

Türkiye’de 1995’ten 2015’e diyabetik ayağa bağlı gelişen alt ekstremitte amputasyon oranlarının seyri



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GATA HAYDARPAŞA EĞİTİM HASTANESİ

- (1) Sualtı Hekimliği Ve Hiperbarik Tıp Servisi
- (2) Plastik Cerrahi Ve Rekonstrüksiyon Servisi



Lower limb amputations in Trondheim, Norway

A 40% reduction in diabetic major lower-limb amputations from 1996 to 2006

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Short Report: Complications

Reduced incidence of lower-extremity amputations in a Danish diabetes population from 2000 to 2011

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Pathophysiology/Complications

BRIEF REPORT

Reduced Incidence of Lower-Extremity Amputations in People With Diabetes in Scotland

A nationwide study

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RESEARCH DESIGN AND METHODS

—We performed a cohort study of all people in Scotland with diabetes between January 2004 and December 2008. The Scottish Morbidity Record was the primary data source using predefined codes for categorization of amputation type





Decreasing Incidence of Major Amputation in Diabetic Patients: a Consequence of a Multidisciplinary Foot Care Team Approach?

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The purpose of this retrospective study was to evaluate the changes in diabetes-related lower extremity amputations following the implementation of a multidisciplinary programme for prevention and treatment of diabetic foot ulcers in a 0.2 million population with a 2.4 % prevalence of diabetes. All diabetes-related primary amputations from toe to hip from 1 January 1982 to 31 December 1993 were included. In 294 diabetic patients, 387 primary major (above the ankle) or minor (through or below the ankle) amputations were performed, constituting 48 % of all lower extremity amputations. The annual number of amputations at all levels decreased from 38 to 21, equalling a decrease of incidence from 19.1 to 9.4/100 000 inhabitants ($p = 0.001$). The incidence of major amputations decreased by 78 % from 16/1 to 3.6/100 000 inhabitants ($p < 0.001$). The absolute number of amputations with a final level below the ankle showed no increase, but their proportion increased from 28 to 53 % ($p < 0.001$) and the reamputation rate decreased from 36 to 22 % ($p < 0.05$) between the first and last 3-year period. Thus, a substantial long-term decrease in the incidence of major amputations was seen as well as a decrease in the total incidence of amputations in diabetic patients. Seventy-one per cent of the amputations were precipitated by a foot ulcer. These findings indicate that a multidisciplinary approach plays an important role to reduce and maintain a low incidence of major amputations in diabetic patients

KEY WORDS Amputation Foot ulcer Multidisciplinary team Incidence Prevention Diabetes mellitus





Reduction in Diabetic Amputations Over 11 Years in a Defined U.K. Population

Benefits of multidisciplinary team work and continuous prospective audit

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OBJECTIVE — To assess changes in diabetic lower-extremity amputation rates in a defined relatively static population over an 11-year period following the introduction of a multidisciplinary foot team.

RESEARCH DESIGN AND METHODS — All diabetic patients with foot problems admitted to Ipswich Hospital, a large district general hospital, were identified by twice-weekly surveillance of all relevant in-patient areas and outcomes including amputations recorded.

RESULTS — The incidence of major amputations fell 62%, from 7.4 to 2.8 per 100,000 of the general population. Total amputation rates also decreased (40.3%) but to a lesser extent due to a small increase in minor amputations. Expressed as incidence per 10,000 people with diabetes, total amputations fell 70%, from 53.2 to 16.0, and major amputations fell 82%, from 36.4 to 6.7.

CONCLUSIONS — Significant reductions in total and major amputation rates occurred over the 11-year period following improvements in foot care services including multidisciplinary team work.

RESEARCH DESIGN AND METHODS

— The survey was conducted between 1995 and 2005 in a defined, predominantly Caucasian (95%), mixed rural/urban population served by Ipswich Hospital from which there are few cross-boundary referrals. Over the period, the population grew from 330,462 to 345,890. In contrast, the diabetic population rose dramatically from 6,768 to 11,906. The largest increase followed introduction of the Quality and Outcomes Framework in 2005, whereby practitioners are paid to achieve diabetes targets (18).

