

Hur läkare skriver ut läkemedel

Introduktion till en artikel av Paul D. Stolley och Louis Lasagna

Läkarnas receptskrivningsvanor har blivit föremål för ett växande intresse i Storbritannien och USA. Det sammanhänger med tillkomsten av alla nya droger, dessas vidsträckta användning och kraftiga verkningar, med den ökade kunskapen om biverkningarna på kort och lång sikt och med en ökad uppmärksamhet beträffande läkemedelskostnaderna. Vi har hittills haft tre huvudkällor till informationen om dessa läkarnas receptskrivningsvanor: uppgifter om olika reklamfirmors forskning, studier av allmänpraktikernas receptskrivningsvanor och studier av receptskrivningsvanor på sjukhus.

Nedanstående artikel sammanfattar de principiella och huvudsakliga resultaten av denna forskning. Artikeln är skriven av Paul D. Stolley, Assistant Professor, Department of Medical Care and Hospitals, School of Hygiene and Public Health och Louis Lasagna, Associate Professor, Departments of Medicine and Pharmacology, School of Medicine. Båda författarna arbetar vid Johns Hopkins University, Baltimore, Maryland, USA.

I artikeln refereras bl.a. en nyligen framlagd federal amerikansk rapport, där man studerat läkemedelsförbrukningen bland äldre människor i avsikt att bestämma det läkemedelsbehov, som det amerikanska medicareprogrammet kan kräva.

Denna offentliga utredning har uppskattat antalet nytillkomna läkemedel i USA 1957—1968 till 2.131. 15 % av dessa betecknade som "betydelsefulla nyheter", 70 % som produkter, innehållande två eller tre äldre läkemedel i nya kombinationer och återstående 15 % som huvudsakligen kopior eller mindre modifieringar av tidigare existerande produkter.

Utredningens arbete mynnade ut i en kritik av de receptskrivningsvanor, som man kunnat konstatera. Som särskilt betänkliga fenomen utpekades bl. a.:

- användningen av läkemedel utan påvisad effektivitet,
- användningen av läkemedel, innebärande vissa risker, utan att sjukdomens allvar krävt dessa läkemedel,
- användningen av läkemedel i inadekvata doser under en inadekvat period.

Som orsaker till dessa och andra brister i läkemedelsförskrivningens kvalitet framhölls bl. a.:

- otillräcklig grundläggande läkarutbildning beträffande praktiskt-kliniskt arbete med läkemedel,
- otillräcklig tillgång på objektiv information om läkemedelsegenskaper och läkemedelskostnader.

Författarna till nedanstående artikel kommenterar, att vi vet alltför lite om vad som bestämmer läkarnas receptskrivningsvanor. Vilka faktorer medför att läkaren tar upp ett nytt läkemedel respektive fortsätter att använda ett gammalt? Varför skrivs vissa läkemedel ut med förhoppningen att det skall ge en farmakologisk verkan, som de definitivt inte har (exempel på detta är t.ex. användningen av vissa vitaminpreparat)? Varför användes olika antibiotika fortfarande av ett stort antal läkare för helt triviala infektioner? Varför behåller vissa kombinationer av antibiotika sin popularitet fast de flesta experter vänder sig mot deras användning?

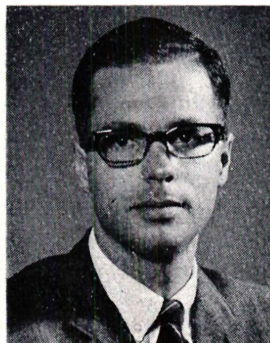
För att dessa och liknande frågor skall kunna effektivt belysas behövs en tvärvetenskaplig forskning av socialmedicinare, farmakologer och samhällsvetare. En epidemiologisk studie inriktad på att beskriva läkarens receptskrivningsvanor och patienters läkemedelsvanor skulle vara ett första steg i varje land, där läkemedelskonsumtionen tenderar att tilltaga.

Enligt en tidigare undersökning skall ungefär hälften av de patienter, som söker en allmänpraktiker inte få någon definitiv diagnos vid första besöket. När man under sådana omständigheter skriver ut läkemedel sker detta rimligen på bas av "intuition" eller "på en balans av sannolikhet och erfarenhet, snarare än på en faktisk säkerhet". I detta fallet är det lika viktigt att den symptomatiska hjälpen sker med den säkraste drogen som att den sker med den mest effektiva.

