# The (Re) Arrangement of Hospital Consultation Services: A Needs Assessment Study: Scientific Letter

Hastane Konsültasyon Hizmetlerinin Yeniden Düzenlenmesi: Bir Gereksinim Belirleme Çalışması

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Yazışma Adresi/Correspondence: Hatice ŞAHİN, MD Ege University, Faculty of Medicine, Department of Medical Education, İzmir, TÜRKİYE/TURKEY hatice.sahin@ege.edu.tr **ABSTRACT Objective:** The aim of this paper is to determine the problems regarding consultation services and to give information about the process of related directive preparation. **Material and Methods:** A structured form, which includes six variables concerning the assignment of consulting physicians, consulting skills and knowledge, follow-up and evaluation, problems, solutions and recommendations for good quality consultation services, was used in-depth interviews. **Results:** Consultation knowledge and skills were obtained through master-apprentice relationship. The clinics did not follow-up or evaluate the consultation. There was no cooperation and communication between physicians. Feedback to the consultation was not timely and consultations were left to night shifts. **Conclusion:** Constructed consultation written request and consultation directive will be effective positively as far as quality of patient care is concerned. It is expected that medical errors could be reduced by the way of follow-up and evaluation of the consultation process.

Key Words: Consultation, hospital administration, hospital legislation, needs assessment

ÖZET Amaç: Bu yazının amacı; konsültasyon hizmetleri ile ilgili sorunların saptanması ve ilgili yönergenin hazırlık süreci ile ilgili bilgi vermektir. Gereç ve Yöntemler: Konsültan hekimin belirlenmesi, konsültasyon bilgi ve becerisi, izlenmesi ve değerlendirilmesi, sorunlar, çözümleri ve kaliteli konsültasyon hizmeti için öneriler olmak üzere altı değişkeni içeren yapılandırılmış bir form derinlemesine görüşmeler için kullanılmıştır. Bulgular: Konsültasyon bilgi ve becerisi usta çırak ilişkisi ile öğrenilmektedir. Klinikler konsültasyonları izlememekte ve değerlendirmemektedir. Hekimler arasında iş birliği ve iletişim yoktur. Konsültasyonlara zamanında yanıt verilmemekte ve gece nöbetlerine kalmaktadır. Sonuç: Yapılandırılmış konsültasyon formunun ve konsültasyon yönergesinin kaliteli hasta hizmetine olumlu etkisi olacaktır. Konsültasyon sürecin izlenmesi ve değerlendirilmesi ile tibbi hataların azalması beklenmektedir.

Anahtar Kelimeler: Konsültasyon, hastane yönetmeliği, gereksinim belirleme, hastaneye başvuru

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onsultation is a physician meeting with another physician or physicians to discuss or to seek advice on the diagnosis and treatment of a patient and therefore consultation service is one of the indispensible services of a hospital. Hospital consultation services are classified as routine and urgent consultations. The fact that the consultation services should be carried out punctually is very important for both inpatients and outpatients. Literature review revealed some important issues concerning consultation services. <sup>1-4</sup> Consultation services are carried out by the coope-

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ration of referring and consulting physicians. Communication between referring physicians and consulting physicians has a special and different meaning. The other important point regarding consultation services is timing. Responding consultation within a reasonable time increases the quality and effectiveness of the consultation services. Thus, urgent consultations should be answered within 30 minutes after receiving the request. For consultations to be answered back within a shorter time, pager system in a hospital is necessary. Certain solutions are searched by defining certain problems concerning consultation services. These problems can be prevented by defining the responsibilities of referring and consulting physicians and the process of consultation. This way consultation services would be carried out effectively and in a standard way.

Ege University Hospital has 1811 beds and 4368 staff members. Ege University Hospital, which is the largest hospital of the Balkans, has modern diagnostic and treatment facilities and contemporary outpatient and inpatient clinics. The hospital has 579.785 outpatients and 49.450 inpatients annually.

The large capacity of the hospital may lead to problems regarding consultation services. A study has been carried out since early 2007 to reduce the problems associated with consultations and to increase the quality of consultation services. The main purpose of the consultation study group was to determine the problems that required solutions (needs assessment study), to prepare a directive and to put it into practice.

The aim of this paper was to determine the problems regarding consultation services, to describe the process of preparing the related directive and to present suggestions for the integration of consultation services in residency training.