An LEA was defined as loss in the transverse anatomical plane of any part of the limb and a major amputation as any above the ankle. When a revision occurred within 3 months, only the later procedure was recorded. Traumatic and tumor-related amputations

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Reduction in Diabetes-Related Lower-Extremity Amputations in the Netherlands: 1991-2000

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OBJECTIVE — Lower-extremity amputation is a common complication among patients with diabetes throughout the world. However, few data exist on the actual impact of the recent moves to improve the management of diabetic foot ulcers to reduce the incidence of lower-extremity amputations. The aim was to determine the incidence of lower-extremity amputations among diabetic patients from 1991 to 2000 in the Netherlands.

RESEARCH DESIGN AND METHODS — A secondary database containing information regarding all hospital admissions in which a lower-extremity amputation occurred for the years 1991–2000 was obtained from the Dutch National Medical Register. Because a patient-unique identifier was included, multiple amputations and hospitalizations for a single individual could be identified. Furthermore, age- and sex-specific diabetes prevalence rates were calculated using a 3-year average for every year, calculating the total diabetic population in the Netherlands at risk for every year.

RESULTS — In 1991, a total of 1,687 patients with diabetes had been admitted 1,865 times for 2,409 amputations. In 2000, a total of 1,673 patients with diabetes were admitted 1,932 times for 2,448 amputations. The overall incidence rates of the number of patients who underwent lower-extremity amputation decreased over the years from 55.0 to 36.3 per 10,000 patients with diabetes ($P < 0.05$). Both in men (71.8 vs. 46.1, $P < 0.05$) and women (45.0 vs. 28.0, $P < 0.05$) with diabetes, a significant decrease could be observed. Mean duration of hospitalization decreased from 45.0 days (SD 44.4) in 1991 to 36.2 days (SD 38.4) in 2000; decreases were observed for both men and women.

CONCLUSIONS — Over the years observed in this study, the incidence rates of diabetes-related lower-extremity amputation in the Netherlands was found to decrease in both men (36%) and women (38%) with diabetes. Furthermore, the duration of hospitalization decreased over time.

Both the social impact of such amputations for the patient and the financial implications for health care systems are grave (8–10). The occurrence of an amputation may reflect the severity of the disease or may be a marker of disease management. In the literature, lower-extremity amputations are mainly used as a parameter to stress the impact of diabetic foot disease.

A high percentage of all lower-extremity amputations are preceded by a nonhealing ulcer with underlying neuropathy and peripheral vascular disease, often complicated by an infection. Incidence may be reduced using a multidisciplinary approach, with a team that preferably consists of an internist, podiatrist, orthopedic and vascular surgeon, rehabilitation physician, orthopedic shoemaker, and diabetes specialist nurse. Using such an approach, a 50–85% reduction in amputations has been described (11–13). In addition, other reports showed a decrease in major amputations (14,15). As was set forth in the St. Vincent Declaration, a 50% reduction in lower-extremity amputation should be the target for improved foot care (16).

The prevalence of known diabetes will increase over the years, more than can be expected on demographic changes of