Karl Evang, Norges hälsodirektör, har formulerat problemet sålunda:

"Vi (läkarna) är, vad läkemedel beträffar, i en övergångsperiod mellan magi och naturvetenskap och vi kan inte gärna rida på dessa hästar på en gång utan att allvarligt skada den vetenskapliga bas, på vilken vi bygger. Om ett läkemedel skrivs ut bara för att något skall ske, om man ger placebopreparat, är det minsta vi kan begära av doktorn, att han gör detta avsiktligt, som en planerad medveten och förnuftig del av behandlingen, baserad på en uppskattning av patientens totala situation Vår uppgift är därför att försöka på ett riktigt sätt kanalisera de utomordentligt mäktiga krafter, som har introducerats och som dels är av en ekonomisk, dels av en medicinsk och dels av en psykologisk natur, utan att på något sätt hindra den fortsatta utvecklingen".

How Physicians Prescribe Drugs*



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Introduction

The prescribing patterns of physicians has become a subject of increasing interest in the United King-

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dom and the United States because of the recent proliferation of new drugs, their widespread use and powerful actions, the increasing recognition of immediate and delayed adverse effects and the increasing concern about the cost of drugs. There are three main sources of our current information about the prescribing patterns of physicians: marketing research data, studies of prescribing in community practice, and studies of prescribing in hospitals.

Information Collected by Marketing Research Firms

Most of the current data about the prescribing patterns of physicians in private practice is collected by marketing research firms which then sell the analyzed information to drug manufacturers and advertising agencies handling drug accounts or supply it to researchers in academic institutions. Very elaborate and extensive "surveillance systems" or monitoring programs have been established by these firms using sophisticated automatic data processing equipment.

In an attempt to obtain a sample of the prescriptions of United States physicians from all geographic regions, all specialties and all age groups, one of the largest of the marketing research firms uses the case-record diary technique. During a two-day period the physician records information about all patient contacts made by him in his practice. During a year's time a quarter million drug prescriptions are collected in this manner and related to patient characteristics (age, sex), diagnosis, and physician characteristics (type of practice, location of practice).¹ In addition to collecting information directly from the physician, the marketing research firms sample prescriptions presented to pharmacies by patients. The information so obtained is useful for determining dosage forms, quantity dispensed, physicians' directions as to how often the patient should take the drug, and refill instructions.²

Some marketing research firms keep track of promotional activities of drug firms by means of journals, mail and detail men to try to gauge the effect of these efforts on physicians' prescribing patterns. Lists of physicians known to have high prescribing rates are sold at a premium price to pharmaceutical firms doing drug advertising. Another interesting facet of the marketing research firms' efforts to learn about the physicians' prescribing patterns is their studies of physicians' attitudes or "images" of certain drugs or classes of drugs. Periodic surveys of physicians' attitudes toward oral contraceptives and tranquilizers are conducted by one major firm.

A study of marketing research data can give someone interested in medical care research extremely interesting clues about the ways in which physicians prescribe drugs, the pharmacologic actions they desire in a drug, and the patterns of prescribing for common illnesses.

When analyzed by diagnostic condition, for example, these data indicate that most physicians (about 95 %) will issue one or more prescriptions to a patient whom they diagnose as having the "common cold". Almost 60 % of these prescriptions are for antibiotics, with the tetracyclines and penicillin the most popular choices. Sulfa drugs are also prescribed in significant numbers, and antihistamine-oral decongestant combinations are popular for treatment of the common cold (Table 1).³

If the marketing research data are examined by the *drug* rather than the *diagnostic condition*, interesting patterns of use for certain medications are apparent. Millions of injections of vitamin B₁₂, e.g., are given yearly for a remarkably wide spectrum of diagnostic conditions with the desired pharmacologic action often listed as "placebo", "stimulant", "sedative" or "hematinic" properties.

Another informative way of looking at such marketing data is to examine the instructions for daily use of the drug. One drug manufacturer was able to learn that its "muscle relaxant" was not being prescribed every four hours as the package insert recommended but more commonly as t.i.d.

It would be interesting to discover whether physicians chose this periodicity from force of habit or from clinical observation.

