hauptman, R. (1976). Professionalism or culpability? An experiment in ethics. *Wilson Library Bulletin*, 50(8), 626-627.
- Hauptman, R. (1979). Ethical commitment and the professions. *Catholic Library World*, 51(5), 196-199.
- Jeuell, C. A.; Francisco, C. B.; & Port, J. S. (1977). Brief survey of public information services at privately-supported medical school libraries: Comparisons with publicly-supported medical school libraries. *Bulletin of the Medical Library Association*, 65(2), 292-294.
- Judkins, D. Z.; Hewison, N. S.; MacWilliams, S. E.; Olson-Urlic, C.; & Teich, S. (1986). Standards for reference services in health sciences libraries: The reference product. *Medical Reference Services Quarterly*, 5(3), 35-49.
- Kibirige, H. M. (1988). Computer-assisted reference services: What the computer will not do. *RQ*, 27(3), 377-383.
- Lewis, R. F. (1970). Readers' services. Part I. Reference. In G. L. Annan & J. W. Felter (Eds.), *Handbook of medical library practice* (3d ed.) (pp. 153-176). Chicago, IL: Medical Library Association.

- Matheson, N. W., & Cooper, J. A. D. (1982). Academic information in the academic health sciences center: Roles for the library in information management. *Journal of Medical Education*, 57(10, Part 2), 1-93.
- McClure, L. W. (1982). Reference services: Policies and practices. In L. Darling (Ed.), *Handbook of medical library practice* (4th ed.) (Vol. 1, pp. 137-181). Chicago, IL: Medical Library Association.
- Mika, J. J., & Shuman, B. A. (1988). Legal issues affecting libraries and librarians. Employment law, liability & insurance, contracts, and problem patrons. *American Libraries*, 19(4), 314-317.
- Murray, J. A. H. (Ed.). (1933). *Oxford English Dictionary, Vol. III* (p. 312). Oxford: Clarendon Press.
- Peterson, K. G. (1983). Ethics in academic librarianship: The need for values. *Journal of Academic Librarianship*, 9(3), 132-137.
- Plutchak, T. S. (1989). On the satisfied and inept end user. *Medical Reference Services Quarterly*, 8(1), 45-48.
- Pritchard, T., & Quigley, M. (1989). The information specialist: A malpractice risk analysis. *Online*, 13(3), 57-62.
- Rainey, N. B. (1988). Ethical principles and liability risks in providing drug information. *Medical Reference Services Quarterly*, 7(3), 59-67.
- Schwartz, D. G. (1987). New roles for the medical librarian in an information management environment. *Medical Reference Services Quarterly*, 6(4), 27-33.
- Schwartz, D. G., & Eakin, D. (1986). Reference service standards, performance criteria, and evaluation. *Journal of Academic Librarianship*, 12(1), 4-8.
- Shaver, D. B.; Hewison, N. S.; & Wykoff, L. W. (1985). Ethics for online intermediaries. *Special Libraries*, 76(4), 238-245.
- Shedlock, J. (1988). Defining the quality of medical reference service. *Medical Reference Services Quarterly*, 7(1), 49-53.
- Stover, M. (1987). Confidentiality and privacy in reference service. *RQ*, 27(2), 240-244.
- Webster's third new international dictionary of the English language, Unabridged edition.* (1965, c1961). Springfield, MA: Merriam.
- White, H. S. (1990). My truths are more moral than your biases. *Library Journal*, 115(1), 72-73.
- Wood, M. S., & Renford, B. L. (1982). Ethical aspects of medical reference. In B. Katz & R. A. Fraley (Eds.), *Ethics and reference services* (pp. 75-87). New York: Haworth Press.
- Wykoff, L. W. (1985). Teaching patrons to search. *Medical Reference Services Quarterly*, 4(2), 57-61.