Diabetes Care 27:1042–1046, 2004





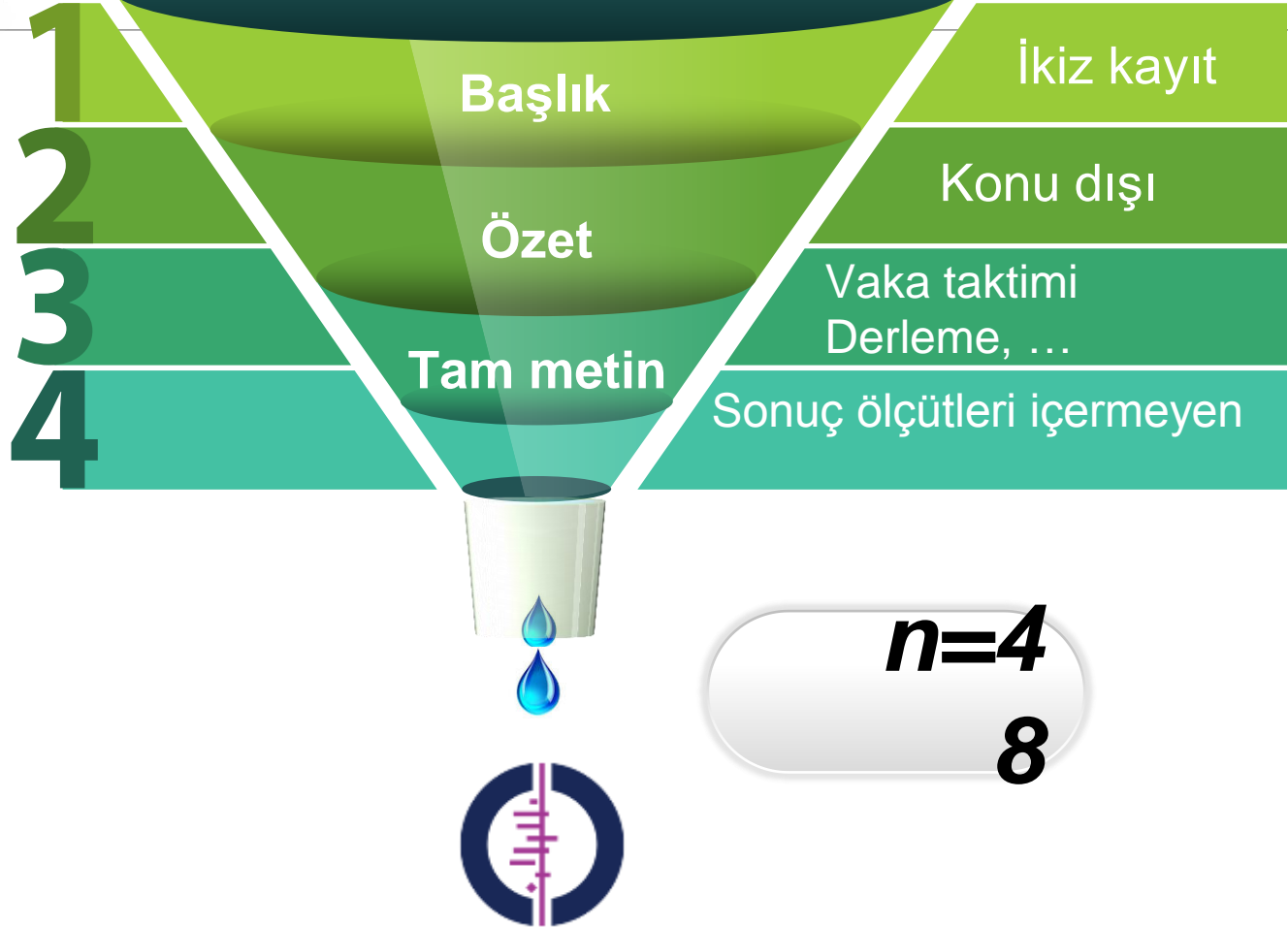
Rates of Lower-Extremity Amputation and Arterial Reconstruction in the United States, 1979 to 1996

