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BROADCASTİNG AND INVESTİGATİON ON DEFENSE MEDİCİNE

Menekşe KILIÇARSLAN
Istanbul Aydin University, Health Management Department, meneksevarol69@gmail.com, Istanbul/TURKEY
ORCİD : 0000002-0580-8645

ABSTRACT

Today, the introduction of new concepts and legal regulations for the misuse of medical practices in the Turkish Criminal Code, the consequences of high compensation costs for malpractice cases, negative accusations against physicians through news and social media, increased violence in health Physicians often use defensive medicine to protect themselves.

In this study, it is aimed to compare the levels of defensive medicine practice, the methods they use and the countries in our country and in the world. The scope of the study consists of 6 studies between 1995 and 2016 in the world and 6 studies between 2008 and 2017 in our country. As a method of working, it was determined as a literature search of studies to determine defensive medicine applications in Italy, USA, UK, Japan, UK, Israel and Turkey. As a result of the study, it is observed that the physicians of the positive defensive medicine who have attitudes such as more diagnostic tests and invasive procedures, detailed explanation about the disease procedures, prolongation of follow-up, unnecessary treatment, Physicians are another defensive medicine method, negative defensive medicine applications; Avoidance of risky procedures that could benefit the patient, and risky illness treatment tend to be high. When we look at the percentage of defensive medical practice in our country, it is observed that 78% is over 62% in the world. When we look at the results, it is determined that the similar qualities and application levels of defensive medical practices of our country and the doctors of the world are close to each other.

Keywords: Defensive Medicine 1, Negative Defensive Medicine 2, Positive Defensive Medicine 3, Malpractice 4.

1. INTRODUCTION

Malpractice is a derived word from Latin which is used in the sense of bad or faulty practice that happens when a profession professes. Medical malpractice is defined as the defective and malfunctioning movements of the medical profession which results in damage(Çetin,2006:31). The world health assembly defines medical malpractice; "The fact that an average physician doesn't perform the standard practice that is expected during treatment, doesn't give the necessary treatment with or without intention or any loss caused by lack of knowledge or skill" (Yorulmaz, 2005: 3).

Damages that arise due to malpractice; monetary losses which can be loss of salary, medical and life care costs or physical and psychological distress such as loss of vision, organ or limb or loss of enjoyment of life and severe pain and emotional disorders due to lack of love (Yıldırım vd., 2009: 357).

The introduction of new concepts and legal regulations for medical malpractice errors in the Turkish Penal Code and the resultant high compensation costs of malpractice cases have led physicians to apply defensive medicine. Regional differences have been tried to be solved with these agencies (Bakkal, et. al., 2018:4)

Defensive medicine is defined as applying marginal or medically irrelevant tests procedures and treatment diagnosis in order to decrease negative consequences by persuading patients that medical activities are done from a legal perspective and to discourage patients from malpractice complaints (Aydaş, 2014: 70) or to avoid necessary diagnosis, treatment and procedures.

Factors leading physicians to defensive medicine practice;

1. Claims of negligence in the face of possible undesirable consequences,

2. Complaints of patients or their relatives,
3. Risk of malpractice,
4. Health insurance costs (Teke et al., 2007: 67),
5. Increasing compensation payment rates,
6. Security campaigns encouraging patients to raise their voices,
7. Increasing administrative duties of physicians (Studdert et al., 2015: 2616),
8. Lawyers specializing in health law (Aydas, 2014: 61),
9. Physicians' fear of trial,
10. Broken communication,
11. Performance level,
12. Effect of health policy and health policy,
13. Taking responsibility from physicians,
14. The reputation and desire to be perfect,
15. The effect of media institutions (Selçuk, 2015: 16).

The increase in defensive medicine practices is thought to decrease the quality of health services and impose a burden on total health expenditures (Yilmaz et al., 2014: 45), and it is seen that physicians have moved away from their primary idea purpose that is improving the patients health(Başar et al., 2014: 17).