Studies of Prescribing in Community Practice

Most studies of prescribing in community practice have been carried out in the United Kingdom. Martin analyzed a large number of prescriptions issued by practitioners under the National Health Service in the early 1950's. The variables he studied most intensively were: 1) prescriptions, 2) doctors' practices, 3) patients, 4) social conditions, 5) geographical location, and 6) morbidity.⁴ He found striking regional differences in prescribing, a finding confirmed by three other studies.^{5, 6, 7} Certain English towns tended to be high-volume prescribing towns over the years, while other towns had a low-volume pattern. He concluded that "local custom" which "embraces not only attitudes toward illness and medical care but the psycho-

Table 1. Treatment of the Common Cold in the Physicians' Office, October 1967—September 1968.*

Type of Drug	Percentage of Patients† Visiting a Physician Receiving a Prescription and/or Drug
Broad or medium-spectrum antibiotic	31 %
Oral cold preparation (antihistamine and decongestant)	29 %
Penicillin	22 %
Cough preparations	12 %
Cold and cough preparations	11 %
Non-narcotic analgesics	10 %
Topical nasal and ophthalmic preparations	8 %
Sulfonamides	6 %
Antihistamines	5 %
Narcotic analgesics	2 %
All others	13 %

* Data from National Disease and Therapeutic Index based on analysis of 1128 patient visits.³

† Percentage exceeds 100 % because patients may be issued more than 1 prescription.

logical climate within which all prescribing takes place" was the most important determinant of differences in prescribing.

The influence of pharmaceutical mailings, journal advertising, detail men, expert recommendations, the price of drugs and the doctors' impressions of individual pharmaceutical companies upon the prescribing patterns of general practitioners was also studied in the United Kingdom by Wilson and his colleagues, using operational research methods.^{8, 9} They concluded that general practitioners depend to a large extent on consultants' advice about drugs in certain illnesses (such as psychoses and neuroses), while they rely on different sources (journal advertising, promotional mailing, detail men) for other illnesses (such as infections or heart failure). These authors believed that the "personal characteristics" of physicians, such as age, training, specialty and social contacts with other physicians had a considerable (though difficult to measure) effect on prescribing.

Joyce, Last and Weatherall attempted to analyze certain personal factors as the cause of differences in prescribing by general practitioners.¹⁰ They noted that in the English towns studied the differences in prescribing remained stable over many years but within these towns there was considerable variation among doctors. They tried to account for this variation in prescribing behavior. They interviewed in depth a sample of practitioners from three industrial towns, whose prescriptions for a one month period had been studied, to learn about their practices, certain personal characteristics, and attitudes to medical problems. Joyce et al. concluded that the significant factors that seemed to affect differences in prescribing included "quality of practice", "whole-person orientation", and "education".

The Ministry of Health in the United Kingdom explored prescribing trends by analysis of prescriptions submitted to the National Health Service for reimbursement.¹¹ They found no significant differences in prescribing patterns among doctors graduating from different medical schools. Older doctors tended to prescribe less than younger doctors; female doctors issued more prescriptions than

male doctors. The larger the general practitioner's list of patients, the lower his prescribing rate per patient.

A study conducted by the Committee of Enquiry into the Relationship of the Pharmaceutical Industry with the National Health Service ("Sainsbury Report") attempted to estimate the extent to which general practitioners were influenced in their prescribing patterns by promotional materials, journal articles, expert recommendations and other sources of information.¹² The English physicians reported that they highly valued the drug firm detail man as a source of information about new products, but found him a less satisfactory source regarding the new products' efficacy. Heavy reliance of practitioners on information from detail men has been confirmed in several studies in the U.S.^{13, 14} The Physicians Desk Reference, published with the financial backing of the drug industry, has been the main source of prescribing information for American doctors for some years according to a recent survey.¹⁴

Cluff listed six factors he considers the most important influences on the prescribing habits of physicians: the example of a teacher or respected peer, testimonials of colleagues, extrapolation from specific studies, convenience, persuasiveness of promotional efforts by the drug manufacturer and availability of samples.¹⁵ There is a great need for further research in the field of prescribing to identify and measure the relative importance of these and other factors. The eventual success of any efforts at continuing education in therapeutics will depend on a strategy and tactics designed to affect those factors which have the greatest influence on the physician in his choice of drugs.