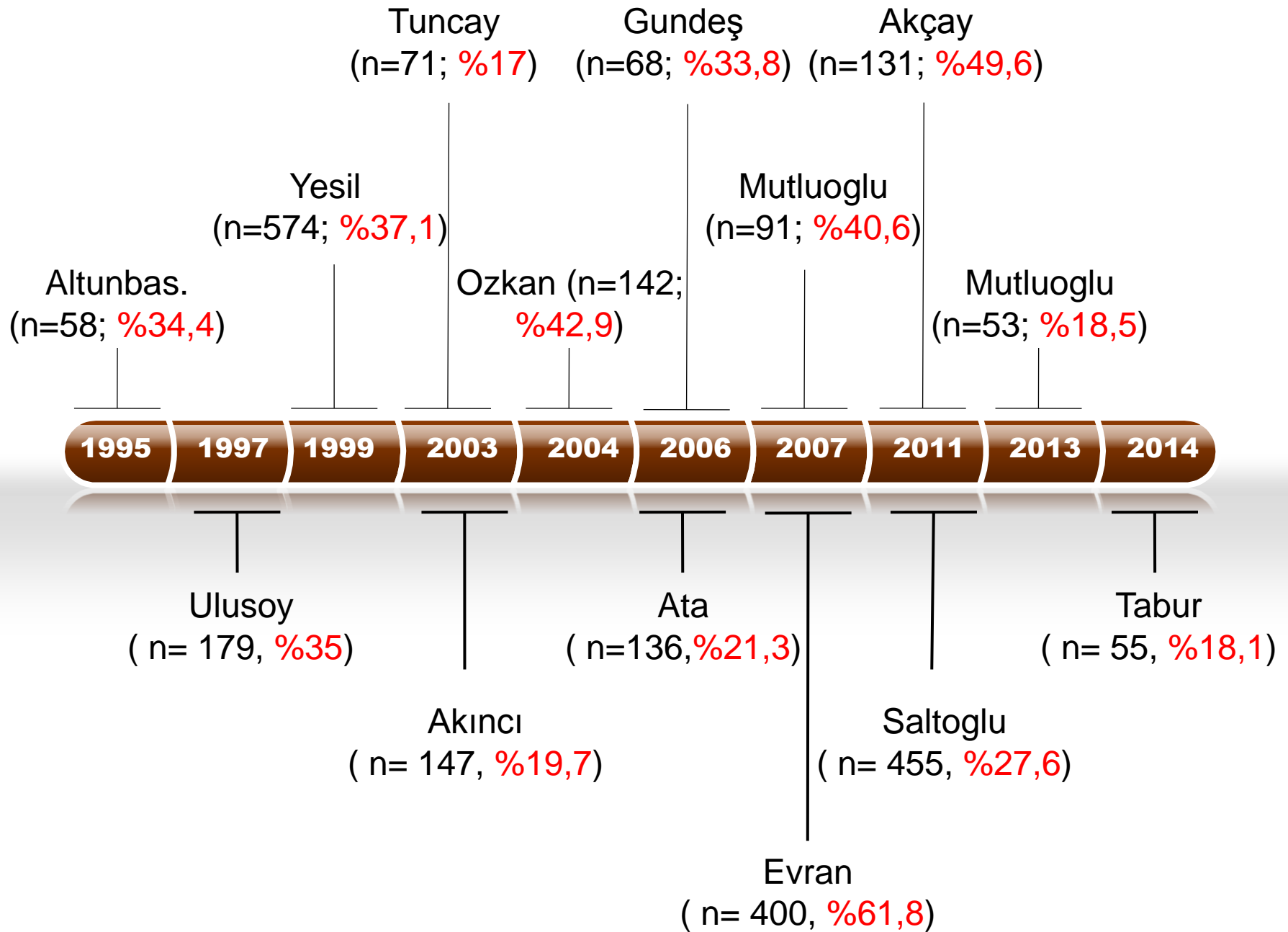
Joe Feinglass, PhD, Jacqueline L. Brown, MD, Anthony LoSasso, PhD, Min-Woong Sohn, PhD, Larry M. Manheim, PhD, Sanjiv J. Shah, BS, and William H. Pearce, MD