Defensive medicine applications are divided into two groups as positive defensive medicine and negative defensive medicine (Aktürk,2016). Positive defensive medicine is an act of assurance which is in the form of increasing the procedures to be followed for the patient to show that the physician is out of responsibility and does not have any medical benefit but is doing enough surplus (Yılmaz et al., 2014: 21)

Positive defensive medicine applications; when the physician considers their own legal safety more than they pay attention to their patients benefits by applying medically unnecessary or fairly unnecessary procedures or paying unnecessary attention when applying the standard procedure (Yılmaz vd., 2014: 21).

Positive defensive medicine can be important due to the fact that it enforces a strict patient record keeping, removing the situations such as improper patient intervention and the revelation of an underlying disease due to extra ordered tests (Bergen, 1974: 1189).

There is a significant share of existing and developing technology in defensive medicine applications. The use of diagnostic technology is also thought to enhance physician self-confidence as well as to help determine whether a particular disease is present (Studdert et al., 2015: 2616).

In addition to the positive aspects, it is also associated with increased costs of healthcare related to overuse of diagnostic and therapeutic modalities and complications or unexpected risks of different dimensions arising from the medical practices themselves (Tancredi and Barondess, 1978: 881). The voters involved in the political decision-making mechanism are politicians, bureaucrats, groups violate existing legal religious moral and cultural norms in the society by providing private benefits (Bakkal,et.al.,2018:10).

Defensive medicine applications are similar even though the properties such as the countries health regulation institutions ,physicians branch, working conditions and patients properties vary. (Aydaş, 2014: 77).

Defensive medicine applications;

1.Hospitalization of a patient who does not require hospitalization,

2. Making unnecessary surveys,

3. Making unnecessary imaging studies,

4.Writing of unnecessary drugs,

5.Requesting unnecessary consultations,

6.Making frequent visits,

7.Performing unnecessary surgeries,

8.Detailed record keeping,

9.Excessive care to the satisfaction of patients and their relatives,

10.Excessive care to inform the patient and his / her relatives,

11.To show extreme care to informed proclamations,

12.It can be ordered as a pouring (Selçuk, 2015: 10) which keeps the negativities related to the patient in more detail.

Negative defensive medicine; are defined as the avoidance of certain dangerous medical treatments and procedures that are necessary for the patient due to the anxiety of the physicians protecting from malpractice assertions. (Bergen, 1974: 1189) Negative defensive medicine not only aims to avoid high-risk patients, but also has the belief that it can prevent possible injury and reduce neglect (Aydas, 2014: 79).

The effect of negative defensive medicine on health care costs is very small and the improvement of patient health due to the failure to apply potential beneficial diagnosis or treatment methods may result in below normal consequences (Aydaş, 2014: 83).

Negative defensive medicine applications;

1. Avoidance from risky patients,

2. Avoidance of risky treatment methods,

3. Avoidance of risky examination methods,

4. Avoidance of risky surgical procedures,

5. Do not refer risky patients to another place,

6. Do not scare off the eyes of risky patients with possible side effects,

7. Risky patients should not kidnap other medical institutions,

8. Exaggerate the risk of initiatives to protect patients and their relatives from possible negativity before the initiative (Selçuk, 2015: 13),