## MATERIAL AND METHODS

The needs assessment study was designed as a qualitative study. Since quantitative data obtained with a survey has limited contribution to the solution of the problems, the design of the research was qualitative. We conducted in-depth interviews

with the physicians providing consultation services; the qualitative data that were difficult to express in numbers were reported in the results section with the physicians' very own statements. This study was conducted in March 2007 in the Ege University Hospital. All clinics providing consultation services (16 clinics) participated in the indepth interview about consultation services in our hospital.

Data regarding consultation services were gathered with in-depth interviews with consulting physicians. A structured form was used for the interviews. When consultant physicians were interviewed with this form, they were given an opportunity to express their views in-depth. This was not a survey form and it was used to obtain qualitative rather than quantitative data. The questions in the form involved, 1) how the consulting physician was determined; 2) whether the consulting physicians were trained for carrying out consultation services before being assigned for the task; 3, whether consultation services were followedup by departments; 4) the most common problems encountered during consultation services; 5) recommendations for qualified consultation services in the hospital. During this in-depth interview, answers to the questions and all the other opinions of consulting physicians were recorded as written. All the consulting physicians were informed about the interview and informed consents were taken. As in other qualitative analyses, the thematic analysis was used for the analysis of the data obtained by using the structured form. All the opinions expressed by the physicians were written down and then were read three times by the research team. Key words stating the main ideas of these opinions were determined and then they were categorized. Sample transcript statements were chosen among the physicians' statements that express the categorized situations, and they were given in the results section of this paper for better understanding of consultation services.

## RESULTS

Sixteen clinics giving consultation services in the hospital participated in the interview. Those physi-

cians who conducted the consultation services in the clinics were particularly asked to take part in the interviews. From some clinics such as internal medicine, more than one physician participated in the interviews. Findings according to the themes were presented as follows with the selected sentences.

#### A. CONSULTING PHYSICIAN

Consulting physicians gave various answers to the question how they were assigned. The procedure used for the assignment of consulting physicians differed among clinics. While in some clinics, specialists were responsible for consultation in others residents carried on the consultation services. Some specialists responsible for consultation had additional duties in their own clinics. The residents could be assigned to consultation services when they became seniors.

"In our department, consultation services are carried out by specialists. I have been a consulting physician for 4-5 years continuously. In the previous years, specialists took turns as consulting physician every 3 months. It seems like that I'll be the one responsible for this service from now on" (physician 4)

"In our clinic, residents are consulting physicians for general issues, whereas specialists serve as consulting physicians for topics regarding sub-specialties" (physician 2)

"Throughout residency, we serve as a consulting physician several times each lasting 2 months" (physician 3)

"In our clinic, consultation services are carried out by residents rotating monthly" (physician 5)

The way consulting physicians are assigned, which changes among clinics, affects consultation services, physicians' skills and continuity and quality of consultation services. If a non-senior resident is assigned for consultation and needs expert opinion about an issue, the consultation process takes longer time. A resident is a trainee and is not allowed to make his/her own decision about the case that is consulted. He/she is not adequately trained for situations that need additional expertise; however, residents can learn how to give consultation

services with the assistance of a specialist. Training of physicians who will carry out the consultation services becomes inevitable when the quality and effectiveness of the consultation services are considered. A resident working together with a specialist for consultation is a good opportunity for the learning experience regarding consultation services.

The duration of consultation services for a specific person in clinics differed; while in some clinics, only one consulting physician carried out consultation services continuously, in others consulting physician changed every 3 months. Another practice was to change the physician daily.

"Specialists are assigned for consultation services and I have been carrying out this task for five and a half years continuously" (physician 16)

"....the person on duty in the wards is responsible for consultations" (physician 6)

The important point in this was not the working hours of the consulting physicians, but the accessibility of the consulting physicians and the continuity and effectiveness of consultation services. Uninterrupted consultation services provide efficacy and follow-up of consultation process. Daily changing physicians usually worked in clinics with many sub-specializations and group night shifts. The major problem in this situation was that the required consultation was not related to the study field of the group responsible for the consultation on that specific day. In such a case, consultation was not attended within a reasonable time (group effect). As a result, continuity of the consultation service could not be provided.

### **B. CONSULTATION KNOWLEDGE AND SKILLS**

Consulting physicians were asked whether they obtained or were provided by any knowledge on how they would carry out consultation services. All physicians stated that they were not informed on this issue. However, they stated that they had some knowledge on consultation services in a manner of master-apprentice relationships in the hierarchy of the clinic. Only one physician reported attempts to learn how to do consultation by reading the sources regarding consultation services.