Studies of Prescribing in Hospitals

In an effort to assure quality and to control drug costs, some hospital medical staffs have become interested in the prescribing patterns of staff physicians. Closed formularies, the encouragement of generic prescribing, and the purchase of generic drugs in large volume and through competitive bids have resulted in savings for certain hospitals. Attempts have been made to measure the "quality"

of prescribing by having a panel of "experts" scrutinize charts using predetermined criteria for the appropriate use of drugs. Muller has pointed out the hazards and tediousness of these methods, but also their usefulness in focusing on variations from predominant prescribing practices which may be of concern to an institution and its medical staff. In her study of four New York City hospitals she noted the existence of such questionable practices as incomplete instructions to the pharmacist; suspected overuse of certain drugs (such as topical medications and vitamins); uncommon dosages; and prescribing of certain drugs judged by "qualified physicians" to be ineffective.¹⁶ Muller also examined the records of ambulatory outpatients in several hospitals and found prescribing differences between the staffs of voluntary and city hospitals.¹⁷

Several studies of antibiotic use in hospitals employing careful review of records suggest that some uses of these agents are difficult to justify.^{18, 19} In an effort to provide continuing education in therapeutics to the hospital staff physicians, some institutions have been distributing "informational letters" concerning appropriate use of drugs. "The Johns Hopkins Drug Letter," regularly reproduced in *The Johns Hopkins Medical Journal*, is one example.²⁰ The object of these letters is to provide information about new drugs within a therapeutic class to facilitate the appropriate choice of an agent, to present the specific indications, and to warn about contraindications or possible adverse reactions.

Studies have reported that adverse drug reactions are a significant cause of hospital admission and, as complications of therapy in the hospital, sometimes increase the length of hospital stay.^{18, 19} There is evidence that some of these adverse reactions would be preventable by more judicious use of drugs, both in community and in hospital practice. Several studies using computer programs are now being conducted in an effort to develop systems for surveillance of drug utilization and adverse drug reactions in hospital settings.^{21, 22}

The United States Department of Health, Education, and Welfare Task Force on Prescription Drugs

Recent release of an Interim Report and Recommendations of the HEW Task Force on Prescription Drugs has resulted in a controversy between the Federal Government and the Drug Industry reminiscent of that which surrounded the famous "Kefauver Hearings" of the early 1960's.²³ The Task Force studied drug utilization among the elderly with the intention of determining the need to provide coverage of prescription drugs outside of institutions for those 65 years and older through the Medicare program. The Task Force developed a Master Drug List of over 400 most commonly prescribed drugs for this age group. A list of the 21 most frequently prescribed drugs is presented in Table 2.²⁴

The Task Force estimated the average market life of a drug from time of introduction to withdrawal from the market to be only five years. The Task Force also attempted to classify the 2,131 new prescription drugs introduced between 1957 and 1968 and considered 15 % of these to be "significant new entities", 70 % to be products containing two or more older drugs in a new combination and the remaining 15 % to be "essentially duplicates or minor modifications of products already in use."²⁵ The Task Force expressed concern over "irrational prescribing" and tried to list the most disturbing forms of this phenomenon: "The use of drugs without demonstrated efficacy.

"The use of drugs with an inherent hazard not justified by the seriousness of the illness.

"The use of drugs in excessive amounts, or for excessive period of time, or inadequate amounts for inadequate periods.

"The use of a costly duplicative or 'me-too' product when an equally effective but less expensive drug is available.

"The use of a costly combination product when equally effective but less expensive drugs are available individually.

"The simultaneous use of two or more drugs

Table 2. The 21 Most Frequently Prescribed Drugs or Drug Combinations for the Elderly in Descending Order.^o

1. Orinase	12. Donnatal
2. Librium	*13. Empirin Compound w/codeine
3. Diuril	†14. Nitroglycerin
4. Indocin	†15. Digitoxin
5. Hydrodiuril	*16. Serpasil
* 6. Lanoxin	17. Diupres
7. Doriden	*18. Raudixin
8. Darvon Compound —65	*19. Purodigin
† 9. Phenobarbital	*20. Seconal sodium
10. Valium	*21. Nembutal
*11. Equanil	

^o Data from Task Force on Prescription Drugs.²⁴

* Dispensed as brand-name drug, although low-cost generic-name product available.