9. Avoiding patients who are likely to sue,

10. Avoiding patients with complex medical problems (Project, 1971: 949),

11. Do not stop practicing medical practices like birth (Bergen, 1974: 1189).

2. RESEARCH FINDINGS

Table 1. Results About Research On Defensive Medicine

STUDY	YEAR	COUNTRY	STUDY SPACE	PARTICIPATION PERCENTAGE	DEFENSIVE MEDICINE APPLICATION PERCENTAGE	POSITIVE DEFENSIVE MEDICINE APPLICATION PERCENTAGES										NEGATIVE DEFENSIVE MEDICINE APPLICATION PERCENTAGESS			
						REQUESTING MORE THAN ENOUGH	UNNECESSARY INVAZSIF PROCEDURES	TO GİVE DETAİLED EXPLANATİON ABOUT THE DİSEASE PROCEDURES	To prolong the follow-up period	Increased screening in practice	Applying Unnecessary Treatment	More than that required drug Suggestion	Hospitalization (In case a patient can be treated outpatient)	Bir Uzmana Gereksiz Sevk Yapılması	Unnecessary Referral to an Expert	Prevention from some procedures or interventions	Avoid risky illness treatment practically	Avoiding risky procedures that could benefit the patient	Consider diagnostic tests in known risk factors
Summerton	1995	ENGLAND	500	60	98	59.6	40.3	86.6	63.4	40.3	-	29.3	-	63.8	90.3	41.9	25.0	.	40.3
Studdert, Mello, Sage, Desroches Peugh, Zapert, Brennan	2005	USA	1333	62	93	92	71	-	-	-	-	69	-	89	-	71	65	-	-
Hiyama, Yoshira, Tanaka, Urabe, Ikegami, Fukuhara, Chayama	2006	JAPAN	171	77	90	36	53	-	-	-	-	59	-	68	-	76	76	-	-
Catıno	2011	ITALY	NS:1000 LS: 248	NS: 37 LS: 82. 2	NS: 77. 9 LS: 83. 3	NS:61. 3 LS:53	NS:14. 3 LS: 4. 7	-	-	-	NS:24. 4 LS: 34. 2	NS:51. 5 LS:57. 7	NS:68. 8 LS:30. 5	NS:58. 6 LS:48. 3	NS:82. 8 LS:78.9	-	NS:26. 2 LS:26. 9	NS: 14 LS:24. 8	-
Ortashi, Virdee, Hassani, Mutrynowski, Abu-Zidan	2013	UK	300	68	89	59.3	-	-	-	-	27.5	23	-	54.9	-	-	9.3	20.6	-
Reuveni, Pelov, Reuveni, Bonne, Canetti	2017	İsrail	213	100	62.1	45.8	-		75.6		-	10.4	54.2	65.9	-	-	-	-	-

Summerton's 1995 study of defensive medicine in England covered 500 people. Participation in the study is 60%. The percentage of participants who applied defensive medicine was 98%. When we look at positive defensive medicine practices; "Providing a detailed explanation of the disease procedures" is the most practiced practice at 98%, with 29.3% of the "Required Prevention of Overdose" being the least practiced method. 41.9% of the respondents said that "Avoiding Some Procedures or Interventions" is the least negative defensive medicine practice with a 25% rate of "Avoiding Risky Disease Treatment".

Studdert and his colleagues in the United States in 2005 made up 1333 people and 62% of the respondents. Participants have seen 93% of defensive medical practice. When we examine the study in terms of positive defensive medicine applications, it is seen that "Request More Diagnostic Tests Required" with 92% is the least favored positive medical defensive applications with 69% of "Required Overdose". Negative defensive medicine practices have been observed to be least effective with "Avoidance of Certain Procedures or Interventions" with 71%, "Avoiding Risky Disease Treatment" with 65%.

Hiyama and his colleagues in Japan in 2006 included 171 people, 77% of whom were involved. It is seen that 90% of defensive medicine applications are used. "Doing unnecessary referral to a specialist" is the least effective positive defensive medicine practice with 36%, "Asking for More Diagnostic Tests Required" at 68%. Expressions of "Avoiding Some Procedures or Interventions" and "Avoiding Risky Disease Treatment", which are considered as negative defensive medicine applications, received 76%.

The work carried out by Catino in Italy in 2011 was carried out both nationally and locally. The work carried out by the National is planned to be implemented in the mail environment of 1000 persons, but it is observed that participation is 37%. In the local study, the articles were made face to face with physicians, 82% of the participants. 2. Nationally 77.9%, local 83.3% of the defensive medical practices have been realized. In the two studies, the most commonly applied, "Unnecessary Invasive Procedures" (NS: 14.3%, LS: 4.7%) were the least-applied positive defensive medicine practices in the phrase "Writing Your Patient Recordings" (NS: 82.8, LS: 78.9). There are 2 applications which are considered as negative defensive medicine application. These are from top to bottom, respectively; "Avoiding Risky Procedures Avoiding Risky Treatment" (NS: 26.2%, LS: 26.9%), "Avoiding Risky Procedures That the Patient Can Benefit" (NS: 14%, LS: 24.8%).