I did not participate in any training programs on consultation services. There is no such program in our clinic" (physician 10)

I did not receive full information; it is generally learned through master-apprentice relationships" (physician 2)

"Generally, people learn this from the senior staff. Sometimes we take the opinions of the senior staff members" (physician 5)

"Night shifts during the first 3 months of residency are accompanied by senior residents or specialists. The consultation procedure is taught during that time. Diverse cases are taught via master-apprentice relationships as time passes" (physician 6)

"I have received information about consultation skills during my residency training (at another university hospital). Here, I am not given any information whatsoever. I carry out this task by skills I gained before" (physician 4)

"Yes, I am informed. During Clinical Liaison Psychiatry rotation, each resident receives this information" (physician 8)

"When I was told to carry out consultation services, I read some textbooks concerning preoperative evaluation and consultations in Internal Medicine. Moreover, I asked my experienced colleagues about some topics and procedures" (physician 12)

Consultation service is an important service. The physicians who will be responsible for consultation services should be trained in a standard way. <sup>5,6</sup> At the end of this training, practice of consultation services and basic principles of this practice in the institution and responsibilities of the physicians are learned. Otherwise, consultation services will be individualized and could not be controlled leading to inefficiency.

### C. FOLLOW-UP AND EVALUATION OF CONSULTATION SERVICES

When consulting physicians were asked whether consultation services were followed-up or evaluated in their clinics, they reported that there was no control system for consultation services; however, they informed the chief of their departments when there was a problem.

"No follow-up or evaluation is done regarding consultation services given by our clinic" (physician 2)

"I have no idea whether follow-up or evaluation is done, but I willingly carry out this task" (physician 4)

"Generally I consult related staff members about problematic and different cases, no followup and evaluation meetings are performed routinely" (physician 5)

"A staff member, responsible for outpatient services, evaluates consulted cases daily, but no general meeting is carried out" (physician 3)

"Yes, follow- up and evaluation are carried out. Once a week, a meeting is organized to evaluate all the consulted ward patients. Supervision is given to consult outpatient cases. In addition, round meetings are organized once a week" (physician 8)

Consultation services should be followed-up and evaluated. This requires a follow-up and evaluation mechanism carried out by clinics and the hospital management. Thus, the dynamics of clinics could be followed-up better and problems could be established and solved more easily.

#### D. PROBLEMS

The following were the main problems in consultation services expressed by consulting physicians: 1) there was no standardized written consultation request; instead, a piece of paper was used for consultation requests most of the time. Written requests were illegible, and nonstandardized abbreviations were used in the text. Medical records of the patients consulted were not properly filled-out. The consulted patient could not be found in his/her bed. Sometimes consultation was performed verbally by individual efforts. 2) Consultation requests were not answered back punctually because of the group effect leading to different consultation practices, the absence of a pager system, lack of triage to differentiate urgent or routine consultation requests, physical structure of the hospital (each clinic in different buildings), and coded doors. 3) Some consultation requests were answered during night shifts

because of the senior staff (faculty member) factor and this led to an increase in workload in the night shift. Senior staff members were not assigned to consultation services in clinics. Lack of communication between referring physician and consulting physician was another problem encountered during consultation services.

"The fact that consultation requests are not detailed, informative and proper is the leading problem. I missed consultation requests with nonstandardized abbreviations; in other words, they were not universal. If the consultation was requested in the morning hours, consultation was likely to be answered back in time" (physician 4)

"The reason of the consultation should be written on the request form clearly. Incomprehensible abbreviations were used" (physician 7)

"Most common problems to my opinion are unnecessary consultation requests, waste of time due to such consultations and communication problems" (physician 2)

"Consultation requests are not read easily. Some consultation requests include only the name of the patient and no detailed information regarding the patient and his/her illness. Most of the time, the reason of the consultation request is not written. Some physicians are used to make a request in an inappropriate way" (physician 5)

"The name of the ward in which patients stay and the number of the room are not written on the request form. Urgent consultation requests are not realistic most of the time. Patients who can walk are asked to be consulted in their wards" (physician 6)

Consultation request forms that do not include the reason of the consultation were the most common problem. In the case that a referring physician did not write the reason of consultation clearly, and the consulting physician did not communicate with the referring physician, consulting physicians just performed physical examination and ended the consultation without discussing the main problem with the patient. Due to the horizontal construction of our hospital, the clinics are far from each other and those who do not have authorized pass-cards cannot pass through the coded

doors after certain hours of the day, which is a major obstacle for consulting physicians to enter another clinic. Because of the hospital costs in surgery departments, the patient is prepared for surgery on an outpatient basis and is admitted to the hospital as an inpatient the night before the operation. Thus, the request for preoperative consultation is done during the night shift. Elective preoperative consultation of the patient during the night shift increases the workload of the consulting physician on night shift. In the case that such requests are not answered, a hierarchic problem develops between junior and senior staff members. When follow-up and evaluation of consultations are accomplished, most of these problems will be solved.