† Dispensed as generic-name drug.

without appropriate consideration for their interaction.

"Multiple prescribing by one or several physicians, for the same patient, of drugs which may be unnecessary, cumulative, interacting or needlessly expensive."²³

The Task Force assigned responsibility for deficiencies in the quality of prescribing to various factors:

"Inadequate training in the clinical application of drug knowledge during the undergraduate medical curriculum.

"Inadequate sources of objective information on both drug properties and drug costs.

"Widespread reliance by prescribers for their continuing education upon the promotional material distributed by drug manufacturers.

"The exceedingly rapid rate of introduction and obsolescence of prescription drug specialties.

"The limited time available to practicing physicians to examine, evaluate, and maintain currency with the claims for both old drugs and newly marketed drugs.

"The constant insistence on the idea that the average physician, with guidance from expert colleagues, does in fact possess the necessary

ability to make scientifically sound judgments in this complicated field."²³

The Need for Further Research

It is clear that further research in the prescribing patterns of physicians is needed to determine the significant variables affecting the doctor's choice of drugs. What are the factors that lead him to adopt a new drug or persist in his use of an older drug? Why are some drugs prescribed with the hope of producing a pharmacologic action which the drug does not possess (as appears to be true of most prescribing of vitamin B₁₂, for example)? Why are chloramphenicol and other antibiotics still prescribed by a significant number of physicians for trivial infections? Why do certain antibiotic combinations retain their popularity while most expert opinion decries their use?

The most fruitful approach in exploring these and similar questions will probably be a multidisciplinary effort by medical care investigators, pharmacologists and behavioral scientists. An "epidemiologic" study, describing the rates of drug prescribing by physicians and the prevalence of drug usage among the community of patients' would be a first step in any country with a rising consumption of drugs.

Macgregor has pointed out that for almost one-half the initial patient visits to general practitioners a definitive diagnosis cannot be made at that visit. He concludes that for the physician prescribing under these circumstances almost half his patients will be given treatment "based on a hunch, on intuition, on the balance of probability and on experience — rather than on established certainty".²⁵ If this estimate is correct, it is important that symptomatic relief be provided with the safest as well as the most efficacious drugs available.

Karl Evang, Director General of Health Services of Norway, has stated the problem succinctly:

We [the medical profession] are, as far as drugs are concerned, in a transitional period between witchcraft and the natural sciences, and we cannot very well ride both these horses at the same time without hurting seriously the very philosophic ba-

sis on which we build. If a drug is being prescribed *ut aliquid fiat*, if placebos are given, the least we can ask from the doctor is that he does it intentionally, as a planned conscious and rational part of his treatment based on an estimation of the total situation of his patient... The task now, therefore, is to channel properly the extraordinarily powerful forces which have been introduced and which are partly of an economic, partly of a medical, and partly of a purely psychological nature without in any way hampering further development.²⁶

Summary

The widespread use of many new and powerful drugs and the increasing recognition of adverse effects has stimulated interest in the manner in which physicians prescribe drugs. The three main sources of information about the prescribing patterns of physicians are marketing research data, studies of general practice and monitoring of prescribing in hospitals. These sources show that prescribing patterns vary greatly among physicians according to their place and type of practice and the community in which they prescribe. The need for further research into the prescribing practices of physicians is stressed and a possible approach to these studies is outlined. Improved information systems for the monitoring of drug consumption is prerequisite to more detailed investigations into physicians' prescribing patterns.