The work done by Ortashi and colleagues in the UK in 2013 covered 300 people, but the participation rate was 68%. The percentage of defensive medicine application was 89%, "Request More Diagnostic Tests Required" was the most applied positive defensive medicine application with 59.3%, while 23% "Minimum Required Medication Expectation" was the least practical application. "Avoiding Risky Procedures That Can Benefit the Patient", which is considered as a negative defensive medicine application, is the least observed with 20.6% and "Avoiding Risky Disease Treatment" is the least seen with 9.3%.

A total of 213 people were involved and 100% participation in the work carried out by Reuveni and his colleagues in Israel in 2016. 62.1% of them applied defensive medicine, 75.8% of positive defensive medicine applications, respectively, from the highest to the lowest, respectively, and "Prolonging Follow-Up Time" and 10.4%.

Table 2. Türkiye' De Defansif Tıp İle İlgili Yapılan Çalışmalara Ait Bulgular

STUDY	YEAR	STUDY SPACE	PARTICIPATION PERCENT	DEFICIENT MEDICAL APPLICATION Sections	POSITIVE DEFENSIVE PRACTICE PERCENTAGES									NEGATIVEDEFENSIVE APPLICATIONS PERCENTAGES					
					Importance to patients and relatives illumination process	pay attention to the confirmation documents	Requesting More than that required Diagnostic Testr	More frequent use of imaging techniques	More than that required drug Suggestion	Hospitalization (In case a patient can be treated outpatient)	to allocate more time for patients	Unnecessary Referral to an Expert	Keep patient records in more detail	Avoiding patients who are likely to complain	Diagnosis and treatment power, avoiding complicated diseases	Refer patients for reasons other than indications	Avoidance from diseases with a high likelihood of complication	Prefer non-invasive methods	To avoid reatment protocols with high rate of complications
Aynacı	2008	798	95.5	78.38	94.88	94.88	82.68	83.46	53.67	50	-	85.43	96.33	74.93	70.73	-	73.88	-	83.99
Yılmaz	2012	208	100	83.3	98.1	-	89.4	92.3	66.9	63.2	-	92.3	96.6	85.6	-	70.2	76.4	-	84.6
Başer, Kolcu, Çığırgil, Kadınkız, Öngel	2014	88	92	100	93.8	-	67.9	-	88.9	-	88.9	87.7	96.3	80.2	-	-	80.2	87.7	91.4
Başer, Kolcu, Kolcu, Tuncer, Altuntaş	2014	66	100	100	92.4	-	90.9	-	83.3	-	87.9	98.5	97	89.4	-	-	92.4	80.3	89.4
Selçuk	2015	240	91.7	84.05	97.7	97.7	84.1	-	64.5	77.7	-	86.8	96.8	84.1	74.1	80	78.2	80.9	-
Mete, Nacar, Tekin, Ünver, Güneş	2017	234	87	-	95.7	97.9	90.6	86.8	65.8	62.8	-	91.5	98.3	85.5	-	86.8	83.8	-	87.6

Aynacı's work in 2008 consists of 798 people, 95.5% participation. It is seen that the applications of defensive medicine applications are 78.4%, positive defensive medicine applications is 96.4%, "Patient Records are more detailed" and 50% of patients are at least "Hospitalized" (when a patient can be treated outpatient). The percentage of negative defensive medicine applications is 83.9%, "Complication Rates Avoiding High Treatment Protocols" is "Diagnosis and Treatment Power, Avoidance from Complex Patients" with 70.7%.

Yılmaz 'ın formed the coverage of the work carried out in 2012 and 100% participation was achieved. When we look at the percentage of defensive medicine practice, it is seen that 83.3%. "Care for Patients and Their Relatives to Illuminate" is the highest with 98.1%, "Hospitalization" (with a patient in case of outpatient treatment) is the least applied positive defensive medicine with 63.2%. The most negative defensive medicine applications were "Avoidance from Diseases with High Likelihood of Complaint" (85.6%) and "Referral to Diseases Out of Indication" (70.2%).