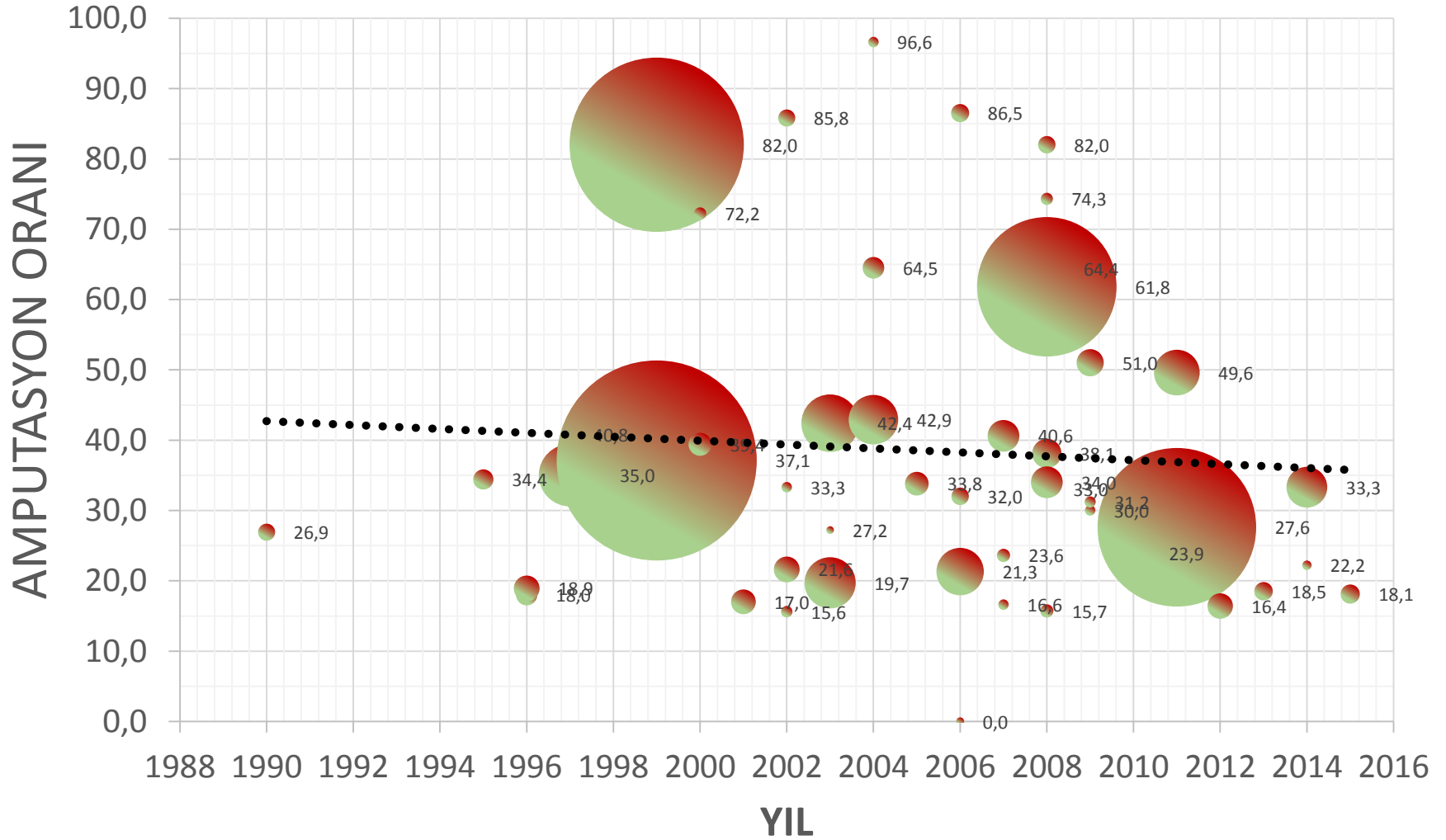
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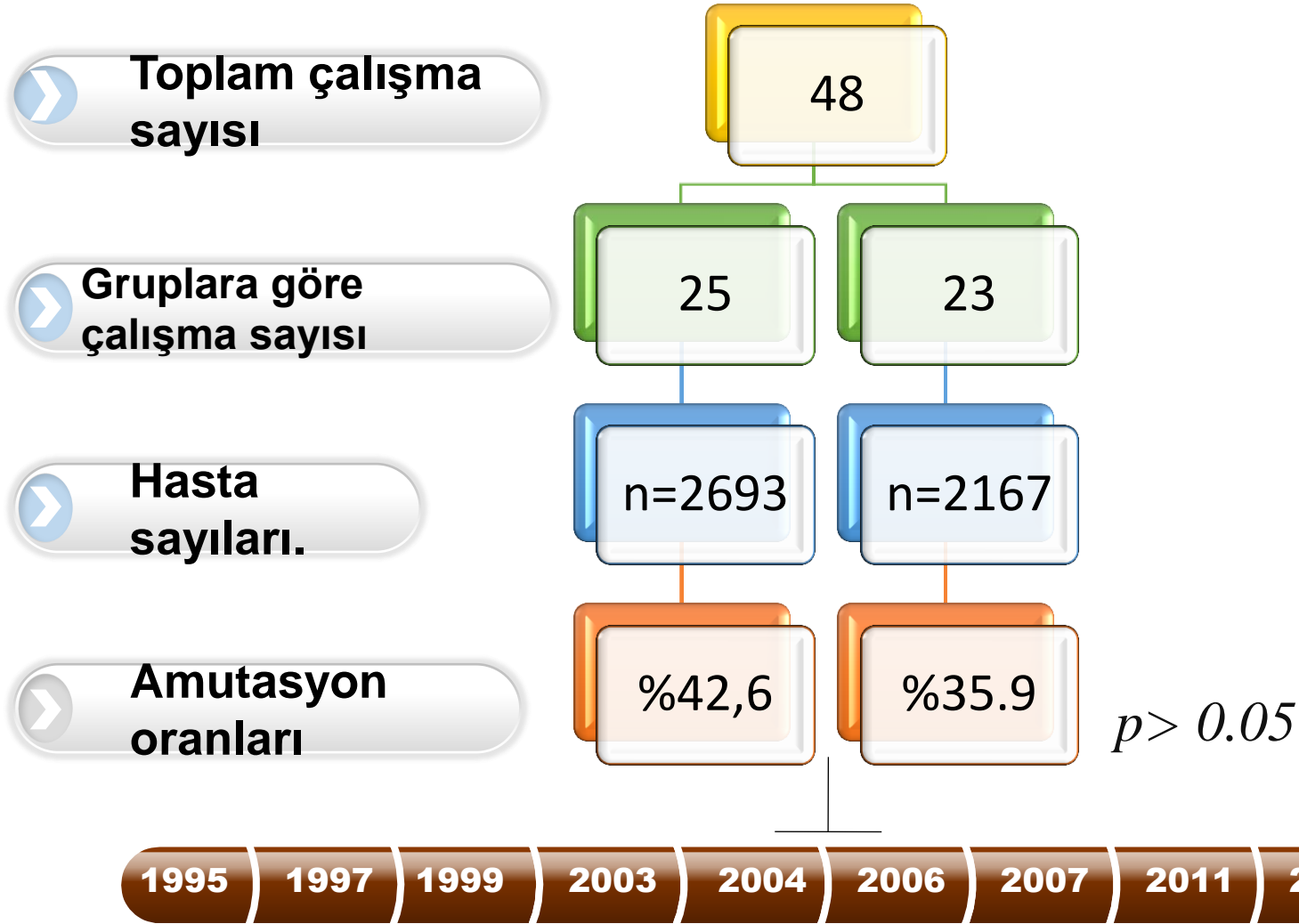
● overall amputation rate Doğrusal (overall amputation rate)



Mesut Mutluoğlu



PRISMA 2009 Akış Diyagramı



To be continued ...



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