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REFERENCES

1. *Sampling Procedures*. Ambler, Pennsylvania: Lea Associates, Inc. (Mimeographed.)
2. *National Prescription Audit*. 19 pp. Dedham, Massachusetts: R. A. Gosselin and Co., Inc. P. 8. (Mimeographed.)
3. *National Disease and Therapeutic Index, Reference File, Diagnosis: The Common Cold, October 1967—September 1968*. 944 pp. Ambler, Pennsylvania: Lea Associates. Pp. 437—438.
4. *Martin, J. P.* Social Aspects of Prescribing. 180 pp. London: Heinemann Ltd., 1957. Pp. 73—84.
5. *Wilson, C. W. M., Banks, J. A., Mapes, R. E. A., and Korte, S. M. T.* Pattern of prescribing in general practice. *Brit Med. J.* 2: 604—607, 1963.
6. *Lee, J. A. H.* Prescribing and other aspects of general practice in three towns. *Proc. Roy. Soc. Med.* 57: 1041—1047, 1964.
7. *Lee, J. A. H., Draper, P. A., and Weatherall, M.* Primary medical care: prescribing in three English towns. *Milbank Mem. Fund Quart.* 43: 285—290, 1965.
8. *Wilson, C. W. M., Banks, J. A., Mapes, R. E. A., and Korte, S. M. T.* The assessment of prescribing: a study in operational research. In *Problems and Progress in Medical Care: Essays on Current Research*. Edited by G. McLachlan. 368 pp. London: Oxford University Press, 1964, Pp. 173—201.
9. *Wilson, C. W. M., Banks, J. A., Mapes, R. E. A., and Korte, S. M. T.* Influence of different sources of therapeutic information of prescribing by general practitioners. *Brit. Med. J.* 2: 599—604, 1963.
10. *Joyce, C. R. B., Last, J. M., and Weatherall, M.* Personal factors as a cause of differences in prescribing by general practitioners. *Brit. J. Prev. Soc. Med.* 22: 170—177, 1968.
11. *Recent National Health Service Prescribing Trends*. 68 pp. London: Her Majesty's Stationery Office, 1964. (No. 110, Report on Public Health and Medical Subjects.)
12. *Report of the Committee of Enquiry into the Relationship of the Pharmaceutical Industry with the National Health Service. 1965—1967, Chairman: Lord Sainsbury*. 232 pp. London: Her Majesty's Stationery Office, 1967.
13. *Bauer, R. A., and Wortzel, L. H.* Doctor's choice: the physician and his sources of information about drugs. *J. Marketing Res* 3: 40—47, 1966.
14. *Physicians' Attitudes Toward Drug Compendia*. 47 pp. A National Survey Sponsored by Pharmaceutical Manufacturers Association, Opinion Research Corporation. Princeton, New Jersey: Pharmaceutical Manufacturers Association, 1969.

15. Cluff, L. E. The prescribing habits of physicians. *Hosp. Pract.* 2 : 100—104, 1967.
16. Muller, C. Medical review of prescribing. *J. Chron. Dis.* 18 : 689—696, 1965.
17. Muller, C. Outpatient drug prescribing related to clinic utilization in four New York City hospitals. *Health Services Res.* 3 : 142—154, 1968.
18. Seidl, L. G., Thornton, G. F., Smith, J. W., and Cluff, L. E. Studies on epidemiology of adverse drug reactions : III. Reactions in patients on general medical service. *Bull. Johns Hopkins Hosp.* 119 : 299—315, 1966.
19. Ogilvie, R. I., and Ruedy, J. Adverse drug reactions during hospitalization. *Cand. Med. Assoc. J.* 97 : 1450—1457, 1967.
20. *The Drug Letter.* Johns Hopkins Hospital. Issued by the Committee on Pharmacy and Therapeutics. Baltimore, Maryland.
21. Stone, D., Gaetano, L. F., Lipworth, L., Shapiro, S., Lewis, G. P., and Jick, H. Computer analysis of epidemiologic data on effect of drugs on hospital patients. *Public Health Rep.* 84 : 39—52, 1969.
22. Koch-Weser, J., Sidel, V. W., Sweet, R. H., Kanarek, P., and Eaton, A. E. Factors determining physician reporting of adverse drug reactions. *New Eng. J. Med.* 280 : 20—26, 1969.
23. United States Department of Health, Education, and Welfare, Public Health Service, Office of the Secretary. *Task Force on Prescription Drugs: Second Interim Report and Recommendations.* 110 pp. Washington, D. C. : Government Printing Office, August 30, 1968. (Publication No. 0—316—291.)
24. United States Department of Health, Education, and Welfare, Public Health Service, Office of the Secretary. *Task Force on Prescription Drugs, Background Papers: The Drug Users.* 145 pp. Washington, D. C. : Government Printing Office, 1968. (Publication No. 0—321—334.) P. 32.
25. Macgregor, A. Drugs and the doctor. *Scottish Med. J.* 8 : 41—52, 1963.
26. Evang, K. *Health Service, Society and Medicine.* 171 pp. London : Oxford University Press, 1960. Pp. 125—130.

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