Başer et al. In 2014, there are two studies to reveal the profile of defensive medicine applications of family physicians and dentists in defensive medicine field. The scope of the work carried out with the family physicians is 88 people and 92% participation is provided. The work done by the dentists is composed of 66 people and 100% participation is provided. Participants in both exercises seem to have implemented 100% defensive medicine.

When we examined the positive defensive medicine practices of family physicians, it is seen that "to keep the patient records more" with 96.3%, "at least 67.9% of the patients required more diagnostic tests". When we examine the positive defensive medicine practices of dentists, it is seen that "Mostly necessary to do an unnecessary referral" with 98.5%, "At least necessary necessary medication recommendation" is 83.3%.

"Avoidance of High Complication Rates Treatment Protocols", which is considered as negative defensive medicine application, is the least practiced by family physicians with the rate of "Avoidance from Diseases with High Likelihood of Complication" and "Avoidance from Diseases with High Likelihood of Complication" by 80.2%. When we look at negative defensive medicine practices in terms of dentists, it is seen that "Avoidance from Diseases with High Likelihood of Complication" is the highest with 92.4% and "Preferring Non-Interventional Methods" with 80.3%.

Selçuk 's coverage of 240 people in 2015, 91.7% participation in the study of the defensive medical practice is seen to be 84 percent. It is seen that positive defensive medicine applications are shown as "giving care to patients and relatives in lightening process" and "showing care for approval documents" with a rate of 97.7% at most, "At least necessary medication required" with at least 64.5%. Negative defensive medicine treatment "Avoidance from Diseases with High Likelihood of Complaints" is the least seen with 84.1%, "Diagnosis and Treatment Power, Avoidance from Complex Disease" 74.1%.

Mete and his colleagues conducted the study in 2017 with 234 people and 87% participation. It is seen that the applications of positive defensive medicine are 98.3%, "Keep Patient Records More" and 62.8% of patients are at least "Hospitalized" (when a patient can be treated outpatient). The percentage of cases with negative defensive medicine was 87.6% and the rate of complications was Avoidance of High Treatment Protocols and 83.8% of Avoidance of High Likelihood Diseases.

3. CONCLUSİON

It is seen that six different countries we examined used defensive medicine more than 60%. Studies show that there are similar defensive medicine applications as well as similar applications. In

addition, positive defensive medicine applications do not have more application variability than negative defensive medicine applications. When we discuss the common points of 6 studies, "Expert Needless Referral" is the most "Positive Required Overdose" is the least applied positive defensive medicine practice. When we look at negative defensive medicine, the words "Avoiding Some Procedures or Interventions", at least "Avoiding Risky Disease Treatment" statements are used.

Studies on defensive medicine in Turkey have been examined and it is seen that studies have been started in our country in the last 10 years (Kaptanoğlu,2016). It is seen that there are 78% of defensive medicine applications in 6 studies. Studies show that there are similar defensive medical practices as well as similar aspects of positive and negative medical practices. In addition, positive defensive medicine applications do not have more application variability than negative defensive medicine applications. When we look at the common practices of the studies, it seems that the most used practice is "positive patient records", at leastis the "hospital admission (when a patient can be treated outpatient)" positive defensive medicine applications. When we look at negative defensive medicine, we use "expressions of avoidance of high treatment protocols" and "avoidance of patients with high probability of complications" at the most.

When we compare studies in our country with studies in other countries; it seems to be a new issue in our country. When we compare the percentage of defensive medicine applications, it is seen that more defensive medicine is applied in Turkey(Kılıçarslan 2016).

The development and implementation of clinical practice guidelines aimed at risky clinical situations to prevent defensive medicine practices is important in helping doctors when faced with difficult situations. Reforming current accountability and compensation systems is thought to be a measure that reduces its dangerous effects to protect the beneficial effects of defensive medicine. It is thought that further studies are needed to examine the economic burden of health care providers and to explore different strategies to cope with this problem (Reuveni et al., 2017: 6).

It is believed that high risk physicians against malpractice cases have financial and psychological support and focus on training appropriate patients and physicians to care for defensive medicine (Studdert et al., 2015: 2617).

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