#### E. THE SOLUTIONS

When the physicians were asked what they did when a problem regarding consultation services arose, they reported that they solved the problem by their individual efforts.

"We try to arrange matters by communication. First, referring physicians should examine the patient and then if necessary they should ask for consultation. If consultation requests are made at a designated time of the day, consultation services will be carried out more effectively" (physician 1)

"Generally I try to solve the problems by way of personal communication" (physician 2)

"I try to solve the problems by individual efforts and by communicating with clinics in which problems occur" (physician 4)

"Generally I solve the problems by my individual efforts and my friendship relationships. If necessary, I inform my senior staff" (physician 5)

"We inform the clinic or referring physician via telephone or we communicate with referring physician in person. We give information about the problem to the chief of the department. These are the most common ways of solutions" (physician 6)

"Speaking with the referring physician in person!" (physician 8)

"Instead of facing the same problem again and again, I prefer to go to the ward and consult the pa-

tient again and make recommendations on the written request form" (physician 10)

"We get into action together with the senior staff" (physician 3)

When the individual efforts were insufficient, informing the chief of the department was another solution. Some consulting physicians said that they did not try to find any solution to the problems and did not spend any effort on this; this was worrying.

"I do not make anything for solution; I think that it's always been this way and it always will be" (physician 11)

#### F. GOOD QUALITY SERVICE RECOMMENDATIONS

Physicians were asked to list their recommendations for the improvement of consultation services. These recommendations were as follows. The consultation process should be standardized starting from the requesting stage to consulting of the referred patient. Responsibilities of the consulting physicians should be determined and declared. Residents should learn how to do consultation by accompanying senior staff during their residency training. The purpose of the consultation request should be written clearly. Communication information should be announced for the transmission of the consultation request to the consulting physician. For the communication between the physicians, pager system can be a good choice. Assignment of faculty members will allow follow-up and evaluation of consultation services in their clinics. Improvement of communication between physicians could be another solution to the problems. Physicians stated that all these recommendations were important to supply good quality health services.

"First of all, referring physician should examine the patient and then if he/she thinks that the patient has a problem regarding chest diseases, he/she should ask for consultation" (physician 1)

"The purposes of the urgent and routine consultations should be known, written requests should be legible and abbreviations should not be used. A sentence such as "I ask you to consult the patient" should not be adequate for consultation requ-

ests. Consultation requests should be delivered to the consulting physicians until a predetermined time; a specific place should be determined in clinics for the delivery of written requests to the consulting physicians. Standards should be known for consultation requests and consulting the referred patient. For internal medicine with many subspecialties, a general internal medicine expert should consult the patient before others" (physician 11)

"There should be a time limit for routine consultation requests. I recommend that there should be a substitute for the consulting physician (nevertheless generally junior staff members-residents are being assigned); purpose of consultation request should be clear; abbreviations should not be used; entrance to the clinics with coded doors should be made easier; the referring physician should attend the consultation instead of a nurse or another health officer" (physician 4)

"Problems with communication should be solved for better service. Date, hour, information about the patient and the name of the referring physician should be legible and complete. My opinion is that senior staff should evaluate the necessity of the consultation request" (physician 2)

"Basic background should be improved. When consultation is requested, we should evaluate the necessity and priority of the consultation. The reason of consultation request should be written clearly, so that true urgent consultation could be handled within a reasonable time. Abbreviations should not be used in written requests" (physician 3)

"When consultations are requested, only if it is necessary will everyone be more comfortable and will the quality of service increase" (physician 5)

"Legible written consultation requests, not using abbreviations, communication of consulting physicians with the referring physician in person, follow-up of repeating consultations, urgent consultation of patients in the emergency department are my recommendations. If the consulting physician is to be late, he/she should call the referring physician and inform him/her. The telephone number of the consulting physicians should be written on request forms" (physician 7)

"Written consultation requests should be delivered to the consulting physician with a signature" (physician 13)

"Residents should be informed and trained" (physician 12)

Problems defined also bring about the recommendations for their solutions. As far as referring and consulting physicians are concerned, interphysician communication is important. Support by the hospital management seems crucial for established consultation processes and the follow-up and evaluation of this process.

## CONCLUSIONS

This needs assessment study was performed to determine the situation regarding consultation services carried out in the Ege University Hospital and to put forward recommendations for the preparation of a directive devoted to the solutions of the problems. The results of this study showed that criteria for the assignment of consulting physicians lacked and there were no fixed working hours. In addition, there were problems during the consultation service process such as the lack of interphysician communication and follow-upevaluation. Another important result was that just one-sided efforts were not enough. To carry out consultation services successfully, they should be a part of the institutional culture. For this, all parts of the process (patient-physician-senior staff member-health worker and manager) should notice the importance of the consultation service and be aware of their responsibilities. Documented process should be provided for owned institution culture.

The literature regarding consultation processes is scarce. Ideal consultation process was defined based on the literature, legal necessities in our country and results of the needs assessment study.<sup>1-8</sup> The comparison of the recent and ideal consultation process was shown in Table 1. The comparison provides some important data regarding further targets of the consultation study group. In order to provide a standard and traceable consultation service in our hospital, a "written consultation request form" and a "consultation directive draft" were prepared by the

consultation study group. The results of this study and related legislations guided us when constructing the written request form and the draft consultation directive. 7,8 The draft consultation directive consists of definitions regarding service, responsibilities of the physicians (referring-consulting physician), process of consultation (Figure 1), follow-up-evaluation and sanctions when the principles of the directive are not applied. The written consultation request form and the draft consultation directive were presented to the hospital management. The hospital management decided that a "written consultation request form" and a "consultation directive" should be used. The approved directive and written request form has been used since April 2008. According to the directive, all clinics were asked to provide the hospital management with the names of the consulting physicians and communication information. The procedure is still in effect and the difference between the present and past years will be assessed in the middle of 2009.

The results of this needs assessment study were used effectively and rapidly for the establishment of a standardized consultation process in our hospital. The integration of consultation services learning into residency training will be another field of this study. Training for consultation services are suggested to take place at the beginning of the residency training within the orientation program. The orientation program still continues to be developed. The residency- training program, which will be revised in 2009 is planned to include training for consultation service skills.

In conclusion, the constructed consultation written request form and the consultation directive are expected to improve the quality of patient care by reducing medical errors through follow-up and evaluation of the consultation process.

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TABLE 1: The comparison of the recent and ideal consultation process.		
Consultation Process	Recent Situation	Ideal Situation
Assignment of consulting physician	Different practices in each clinic,	Specialists
	specialist and/or residents	(residents can work with the specialists
		to learn)
Usage of consultation written request	No standard consultation request,	Forming of copied consultation written
	being written onto cursory papers	request and usage
Urgency of consultation request	No standard consultation written request,	Clarification of whether consultation is
	communication with telephone	urgent or routine
Determination and announcement of	No list, not being determined	Determination of list monthly and
the consulting physicians' list		being announced to hospital
Consultation written request delivery to	No specific way of delivery, being delivered by	Establishment of pager system known
the consulting physician	the way of individual efforts	and used by everyone
Documentation of consulting physicians' reports	No documentation	Documentation of consulting physicians'
		reports
Follow-up and evaluation	No follow-up and evaluation	The evaluation of the documented
		reports by the assigned senior
		staff member for the assessment of
		the consultation process in each clinic
Consultation skills training	Learning by the way of the master-apprentice	Giving information in the residency
	relationship	training as a part of the adaptation program
Legal base of the consultation services	Unknown	Being aware and announcing of the legal
		necessities, construction of consultation
		directive for application

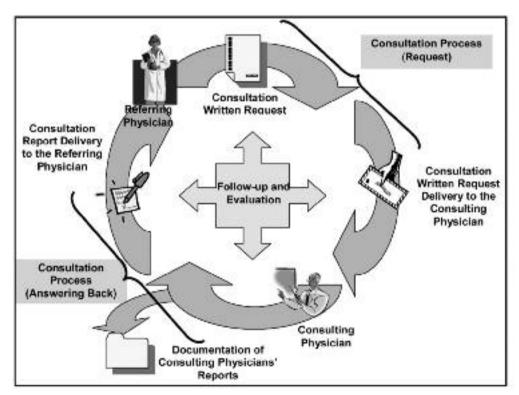


FIGURE 1: Ideal consultation process.

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